

NYC FIRE CODE GUIDE



CODE DEVELOPMENT UNIT
BUREAU OF FIRE PREVENTION

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NYC FIRE CODE GUIDE

*FREQUENTLY ASKED QUESTIONS AND RESPONSES
PROVIDING
OFFICIAL INTERPRETATIONS AND GUIDANCE*

*NEW YORK CITY FIRE CODE
(CHAPTER 2 OF TITLE 29 OF THE ADMINISTRATIVE CODE
OF THE CITY OF NEW YORK)*

*NYC FIRE DEPARTMENT RULES
(TITLE 3 OF THE RULES OF THE CITY OF NEW YORK)*

GENERAL QUESTIONS

1. What is the Fire Code?

The New York City Fire Code is a City law that establishes fire safety requirements for a wide range of activities in New York City. These requirements govern such matters as emergency preparedness; the prevention and reporting of fires; the manufacture, storage, handling, use and transportation of hazardous materials and combustible materials; the conduct of various businesses and activities that pose fire hazards; and the design, installation, operation and maintenance of the buildings and premises that house such materials, businesses and activities.

2. To whom does the Fire Code apply?

The Fire Code applies to all persons and places in New York City. Everyone must comply with its prohibitions and fire safety requirements. Persons and businesses that conduct or supervise the activities regulated by the Fire Code may also be required to obtain permits and certificates that authorize them to engage in those activities.

3. When did the Fire Code take effect?

The 2014 Fire Code took effect on March 30, 2014. It was the first periodic review and revision of the 2008 Fire Code, which took effect on July 1, 2008.

The 2008 Fire Code was enacted by Local Law No. 26 of 2008. It was the first comprehensive revision of the City's fire code in a century. It was based on a model code, the International Fire Code, published by the International Code Council, Inc.

New York City Administrative Code §29-104, enacted as part of Local Law 26 of 2008, required that no later than the third year after the effective date and every third year thereafter, the Fire Commissioner shall review the latest edition of the International Fire Code and submit to the City Council such proposed amendments as he or she may determine should be made to the Fire Code based upon such model code.

In accordance with Administrative Code §29-104, the Fire Department undertook a three-year code review process in consultation with representatives of the City Council, New York City Department of Buildings and industry, professional, trade and union organizations. This process culminated in proposed amendments that were approved by the City Council and signed into law by the Mayor as

Local Law 148 of 2013 in December 2013. This amended Fire Code, which is referred to as the "2014 Fire Code" for convenient reference, took effect on March 30, 2014.

4. **What happened to the Fire Code in effect prior to July 1, 2008?**

The Fire Code in effect prior to July 1, 2008, known as the New York City Fire Prevention Code, was repealed on July 1, 2008.

However, some of the design and installation provisions of the Fire Prevention Code continue to be applicable to certain "pre-existing" installations that have been allowed to remain in use since July 1, 2008, the effective date of the 2008 Fire Code, even though they are not in compliance with the 2008 Fire Code's requirements. The Fire Department has consolidated such Fire Prevention Code provisions into Chapter 48 of the Fire Department rules (Title 3 of the Rules of the City of New York) for convenient reference and enforcement purposes.

5. **Is there a "grace period" under which it is optional to file with the Fire Department under the 2014 Fire Code?**

No, there is no grace period. However, provision is made for "projects in progress" at the time the 2008 and 2014 Fire Codes took effect. See Chapter 1, Frequently Asked Question #13.

6. **How can I tell where in the 2014 Fire Code a 2008 Fire Code section can be found?**

Most section numbers in the 2014 Fire Code are unchanged from the 2008 Fire Code. 2008 Fire Code sections that have been moved or renumbered are listed in the following cross-reference table, with the section number of the corresponding 2014 Fire Code section. See the Fire Code Cross-Reference Table at the end of this Guide.

7. **I have questions about the Fire Code. Who should I contact at the Fire Department to obtain assistance?**

The best way to obtain assistance regarding the meaning of the Fire Code is to monitor this Frequently Asked Questions page and to use the Fire Code inquiry form on this web site.

To submit a Fire Code question, go the Code and Rules Public Feedback Page on the Fire Department's website (www.nyc.gov/fdny) and use the Public Inquiry Form.

You may also submit your inquiry in writing to: Code Development Unit, Bureau of Fire Prevention, New York City Fire Department, 9 MetroTech Center, Brooklyn, NY 11201-3857.

The Fire Department cannot provide an official interpretation of the Fire Code, or other official guidance upon which you can rely, in response to a telephone inquiry.

8. **Will the existing Fire Department rules (as set forth in Title 3 of the Rules of the City of New York) remain in effect after the 2014 Fire Code becomes effective?**

Yes. The existing Fire Department rules will remain in effect unless and until they are repealed or amended at a later date.

9. **Does the Fire Department anticipate making any changes to its rules, or adopting new rules, in light of the 2014 Fire Code?**

Yes. In connection with the recent amendments to the Fire Code, the Fire Department has promulgated rules to implement the provisions of the 2014 Fire Code. Certain rules, the provisions of which were incorporated into the 2014 Fire Code, have been repealed.

All existing and amended Fire Department rules are numbered to parallel the Fire Code chapters and sections to which they correspond.

All proposed and final rules, new and amended, may be viewed on New York City's NYC Rules website: <https://rules.cityofnewyork.us>.

10. **Where can I obtain a copy of the published version of the 2014 Fire Code?**

The new Fire Code can be purchased online or in person at *Citystore*, located in the Municipal Building at One Centre Street, North Plaza, in Manhattan.

11. **How can I register a complaint with the Fire Department regarding a potential violation of the Fire Code or Fire Department rules?**

A complaint regarding a potential violation of the Fire Code or Fire Department rules can be reported to the Fire Department's Bureau of Fire Prevention Field Public Operations Support Unit at (718) 999-2541.

FC CHAPTER 1 - ADMINISTRATION

1. **I understand that all installations on or after March 30, 2014 must comply with the design and installation requirements of the 2014 Fire Code, but is there any "grandfathering" for installations that were approved or were under construction prior to March 30, 2014?**

FC 102.3 and 102.4 address facilities and conditions "lawfully existing" on June 30, 2008 and March 30, 2014 that would not be allowed or approved under the 2008 or 2014 Fire Code, respectively. Clarification of the scope and meaning of **FC 102.3 and 102.4** is set forth in Fire Department rule 3 RCNY 102-01, which was recently amended to address "grandfathering" issues arising from the enactment of the 2014 Fire Code.

2. **FC 102.3 and 102.4 state that lawfully existing facilities whose design and installation would not be allowed or approved under the 2014 Fire Code can be continued under prior laws, rules and regulations. FC102.5 contains certain exceptions, one of which requires compliance with the Fire Code when the part of the building in which the installation exists undergoes alteration. Is alteration defined?**

Yes. **FC202** defines "alteration" as any addition to, or modification of, an existing installation, other than repairs made in the ordinary course of maintenance. An example of an alteration would be the installation of a new system, or the removal and replacement of an existing system. An example of an ordinary repair would be the servicing or replacement, in kind, of components of an existing installation. Certain Fire Code sections (**FC501.4.3.1** is an example) may set forth specific standards for alterations that trigger Fire Code compliance.

3. **I own a single family home in Broad Channel, Queens, that was severely damaged by Superstorm Sandy in October 2012. The damage extended to the propane installation that fuels my kitchen stove and clothes dryer. What Fire Code requirements and Fire Department approvals are required to repair and restore my propane installation?**

The Fire Code strictly regulates Liquefied Petroleum Gases (LPG), commonly referred to as propane, and prohibits its use for household purposes where piped natural gas is available from a public utility.

Broad Channel is one of the few areas in New York City that is not supplied with piped natural gas. Many of the single family homes in Broad Channel were constructed in the 1930s and 1940s and since that time have used propane to fuel cooking appliances and clothes dryers.

The Fire Code authorizes continuation of lawful installations pre-dating the requirements of the 2008 and 2014 Fire Code, with certain exceptions. **FC102.3** and Fire Department rule 3 RCNY §4838-01 authorize continuation of existing lawful residential use of propane for cooking and clothes drying purposes where piped natural gas is not available.

The Fire Department has determined to treat the restoration of Sandy-damaged stationary propane installations for these residential purposes as a repair, not an alteration. As such, the owner of a one or two family home in Broad Channel may restore a stationary propane installation lawfully used for residential cooking and/or clothes drying as of the date of Superstorm Sandy (October 29, 2012) and does not have to comply with the design and installation requirements of **FC Chapter 38**

and Fire Department rule 3 RCNY §3809-01 that are applicable to newly-constructed or altered stationary propane installations.

Broad Channel homeowners do not have to obtain any Fire Department approvals for repairs to their lawfully existing propane residential cooking and/or clothes drying installations provided that they meet the following interim guidelines:

1. The homeowner has documentation (such as invoices from a plumber or propane supplier) that establishes that stationary propane installation was in operation at the premises as of October 29, 2012.
2. The quantity of propane fueling the cooking and/or clothes drying appliances is unchanged from the amount in use on October 29, 2012, and in no case exceeds two (2) propane tanks.
3. All propane tanks are located outdoors and the size (capacity) of each individual propane tank does not exceed one hundred (100) pounds of propane.
4. There is no reserve storage of propane (unconnected spare tanks) at the premises.
5. The propane installation is used only for cooking and/or clothes drying purposes and for no other purpose.
6. With respect to any propane installation originally installed on or after March 1, 2000, no propane tank shall be located within five (5) feet of:
 - (A) any building opening, including any door, openable window or intake or exhaust vent;
 - (B) the nearest lot line, sidewalk or building on an adjoining lot;
 - (C) a parked motor vehicle; and/or
 - (D) any vent or fill line of a fuel oil storage tank.
7. All repairs necessary to restore the propane installation, including repairs to the piping and equipment, shall be made by a plumber licensed by the New York City Department of Buildings in accordance with the requirements of the Fire Code and the New York City Construction Codes, including the Fuel Gas Code.

Any homeowner that meets these interim guidelines (and can document that the installation was in operation at the premises as of October 29, 2012, the date of Superstorm Sandy) may restore their propane residential cooking and clothes drying installation without filing design and installation documents with the Fire Department.

Any homeowner with an installation that does not meet these interim guidelines should contact the Technology Management Unit of the Bureau of Fire Prevention at (718) 999-2405 for instructions about filing an application for Fire Department review of the installation.

4. **Is there a convenient way to identify the types of installations that require design and installation documents to be submitted to the Fire Department for approval?**

Yes. **FC105.4** lists the types of installations requiring submission of design and installation documents. See the list of installations requiring submission of design and installation documents at the end of this Guide.

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5. **Is there a convenient way to identify the materials, operations and facilities that require a Fire Code permit?**

Yes. **FC 105.6** lists all of the permits required by the Fire Code.

6. **Am I required to obtain a permit for an existing business or activity that did not previously require a permit?**

Yes. Existing businesses will be required to secure permits that are required by the 2014 Fire Code, even if they were not required previously. You will have until March 30, 2015 (one year from the effective date of the 2014 Fire Code) to obtain the new permit.

If the permit is for an existing installation, in most cases existing businesses will not be required to comply with 2014 Fire Code design and installation requirements in order to obtain the permit. The exceptions are set forth in **FC102.5** and Fire Department rule 3 RCNY 102-01.

7. **Is there a convenient way to identify the Fire Code's certificate requirements, especially those that are new to the 2014 Fire Code?**

Yes. A list of all required Certificates of Fitness and Company Certificates is posted on the Fire Department's website, www.nyc.gov/fdny.

FC113 lists the general requirements for Fire Department Certificates of Fitness and Certificates of Qualification; **FC114** for Certificates of License; and **FC115** for Company Certificates. Additional requirements are set forth in the following Fire Department rules: 3 RCNY 113-01, 113-02, 113-03, 113-08, 113-09 and 113-11 for Certificates of Fitness and Certificates of Qualification; 3 RCNY 114-01 for Certificates of License; and 3 RCNY 115-01 for Company Certificates.

8. **Am I required to obtain certificates for an existing business or activity that under the 2008 Fire Code did not require a Fire Department certificate?**

Yes. Individuals and existing businesses will be required to secure certificates that are now required by the 2014 Fire Code, even if they were not required previously. You will have until March 30, 2015 (one year from the effective date of the 2014 Fire Code) to obtain the new certificate.

9. **I currently hold a certificate issued by the Fire Department. Is my certificate still valid after the 2014 Fire Code took effect on March 30, 2014?**

Yes. Your certificate remains valid until its expiration, unless you are notified otherwise by the Fire Department. Upon renewal, some certificate holders may be required to demonstrate knowledge of the 2014 Fire Code requirements by attending a continuing education program or passing a certificate examination. Current certificate holders will be notified in advance of the certificate's expiration date of any such requirements.

10. What are the Fire Code's "operational and maintenance" requirements?

Operational requirements are those that relate to the operation and supervision of equipment and premises. Permits, supervision and certificate requirements, emergency preparedness plans, recordkeeping, markings and the posting of signs, and prohibitions against smoking are examples of operational requirements.

Maintenance requirements are those that relate to keeping equipment and premises in good working order and a safe condition. Housekeeping, servicing and periodic testing and inspection of equipment, and prevention and removal of obstructions to means of egress are examples of maintenance requirements.

11. As the owner of an existing building or business, am I required to comply with the 2014 Fire Code's operational and maintenance requirements, or those contained in the 2008 Fire Code?

You are required to comply with the 2014 Fire Code's operational and maintenance requirements. The operational and maintenance requirements set forth in the 2008 Fire Code have been superseded by the 2014 Fire Code.

If you encounter a situation where it is impossible or impracticable to comply with the 2014 Fire Code's operational or maintenance requirements, seek Fire Department guidance as to how to comply with the Fire Code and/or seek a modification of the Fire Code's requirements (see General Frequently Asked Question #7).

12. My facility was granted Fire Department modifications from certain provisions of the repealed Fire Prevention Code and the 2008 Fire Code. Will these modifications still be valid under the 2014 Fire Code?

Yes, unless the Fire Department determines that one of the exceptions to pre-existing facilities and conditions set forth in **FC102.5** applies to your facility.

13. I have filed and obtained various approvals from the New York City Department of Buildings and other regulatory agencies prior to the effective date of the 2014 Fire Code for a number of projects that will not be commenced until after March 30, 2014 (the effective date of the 2014 Fire Code). Certain design elements of these projects do not conform with the 2014 Fire Code requirements? Can I proceed with these projects?

Generally speaking, any new installation on or after March 30, 2014 (the effective date of the 2014 Fire Code) must comply with the 2014 Fire Code design and installation requirements. However, special consideration is given to certain "projects in progress" in recognition of the hardship that would result if the new design and installation requirements were imposed on buildings or other projects that are fully designed and/or in the process of being constructed or installed.

Fire Department rule 3 RCNY 102-01 allowed certain projects in progress at the time the 2008 Fire Code took effect to be constructed under the prior code requirements if completed within a specified timeframe. In order for the work to be considered a project in progress under the criteria specified in Section 102-01(f), the applicant must have obtained a Department of Buildings work permit prior to the effective date of the Fire Code. This ensures that the work that is to be undertaken or

continued after the effective date of the new code requirements legitimately pre-dates the new code requirements.

The Fire Department has amended Rule 102-01 to provide a similar grace period for projects in progress as of the effective date of the 2014 Fire Code.

For solar panel installations on pitched roofs filed and/or approved prior to the effective date of the 2014 Fire Code, see Chapter 5, Frequently Asked Question #36.

FC CHAPTER 2 - DEFINITIONS

1. Where can I find the definitions for terms used in the Fire Code?

FC Chapter 2 contains a complete list of all defined terms used in the Fire Code. **FC Chapter 2** sets forth definitions for all administrative terms used in the Fire Code, as well as referencing, by section number, terms defined in the individual Fire Code chapters.

2. Where can I find the definitions for terms used in the Fire Department rules?

Fire Department rules italicize terms that are defined in the Fire Code. In addition, certain defined terms are used in the rules. These defined terms are also italicized and are listed in Fire Department rule 3 RCNY 202-01.

FC CHAPTER 3 - GENERAL PRECAUTIONS AGAINST FIRE

1. Are tar kettles permitted to be utilized on the roof of buildings?

No. **FC303.2** prohibits the use of tar kettles on the roof of any building. However, the Fire Code does allow LPG-fueled asphalt melters to be used on the roof of buildings that have noncombustible roofs under certain circumstances, as set forth in Fire Department rule 3 RCNY 3809-01.

2. I notice that stores and catalogs advertise and sell for backyard use portable outdoor fire pits. These fire pits burn wood in a metal dish that looks like a big wok, sometimes with screening. I am aware that the Fire Code regulates barbecues. Does it regulate fire pits as well?

Yes. Portable outdoor fire pits that burn wood or other solid fuel (such as manufactured firelogs) are regulated by the Fire Code as an open fire. The Fire Code (**FC307.1**) prohibits open fires, with a few exceptions, because of the fire hazards they present. The main exception allows barbecues that burn charcoal, propane or piped natural gas (See Frequently Asked Questions #3, 4 and 5). The fuels used in a barbecue generate heat or a controlled flame, as opposed to the uncontrolled fire that is created by the open burning of wood in fire pits.

3. I am the managing agent for a high-rise apartment building. The tenants would like to barbecue on the balconies, rooftop and rear yards. Does the Fire Code have any restrictions or prohibitions?

Yes. **FC307.5** regulates the operation and maintenance of charcoal, piped natural gas, LPG and electric barbecues on all properties, including apartment building properties. You should refer to **FC307.5** for complete requirements.

All barbecues, regardless of the type of fuel used, are required to be operated outdoors (such as on a balcony or rooftop or in a rear yard) and at least 10 feet from combustible materials, including combustible building surfaces, combustible roofs and combustible decks. This restriction will effectively preclude the use of a barbecue on many balconies and rooftops, including on the roof of any apartment building with a combustible roof. Additionally, rooftops are not generally designed or safe for occupancy. You should consult with an engineer, architect or the New York City Department of Buildings regarding the safe and lawful use of any rooftop.

Use of propane (LPG)-fueled barbecues on apartment building properties is restricted to barbecues fueled by one 16.4 ounce container of LPG (the size of LPG container commonly used for hand-held propane torches). A maximum of four 16.4 ounce propane containers may be stored in any individual apartment. No LPG may be stored in any basement or cellar.

All barbecues must be constantly attended and there must be ready access to fire extinguishing equipment, as set forth in **FC307.5**.

See Frequently Asked Question #4 for barbecue requirements for private dwellings and Frequently Asked Question #5 for commercial properties.

4. **I live in a private dwelling (1 or 2 family home). Can we have a barbecue on the balcony or roof deck and/or in the rear yard? If it is allowed, are there any restrictions on barbecue use on the property?**

Yes. **FC307.5** regulates the operation and maintenance of charcoal, piped natural gas, LPG and electric barbecues on all properties, including private dwelling properties. You should refer to **FC307.5** for complete requirements.

All barbecues, regardless of the type of fuel used, are required to be operated outdoors and at least 10 feet from combustible materials, including combustible building surfaces, combustible roofs and combustible decks. This restriction will effectively preclude the use of a barbecue on many balconies and rooftops, including on the roof of any private dwelling with a combustible roof. Additionally, rooftops are not generally designed or safe for occupancy. You should consult with an engineer, architect or the New York City Department of Buildings regarding the safe and lawful use of any rooftop.

Additionally, propane (LPG)-fueled barbecues located and used on a balcony or roof deck are limited to those having a container not exceeding 16.4 ounces of LPG, with not more than 4 such containers in any dwelling unit. LPG fueled barbecues located and used in rear yards are limited to those having a container not exceeding 20 pounds of LPG, with not more than 2 such containers stored outdoors on the property (one in use and one reserve container). LPG containers with a capacity exceeding 16.4 ounces are not allowed to be stored indoors. No LPG may be stored in any basement or cellar.

All barbecues must be constantly attended and there must be ready access to fire extinguishing equipment, as set forth in **FC307.5**.

See Frequently Asked Question #3 for barbecue requirements for apartment buildings and Frequently Asked Question #5 for commercial properties.

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5. **My business occupies an office building. I would like to have a summer barbecue for my staff on the rooftop or in the rear yard. Does the Fire Code restrict or prohibit barbecues in these areas?**

Yes. **FC307.5** regulates the operation and maintenance of charcoal, piped natural gas and electric barbecues on all properties, including commercial properties. Unlike residential properties, propane (LPG)-fueled barbecues are not allowed on commercial properties. You should refer to **FC307.5** for complete requirements.

All barbecues, regardless of the type of fuel used, are required to be operated outdoors and at least 10 feet from combustible materials, including combustible building surfaces, combustible roofs and combustible decks. This restriction will effectively preclude the use of a barbecue on many rooftops, including on the roof of a commercial establishment with a combustible roof. Additionally, rooftops are not generally designed or safe for occupancy. You should consult with an engineer, architect or the New York City Department of Buildings regarding the safe and lawful use of any rooftop.

All barbecues must be constantly attended and there must be ready access to fire extinguishing equipment, as set forth in **FC307.5**.

See Frequently Asked Question #3 for barbecue requirements for apartment buildings and Frequently Asked Question #4 for private dwellings.

6. **I own an electric cooking grill which has its heating elements embedded within a solid cooking surface. Is this type of grill considered an “electric barbecue” regulated by FC307.5.1?**

No. An electric grill which has its heating elements embedded within a solid cooking surface is not an electric barbecue. For purposes of **FC307.5.1**, as set forth in **FC302.1**, an electric barbecue is defined as “any device designed for heating or cooking food on an open grate cooking surface above exposed heating elements”. An electric grill that has its heating elements embedded within a solid cooking surface is not an electric barbecue. Electric barbecues present the fire safety hazard of grease from the heating or cooking process dripping on the heating elements and being ignited.

It is important to note that barbecue-size electric grills require a substantial amount of electric current. Be sure that the electrical outlet into which you plug the grill has sufficient current to safely operate the grill (see Chapter 6, Frequently Asked Question #3) and that if you use an extension cord you comply with the fire safety requirements of **FC605.5**.

7. **Are coke-fueled salamanders at a construction site allowed to be used for concrete drying and curing?**

Yes. Coke-fueled salamanders were allowed by the New York City Fire Prevention Code but were not included as an allowed type of open fire in the 2008 Fire Code. In response to construction industry requests, the Fire Department has, since 2008, allowed the use of coke-fueled salamanders at construction sites through granting of modifications.

The 2014 Fire Code, in **FC 307.1** and **307.6**, allows the use of coke-fueled salamanders for construction-related drying and curing, subject to permit requirements, supervision requirements and other safety requirements to be established by rule.

8. **My school conducts candle-lighting ceremonies as a memorial on certain holidays or to create a spiritual or festive atmosphere on other occasions. We understand that candles are a common cause of fires and we want to be sure that we can conduct these ceremonies lawfully and safely. Does the Fire Code allow candle use in an educational occupancy and, if so, does the Fire Department offer any guidance as to how candle-lighting ceremonies should be conducted?**

The Fire Code regulates the use of candles and other open flames, which are the cause of many fires. **FC308.2** prohibits candles in college and university dormitories; in any place in which hazardous material is stored, handled or used; or where the open flame could ignite combustible materials or vapors.

The Fire Code (in **FC308.3**) strictly regulates the use of candles in any place of assembly. This includes school auditoriums, cafeterias and classrooms that are designed to be occupied by more than 75 persons. Any use of candles in these spaces requires a Fire Department permit and must comply with the detailed requirements of **FC308.3**.

The Fire Code does not specifically prohibit or regulate candle use in classrooms or other areas of an educational occupancy (kindergarten through 12th grade) that are *not* places of assembly.

The Fire Department does not encourage use of lit candles in any occupancy, given the fire safety hazards associated with open flames. However, the Fire Department recognizes that candle-lighting is a traditional observance. Also, educational occupancies typically have noncombustible finishes

and fewer combustible materials than, for example, a residential occupancy. Accordingly, the Fire Department offers the following guidance with respect to candle use in rooms or areas of educational occupancies that are *not* places of assembly.

Whenever a candle is being lit, handled and/or left lit, the following fire safety precautions shall be taken:

1. Candles may be lit, carried and left lit only in rooms or areas that do not contain hazardous materials or vapors. (Science laboratories and art rooms may contain such materials.)
2. Candles must be lit, carried and left lit a safe distance away from combustible material (including drapes, decorations, upholstered furniture and papers).
3. Candles should be lit only by an adult, or under the individualized and immediate supervision of an adult who, if necessary, can intervene to ensure safe lighting.
4. Candles should be carried only by an adult, or under the individualized and immediate supervision of an adult who, if necessary, can intervene to ensure safe handling.
5. All persons involved in candle-lighting or handling lit candles should avoid loose clothing or costumes, and long hair should be tied back.
6. Candles that are left lit should be placed in candle holders that securely hold the candles and are not easily susceptible to tipping over. Ideally, candles that are left lit should be placed on noncombustible surfaces or trays.
7. Candles that are left lit should be continuously monitored by an adult, and not left unattended.
8. One or more portable fire extinguishers should be readily available, and the adults responsible for supervising the candle-lighting and handling and the monitoring of lit candles should be trained in their use.

9. **I operate a bar and restaurant that has a lawful occupancy of less than 75 persons. As it is not a place of assembly, am I required to comply with the regulations in the Fire Code and the Fire Department's rules for use of open flames and propane (LPG)?**

Yes. Bars, restaurants and other eating and drinking establishments with a lawful occupancy of less than 75 persons are regulated by the Fire Code (**FC403.1**) as a "public gathering place."

The use of open flames and LPG present the same fire safety concerns in eating and drinking establishments that are public gathering places as they do in eating and drinking establishments that are places of assembly. Accordingly, the regulations governing the use of open flames and LPG apply to eating and drinking establishments whether they are large enough to be classified as a place of assembly or are regulated as a public gathering place.

With respect to open flames, **FC105.6** requires an open flame permit for any public gathering place. The fire safety regulations governing the use of open flames in public gathering places are set forth in **FC308** and Fire Department rule 3 RCNY 308-01. Among other things, these provisions regulate the preparation of flaming foods and beverages, and the use of candles and combustible liquids in tabletop lamps and other open-flame decorative devices; solid alcohol for food warming (Sternos); and charcoal for cooking in hibachis.

With respect to LPG, **3 RCNY 308-01** regulates the use of LPG in public gathering places, including restricting its use to food warming and culinary browning; limiting the size of LPG containers to not more than 16.4 ounces; and limiting the number of containers that can be stored on the premises to no more than 12 containers.

Permits for open flames are issued by the Fire Department's Bureau of Fire Prevention upon completion of a satisfactory inspection of the premises. Permits are normally issued for a period of one year and must be renewed upon expiration. For additional information regarding open flame permits in eating and drinking establishments call the Bureau of Fire Prevention at (718) 999-0380.

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10. **A resident in our apartment building would like to install a decorative "fireplace" in his apartment that burns liquid alcohol to generate a flame. The fireplace is a modern-looking device of stainless steel and glass construction, with a reservoir in its base that holds the liquid alcohol. Advertising materials depict the fireplace as a freestanding device or as permanently installed in a niche in the wall, but the materials for such installation are not supplied. The device generates a continuous linear flame approximately two feet in length, which is advertised as adjustable and appears to reach as high as 6 to 12 inches. The flame is not fully enclosed by the glass, which only provides a partial shield. Is the installation of such alcohol-burning decorative devices lawful in a residential dwelling unit?**

At the present time, the installation of alcohol-fueled open flame decorative fireplaces is lawful in apartments (Group R-2 dwelling units) and one and two-family homes (Group R-3 dwelling units), but the Fire Department strongly discourages their use for the reasons explained below. The Fire Department is currently considering amending the Fire Code and/or adopting rules to regulate the use and/or installation of such devices in residential dwelling units.

Depending on the design of the device, alcohol-burning devices could be characterized as an open flame device or an open fire. An open flame device (as defined in **FC302.1**) generates a flame in a controlled manner. A device that does not generate a flame in a controlled manner would be prohibited as an open fire by **FC307.1**.

The Fire Department evaluated one type of alcohol-fueled decorative fireplace more than 10 years ago and approved it under the laws and regulations then in effect. That device was a freestanding, fully-enclosed, self-contained floor unit that used solid alcohol fuel (briquettes) and that had a lever to close the fuel box and extinguish the flame.

Alcohol-fueled decorative fireplaces and similar devices present serious fire safety and potentially life safety concerns, including the following:

- **Handling of Fuel.** The flammable liquid alcohol used to fuel such devices is a material that is readily ignitable. Anyone who has refilled the windshield washer fluid tank under the hood of a car or the fuel tank of a lawn mower or other portable equipment knows it is difficult to pour liquids from a container without some spillage. Without special equipment, such as dispensers or pumps, refilling of a decorative fireplace or other device fueled from a container of liquid alcohol, is likely to result in spills. Spills of a flammable liquid, especially in a residential occupancy, can be extremely dangerous.

In one apartment fire, the liquid alcohol from occasional spillage seeped into a wood floor. When it was accidentally ignited, the fire quickly spread along the floor to the wall and then the ceiling of the apartment, causing substantial damage.

- **Storage of Fuel.** Use of alcohol-fueled decorative fireplaces necessitates storage of the flammable fuel. Flammable liquids are dangerous because they release flammable vapors that can be ignited if they reach sufficient concentration in a closed space (like a natural gas leak). Even if not the source of the fire, flammable liquids can serve to accelerate a fire in a home or apartment.

FC3404.3.4.2(3) allows storage of flammable liquids in dwelling units only for household use and only in an amount necessary to maintain and operate equipment, but in any event not

more than 5 gallons (permit amount). Storage of flammable motor fuel (such as gasoline) is entirely prohibited within a dwelling unit.

The liquid alcohol used to fuel decorative fireplaces is not comparable to alcoholic beverages. Alcohol used as a fuel (which is unsafe for human consumption) is much more concentrated than even the highest proof alcoholic beverages, and much more flammable.

- **Flames.** The flames generated by alcohol-fueled decorative fireplaces present a fire hazard. It is essential that they be adequately contained within a noncombustible metal and glass enclosure.

Accidental tipping of an inadequately secured device, or accidental contact with combustible material, can cause a fire that can quickly spread. Residential dwelling units are typically full of combustible materials, such as upholstered furniture, drapes and decorations, paper and other items.

- **Toxic Gases.** Alcohol-fueled decorative fireplaces generate carbon monoxide, a colorless and odorless gas that is combustible and toxic. (The most common source of residential carbon monoxide is malfunctioning home heating and hot water equipment that burn oil.) Alcohol-fueled decorative fireplaces also generate carbon dioxide, a colorless and odorless gas that in high concentrations is an asphyxiant (suffocation hazard).

Most homes and older apartments are not mechanically ventilated (supplied with constantly circulated air through ducts) and, for energy conservation reasons, residential dwelling units increasingly have windows that are tightly sealed. If either of these toxic gases accumulates in a room, it can become life-threatening.

Manufacturers of decorative fireplaces and similar devices advertise their products as designed to generate only small amounts of toxic gases, and may provide guidance with respect to installation of such devices, to ensure that they are installed in rooms of sufficient size and ventilation to avoid dangerous accumulations of such gases. However, with such devices being installed without professional guidance or oversight and without any ongoing inspection and maintenance to detect any defects or performance issues, these devices potentially could present life safety concerns.

In view of the foregoing, the Fire Department strongly discourages installation of alcohol-fueled decorative fireplaces and similar devices in dwelling units in all types of residential buildings but especially in buildings of combustible construction (consult the fire safety notice required to be posted in your apartment by Fire Department rule 3 RCNY 408-02) and on high-rise floors.

Anyone considering installing such a device should:

- select a device that is fully enclosed in noncombustible metal box, with fire-resistant glass providing full protection from the flame on the side(s) facing the room;
- select a device that has a ready means of closing the fire box or other means to immediately smother the flame;
- select a device with a Underwriters Laboratories (UL) listing or other assurance that it is designed and constructed in accordance with industry standards;
- select a device that uses solid alcohol fuel, to prevent spillage of liquid alcohol;
- only use the fuel specified by the manufacturer for the device;
- exercise care in fueling a device that uses liquid alcohol. Consider selecting a model that has a pump or other means of securely filling the device. Clean up any spills immediately. Do not re-fuel the device when it is lit or not completely cool;
- limit storage of liquid alcohol in your home or apartment to one gallon, or the equivalent in solid fuel. Store it in a location away from any heat or ignition source;
- have an architect, engineer or other knowledgeable professional design or approve the installation and confirm that the room is of a sufficient size and ventilation to prevent

unsafe levels of toxic gases, taking into consideration the capacity of the device's alcohol reservoir and rate of burning;

- install the device in a safe location (in accordance with manufacturer's instructions), where it is protected from physical impacts and air drafts. Do not select a device which, because of its design or construction, cannot be safely placed in your apartment or can easily be dislodged;
- install the device away from combustible surfaces and materials, including upholstered furniture, draperies, and wood surfaces;
- extinguish the flames whenever you leave the room or apartment or go to sleep. Do not leave a lit alcohol-fueled fireplace or other device unattended for any extended period of time. It is not always easy to see an alcohol fuel flame, so always close the lid or otherwise be certain that the flames have been fully extinguished;
- install a smoke alarm and a carbon monoxide alarm in the room; and
- keep a standard household portable fire extinguisher (20-A:B:C) readily available whenever lighting and using the device.

11. FC310.3 requires that "no smoking" signs be posted at locations where smoking is prohibited by the Fire Code. What content, lettering, size and color is required of such signs?

The Fire Department has published an approved "No Smoking" sign. It is set forth in Fire Department rule 3 RCNY 310-02. However, the Fire Department does not mandate that this design be used. Other legible, durable signs, clearly communicating the "no smoking" requirement, may be used, but are subject to Fire Department enforcement action if found to be inadequate.

12. Our apartment building has an indoor parking garage. Can residents use the area in front of their parking space, or in the space itself, to store boxes, tires, carts and other possessions? If we provide storage bins next to their parking spaces, can items be stored on top of the bins?

The lawful use of an occupancy is governed by the New York City Building Code, which is administered by the New York City Department of Buildings (DOB). The Building Code states that parking garages are intended for the storage of motor vehicles (see definition of parking garage in BC202). You should consult DOB as to whether storage of combustible materials in a parking garage is allowed under the Building Code and/or would affect the classification of the occupancy.

The Fire Code does not specifically address the storage of items in a parking garage. **FC315** generally requires that the storage of combustible materials in buildings be orderly.

Storage of personal items in a parking garage area could constitute a violation of the Fire Code under a number of circumstances, including the following:

- Storage of gasoline or other prohibited flammable or combustible liquid. See **FC 3404.3.3, 3404.3.4.2**.
- Storage too close to any type of heater or heating device. See **FC315.2**.
- Storage of combustible materials within 2 feet of a ceiling or 18 inches from a sprinkler head. See **FC315.2.1**. Stored items should not obstruct the flow of water from the sprinkler head.
- Storage obstructing any means of egress. See **FC 315.2.2, 1027**.

- Storage of a substantial quantity of tires without a permit. See **FC105.6**. Tires are a potential fire hazard and their number should be restricted.
- Storage of items more than 12 feet above the floor, or storage of high-hazard items (including tires and mattresses) more than 6 feet above the floor, without a permit. See **FC2301**.
- Storage of substantial quantities of combustible materials or combustible waste, or in disorderly manner, that the Fire Department determines constitutes a fire hazard. See **FC304, 315.2**.

In addition to prohibited or regulated items, the Fire Department would be concerned about the presence of large quantities or careless storage of wood, paper, plastic, household fluids and other items that could ignite or contribute to a fire, especially as they are being stored in proximity to motor vehicles with gasoline in their tanks. Storage of items in high piles, including piles on top of storage cabinets, is potentially hazardous. Appropriate height limitations should be established.

A building owner is responsible at all times for the safe maintenance of a building. See FC107.5. The standards set forth in the Fire Code are minimum standards and do not preclude a building owner from enforcing stricter standards.

FC CHAPTER 4 - EMERGENCY PLANNING AND PREPAREDNESS

1. **The 2014 Fire Code comprehensively revised and reorganized the emergency preparedness requirements of Chapter 4. When will these new requirements of Chapter 4 take effect?**

The 2014 Fire Code took effect on March 30, 2014. However, **FC401.3.6.1** of the 2014 Fire Code provides that the emergency preparedness plan requirements of the 2008 Fire Code remain in effect until such time as rules are adopted to implement the emergency preparedness plan requirements of the 2014 Fire Code. This includes preparation of the emergency preparedness plan as well as staffing and drill requirements. At this time, the 2008 Fire Code provisions have lapsed only with respect to buildings or occupancies that are not required by the 2014 Fire Code to prepare an emergency preparedness plan.

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2. **I understand that the Fire Department requires fire guards in places of assembly. What is the source of this requirement and why are fire guards required in places of assembly that have a sprinkler system, fire alarm system and/or emergency lighting?**

The Fire Department requires that fire safety personnel be present in all places of assembly when they are open to the public. Their role is to monitor the premises for fire and fire hazards and to take action if they discover any unsafe condition.

An assembly occupancy is defined by New York City Building Code Section 303.1 as any building or portion thereof for public gatherings for such purposes as civic, social or religious functions, recreation, food or drink consumption, educational instruction or awaiting transportation. A place of assembly is any indoor assembly occupancy (including rooftop spaces) used or intended for use for 75 persons or more, and any outdoor assembly occupancy used or intended for use for 200 persons or more. Places of assembly require a Fire Department permit and a Department of Buildings certificate of operation.

The Fire Department recognizes that automatic sprinkler systems and fire alarm systems now required in many places of assembly enhance their safety. However, no fire protection system can substitute for trained personnel capable of identifying fire or fire hazards and initiating the appropriate response.

Fire safety personnel have been required in places of assembly since 1978, if not earlier. New York City Local Law No. 41 of 1978 authorized the assignment of firefighters to each "place of amusement" during each public performance to monitor the premises "for the purpose of guarding and protecting the occupants from fire and panic." The local law further provided that the owner of any establishment not assigned firefighters was required to employ "one or more persons who possess a *certificate of fitness as a fireguard* issued by the [Fire] commissioner, who shall be on duty continuously in the main audience area during the performance to protect and guard the occupancy of such buildings from fire and other sources of danger."

Today's Fire Code, in **FC403.1**, authorizes the Fire Commissioner to establish requirements to ensure fire safety at indoor and outdoor public gatherings, including the provision of "fire guards or other qualified personnel."

Some years ago the Fire Department developed a new certificate of fitness, the Certificate of Fitness for Place of Assembly Safety Personnel (F-03/F-04), which replaced the fire guard certificate in places of assembly. The safety personnel, like fire guards, are trained to conduct a fire watch, which **FC202.1** defines as "identifying and controlling fire hazards, including detecting early signs of fire, raising an alarm of fire, notifying the [Fire Department], and performing such other fire safety duties as may be prescribed by the commissioner." Unlike fire guards, however, the Certificate of Fitness for Place of Assembly Safety Personnel allows holders to engage in other duties for their employer, provided that they remain on the premises and capable of performing their fire watch duties.

The Fire Department may establish and enforce the fire safety personnel requirement for places of assembly (or other places of public gathering) by issuance of a premises-specific order specifying the number of fire safety personnel required.

The Fire Department's longstanding interpretation and enforcement policy required, when the building or occupancy was open to the public, at least one Certificate of Fitness holder for each two hundred fifty (250) patrons or other visitors present on the premises. Fewer fire safety personnel were required if the building or occupancy was protected by a sprinkler system.

To facilitate compliance and to promote consistency of enforcement, the Fire Department adopts the following interim guidelines, pending Fire Code revision or promulgation of a rule:

Configuration of Place of Assembly or Public Gathering	Fire Alarm System and/or Sprinkler System*	Minimum Number of Place of Assembly Safety Personnel COF Holders Required
One Floor	No	1 for each 250 patrons/visitors present
One Floor	Yes	1 for each 500 patrons/visitors present
More than One Floor	No	1 for each 250 patrons/visitors present <i>per floor</i>
More than One Floor	Yes	1 for each 500 patrons/visitors present <i>per floor</i>

* Fire alarm system includes an approved pre-signal system, or a stage emergency control panel.

These guidelines do not preclude the Fire Department from ordering that additional fire safety personnel be provided at a particular place of assembly, public gathering or event, based on the nature of the event, location or configuration of the premises, or other fire safety consideration.

If the sprinkler system or fire alarm system in a place of assembly malfunctions or is otherwise out of service when the place of assembly is open to the public, additional Place of Assembly Safety Personnel are required as set forth in the table above, as if there were no fire protection system on the premises. Additionally, a fire watch must be maintained in accordance with **FC901.7.2.2** by one or more fire guards (who hold a Fire Department F-01 Certificate of Fitness). **FC901.7.2.2** requires one fire guard for every 50,000 square feet. For example, a place of assembly with 500 occupants would require two (2) Place of Assembly Safety Personnel *per floor* and one fire guard per 50,000 square feet. Fire guards conducting the fire watch for an out-of-service fire protection system may not engage in any other duties.

FC CHAPTER 5 - FIRE OPERATION FEATURES

1. I understand that FC503.1.1 requires a fire apparatus access road from a public street to the frontage space of a building. The definition of “frontage space” in FC502.1 refers to a street or open space outside of a building that is within 30 feet of the main front entrance to the building and not less than 30 feet in any dimension. I understand that the Building Code has a different definition of “frontage space.” How should the term “frontage space” be interpreted, and at what distance from a public street does a fire apparatus access road need to be provided?

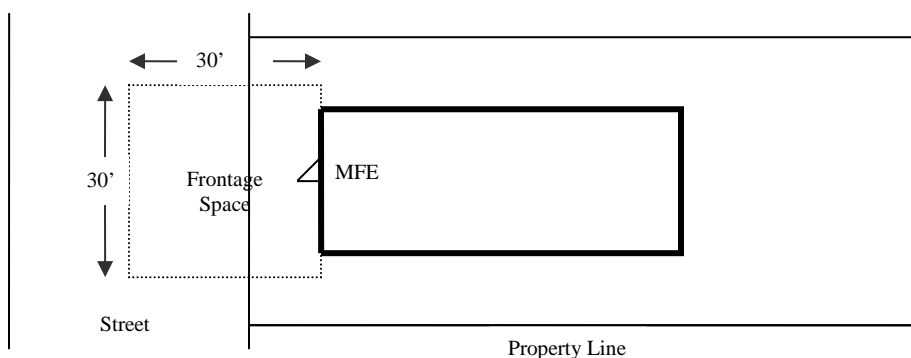
The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC502.1** and **FC503.2.4** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

The Fire Code uses the term “frontage space” to refer to a 30-foot by 30-foot unobstructed space in front of the “main front entrance” to a building. If the main front entrance of a building is more than 40 feet from a public street, a fire apparatus access road is required from the public street or private road to the frontage space.

The New York City Building Code’s definition of frontage space (set forth in BC502.1) and the Building Code provision specifying when a frontage space is required (in BC501.3.1) are different from the Fire Code’s definition (in **FC502.1**) and requirements. A development must comply with both Building Code and Fire Code requirements.

The New York City Building Code (BC501.3.1) generally requires a 30-foot by 30-foot unobstructed space adjoining every building. (For buildings without a large front yard, the sidewalk and the street can be included in meeting the frontage space requirement.) The intent of this frontage space is to allow direct access to the building by fire apparatus and other vehicles. (See Figure 1.)

Figure 1



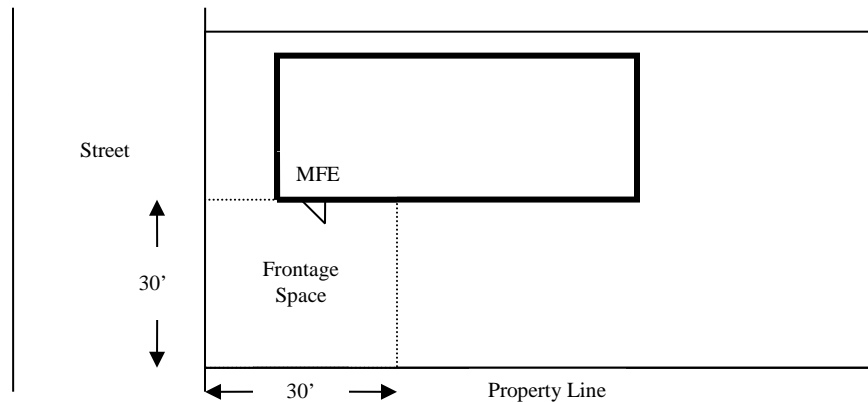
MFE = main front entrance
Location of frontage space shown is illustrative only.

However, the Building Code does not require that this space be located on the “front” of the building, where the main front entrance and windows typically provide the best access to the building for firefighting operations. The Fire Department generally organizes its firefighting operations from the front of the building.

Accordingly, the Fire Code was drafted to require that the required 30' by 30' frontage space directly adjoin the main front entrance. However, the wording of **FC502.1** definition of frontage space has created some confusion. The Fire Department interprets **FC502.1** to require that the minimum 30' by 30' frontage space be situated directly in front of the building, including the area directly in front of the main front entrance. (Building lots that are less than 30 feet in width can comply with this requirement by providing an unobstructed frontage space for the full width of the lot.)

The main entrance to a building may not always be on the face of the building that is generally recognizable as the "front" of the building. The term "front" in "main front entrance" refers to that face of the building that is most accessible for firefighting operations (see Figure 2). Fire Department plan review may be required in cases where the main entrance is not on the front of the building.

Figure 2



MFE = main front entrance
Location of frontage space shown is illustrative only.

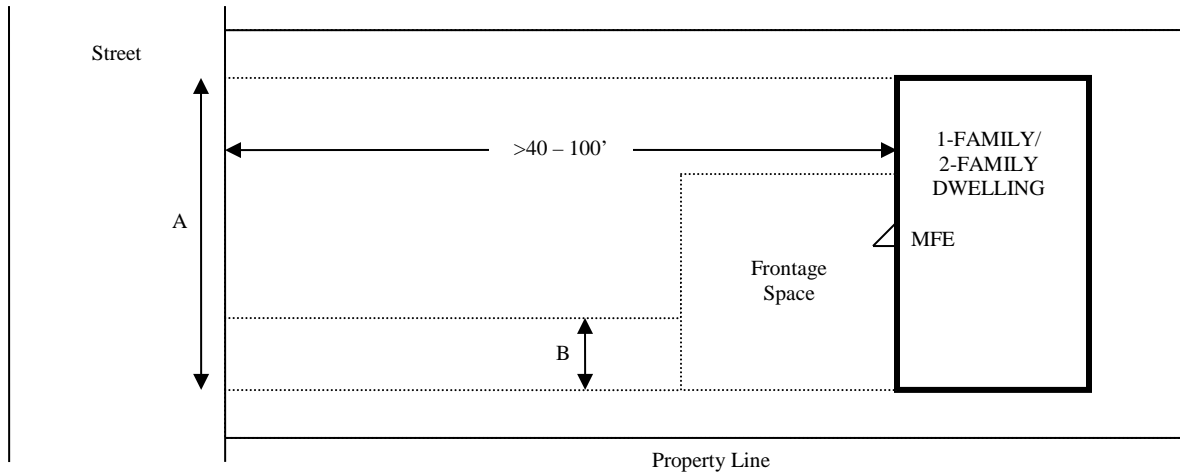
Where a building has more than one occupancy and the occupancies have separate entrances, the Fire Code requires a separate frontage space for the "main front entrance" to each occupancy. In the case of a single two-family dwelling with one or both of the entrances more than forty feet (40') from the street, the Fire Department will accept (by modification) unobstructed five foot access to the rear yard of the building in lieu of a second frontage space. (See Frequently Asked Question #2.)

The definition of frontage space has a bearing on the Fire Code's fire apparatus access road requirements because **FC503.1.1** requires that a fire apparatus access road be provided from a public street to the frontage space of a building.

When the main front entrance of a building is more than forty feet (40') from the curb line on the street that provides access to the building, it can no longer be said to front directly on a street, and a fire apparatus access road must be provided from the street to the frontage space of the building. See **FC503.2.4**.

When a building is located within a private residential or commercial development, the fire apparatus road required by **FC503.1.1** is the private road that proceeds from the public street into the development to the particular property upon which the building is situated. If the main front entrance of the building is set back more than forty feet (40') from curb line of the "street" (i.e., the private road to the property), the fire apparatus access road must be "extended" by a fire apparatus access road to the frontage space of the building (see Figure 3).

Figure 3



MFE = main front entrance

Location of frontage space shown is illustrative only.

A: Fire apparatus access road required by FC503.2.1 (30' – 34' wide)

B: Driveway/FAAR alternative authorized by interim guidelines (width subject to DOB approval).

The requirement that a fire apparatus access road connect a building to the street when the building's main front entrance is set back more than 40 feet from the street is similar to the Building Code requirement for a "driveway" to the frontage space, but it is not a "driveway" in the commonly-used sense of the term, as a paved surface leading to a parking space or garage.

Concerns were expressed about the need for a fire apparatus access road that is 34 feet wide (or even one that is 30 feet wide, as authorized by **FC503.2.3** for some developments) when the road is being designed and will be used exclusively to provide for access to a one-family or two-family home or certain small commercial developments. This issue is addressed in Frequently Asked Questions #4 and 5 and **FC503.2.4.1**.

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2. **I understand that FC503.1.1 requires that a fire apparatus access road be provided to the frontage space of any building, including one-family and two-family homes, where the main front entrance is more than 30 feet from the street. However, a fire apparatus access road of the size required by the Fire Code (30 or more feet wide) would be as large as, or larger than, the front yard of a typical one-family or two-family home. Is there any alternative to providing such a large fire apparatus access road?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC503.2.4** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

The Fire Department recognizes that the typical one-family or two-family dwelling, even if it is set back more than 40 feet from a public street, does not require a fire apparatus access road of the size and construction required for access to other types of developments.

FC503.1.1 requires a fire apparatus access road to the frontage space of each building to ensure that an emergency response is not impeded by narrow, obstructed streets. Ordinarily, the fire

apparatus access road is the street leading to the property, culminating in the street in front of the building. However, when the main front entrance of a building is more than 40 feet from the street, the building can no longer be said to front directly on the street, and a fire apparatus access road is required to “extend” the street to the frontage space of the building.

Accordingly, the Fire Department revised this requirement in the 2014 Fire Code as it relates to any one-family or two-family dwelling with a main front entrance more than 40 feet from the street that is accessed by means of a driveway designed and used solely for that building and that meets the requirements of the New York City Building Code or is otherwise approved by the New York City Department of Buildings. **See FC503.2.4.**

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3. **I am an architect that is designing a commercial strip mall that is set back more than thirty feet from the street. The mall will have three stores, each with a main front entrance, and a parking lot complying with off-street parking zoning requirements and the parking lot lane width required by the Building Code. I understand that FC503.1.1 requires that a fire apparatus access road be provided to the frontage space of a building if the building is set back more than 30 feet from the street, and that FC503.2.1 generally requires that the fire apparatus access road be 38 feet wide. Does the fire apparatus access road to the three store entrances have to be 34 feet wide? That would be far wider than the required width of the parking lot lanes between parked cars. At what location in the development does the fire apparatus access road terminate?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC503.5** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

The Fire Department recognizes that in small commercial strip malls and other small commercial developments situated in a parking lot setting, with main front entrances more than 40 feet from a public street, it may be impracticable, and unnecessary for firefighting operations, to provide a fire apparatus access road of the size and construction required for access to other types of developments. As set forth below, the Fire Department will consider, on a case-by-case basis, granting modifications (variances) pursuant to its authority under **FC104.1** when the application incorporates the design guidelines set forth below.

FC503.1.1 requires a fire apparatus access road to the frontage space of each building to ensure that an emergency response is not impeded by narrow, obstructed streets. Ordinarily, the fire apparatus access road is the street leading to the property that culminates in the street in front of the building. However, when the main front entrance of a building is more than forty feet (40') from the street that provides access to the building, it can no longer be said to front directly on a street, and a fire apparatus access road must be provided from the street to the frontage space of the building. (See Frequently Asked Question #2.)

Although maintenance of access to the main front entrances of commercial buildings is critical for firefighting operations, when such buildings are situated in a parking lot setting, the immediate availability of parking generally minimizes impediments to fire apparatus access, except at the main front entrances to the stores, where vehicles constantly stop to discharge and load passengers and their purchases. The area in front of the building may be used for parking in certain developments because the frontage requirements of the New York City Building Code do not necessarily require that the 30 foot by 30 feet unobstructed frontage space be situated in front of the stores' main front entrances.

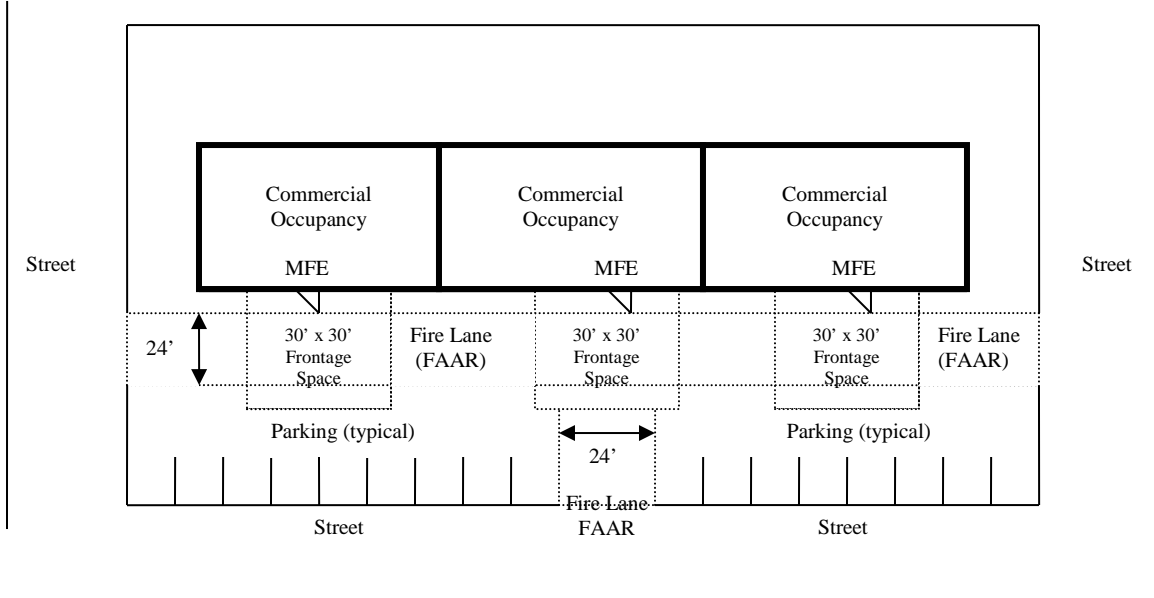
With these concerns and considerations in mind, the Fire Department has concluded that a 34-foot-wide fire apparatus access road may not be necessary in all small commercial developments, provided that the design of the development eliminates parking and other obstructions at the front of the building in a way that facilitates firefighting operations. The Fire Department is prepared to grant modification of the fire apparatus access requirement to encourage parking lot design that better serves firefighting operations.

The Fire Department will grant modifications of this requirement on a case-by-case basis. In accordance with the standard set forth in **FC104.8**, modification may only be granted if provision is made to ensure an equivalent level of fire safety. Applications meeting the design criteria set forth below (which would serve to mitigate and offset the consequences of a delayed Fire Department response resulting from impediments to fire apparatus access) are more likely to receive favorable consideration.

Applications for modification of the fire apparatus access road requirement in commercial developments that incorporate the following design criteria are more likely to receive favorable consideration:

1. **The property owner demonstrates that compliance with the Fire Code's fire apparatus access requirement is impracticable, given the size, location and/or configuration of the property (the size of the project and the height of the buildings will be a factor in determining whether to grant a modification); and**
2. **The building is protected throughout by a sprinkler system designed and installed in compliance with the requirements of the New York City Building Code; and**
3. **There is a 30 foot by 30 foot unobstructed frontage space in front of each of the main front entrances of the building, which is accessible from at least one fire apparatus access road. Such frontage spaces may only be used for passenger discharge and loading, and shall be demarcated by yellow road markings as a "fire access lane." (See Figure 1.) "No Parking" signs conforming to the requirements of FC503.7 shall be conspicuously posted; and**
4. **The fire apparatus access road is at least twenty-four foot (24') in width and is designed and constructed in compliance with the requirements of FC503.1.1; and**
5. **The location and configuration of the off-street parking for the development serve to obviate obstructions to fire apparatus access.**

Figure 1
Typical Small Commercial Development



FAAR = fire apparatus access road
MFE = main front entrance
Locations of frontage space shown are illustrative only.

These design criteria only apply to newly-constructed developments. These design criteria do not authorize the construction, use or occupancy of a building contrary to the Building Code, Zoning Resolution or other applicable provisions of law.

Modification of the fire apparatus access road requirement may be obtained from the Fire Department prior to submitting a building application to the New York City Department of Buildings. The Department of Buildings will issue an objection requiring the applicant to obtain Fire Department approval if the development does not provide a fire apparatus access road in compliance with **FC503.2**. Submission of a modification application (available on the Fire Department's website) and a site plan that is clearly marked to indicate compliance with each interim guideline (such as notes documenting each required dimension or design feature) will facilitate timely Fire Department review.

4. **The Fire Code requires that fire apparatus access roads have an "unobstructed" width of 34 feet, and that new buildings on public streets with an "unobstructed" width of less than 34 feet be protected throughout by a sprinkler system. What would constitute an obstruction for these purposes?**

For purposes of **FC503.2.3**, **FC503.2.10** and **FC503.3.2**, a private road or public street has an "unobstructed" width of 34 feet if its roadbed extends 34 feet from curb to curb, and is open to vehicular traffic for that full distance. An "obstruction" for these purposes would be any installation that prevents or impedes vehicular access, such as planters, bollards and fences. Approved speed bumps and legally parked motor vehicles would not be considered an obstruction.

Partial widening of existing streets, such as widening public streets in front of one or more individual buildings, does not constitute compliance with this requirement. Such a partially widening street does not afford "unobstructed" vehicular access to the property. The intent of these provisions was to address the impediment to fire apparatus access and emergency response resulting from narrow streets, and such partially widened streets do nothing to further this objective, and indeed may exacerbate the problem.

The Department is currently reviewing how to treat streets divided by pedestrian islands. The Fire Code did not intend to prohibit or eliminate such amenities.

5. **Does the sprinklering requirement of FC503.8.2 apply to accessory buildings, such as a detached garage or a detached shed?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC503.2.10** and **FC503.3.2** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

The answer depends on the use, floor area and height of the accessory building.

FC503.2.10 and **FC503.3.2** requires that buildings on streets with an unobstructed width of less than 34 feet be protected throughout by a sprinkler system. The Fire Department has interpreted this provision to require sprinklering of newly-constructed buildings and certain buildings undergoing substantial alterations on public streets with a roadway of less than 34 feet, curb to curb. See **FC501.4.3**.

The primary purpose of **FC503.2.10** and **FC503.3.2** was to ensure that newly-constructed buildings on public streets whose width may impede fire apparatus access, be sprinklered. It was not intended that compliance with this sprinkler requirement be triggered by any alteration, no matter how small, to an existing building.

The term "building" is defined by **FC202** as "an enclosed structure designed or occupied to house any use or occupancy." As with the issue of alterations, the Fire Department has concluded that it was not intended that compliance with the sprinkler requirement of **FC503.8.2** be triggered by any enclosed structure, no matter how small, and no matter how limited the benefit of sprinklering such a structure.

FC503.2.10 and **FC503.3.2** require sprinklering of buildings on public streets of substandard width even when New York City Building Code may not require that the occupancies housed in such buildings be sprinklered. Nonetheless, the Building Code (BC) provides some guidance as to need or efficacy of sprinklering certain buildings.

The Building Code (BC312.1) includes in its "utility and miscellaneous" (Group U) occupancy classification what it terms "private garages," "carports," "sheds" and "greenhouses." BC406.1.2 defines private garages and carports as structures that are not more than 650 square feet in size and one story in height, and that are accessory to a one-family or two-family dwelling (Group R-3 occupancy), or an apartment building or other Group R-2 occupancy. BC312.1 defines sheds and greenhouses as structures that are not more than 120 square feet in size, accessory to a one-family or two-family dwelling (Group R-3 occupancy), and used for household goods or gardening items. The Building Code does not require that these four accessory occupancies be sprinklered.

The Fire Department has concluded that the Fire Code did not intend to require sprinklering of the typical detached, unheated, garden shed, or one- or two-car garage for parking of personal automobiles, accessory to a private residence. Although such accessory storage spaces fall within the definition of "building," a reasonable interpretation of the intent of the Fire Code would not

encompass such buildings, provided that they do not exceed the parameters set forth in BC406.1.2 and BC312.1. The 2014 Fire Code excludes Group U occupancies from the sprinklering requirement, as set forth in **FC503.2.10** and **FC503.3.2**.

Garages, carports, sheds and greenhouses that exceed the use, floor area and/or height parameters of a "utility or miscellaneous" occupancy, or other buildings used for storage of automobiles or other items, would ordinarily be classified by the Building Code (BC311) as storage (Group S) occupancies. The Building Code requires some storage occupancies to be protected throughout with a sprinkler system. Even if the Building Code does not require that a storage occupancy be sprinklered, **FC503.2.10** and **FC503.3.2** may require that it be sprinklered if the storage occupancy is constructed in a building on a street of substandard width. This would be true regardless of whether it is the main building occupying the lot or accessory to another building. The Fire Department will consider such developments on a case-by-case basis.

The Fire Department has further concluded that if an accessory detached building is designed to be occupied, whether for residential, commercial or office purposes, the building must be fully sprinklered, regardless of Building Code requirements. Examples of such accessory detached buildings are a caretaker's residence, cottage or a dwelling above a garage, or a private garage converted to a commercial office or workshop. Sprinklering such small buildings generally may be accomplished as of right or by modification using storage tanks or alternative fire extinguishing systems.

6. **I own a building that is subject to the requirements of FC504.4 for rooftop access and obstructions. Do I have to bring my building into compliance?**

Generally, no, unless you alter your rooftop. Lawfully existing installations are not required to comply with the provisions of **FC504.4**, except with respect to color-coding of conduits and piping and the other operational requirements set forth in **FC504.4.7** and **504.4.8**. However, an alteration to a lawfully existing rooftop installation would require that the design and installation of such rooftop obstructions be brought into compliance with **FC504.4**, unless a modification was granted.

7. **What type of alterations to rooftop installations would require that the rooftop comply with the rooftop access and obstruction requirements of FC504.4?**

FC202.1 defines "alteration" as any addition to, or modification of, an existing installation, other than a repair made in the ordinary course of business. An example of an alteration to a rooftop would be the installation of a new refrigerating system or telecommunications installation. An example of an ordinary repair would be the servicing or replacement, in kind, of components of an existing installation.

8. **I am planning to perform construction on the roof of my building and install new equipment. I understand that, as explained in Frequently Asked Questions #6 and 7, such work constitutes an alteration to the rooftop that triggers the obligation to comply with the rooftop access and obstruction requirements of FC504.4. However, there are existing structures and installations on the roof that make full compliance problematic if not impossible. Is there an alternative to complying with FC504.4 as written?**

Yes. **FC104.8** authorizes modifications of the Fire Code when compliance with one or more Fire Code requirements is impracticable.

The Fire Department recognizes that full compliance with the rooftop access and obstruction requirements of **FC504.4** may be impracticable when an alteration is made to an existing rooftop. The Fire Department has granted modifications of these requirements when a rooftop access plan is presented that affords reasonable access onto and across the rooftop consistent with the purposes of **FC504.4**.

The Fire Department's Bureau of Fire Prevention has issued an informative bulletin that provides detailed guidance to applicants seeking modification of the Fire Code's rooftop access and obstruction requirements. To request a copy *go the Code and Rules Public Feedback Page on the Fire Department's website* (www.nyc.gov/fdny) and use the Public Inquiry Form.

9. **Are satellite dishes, television antennas and vent pipes considered to be rooftop obstructions?**

Yes. Other examples of other obstructions are set forth in **FC504.4**.

10. **With respect to rooftop access and obstructions, is it the intent of FC504.4.4 that the roofs of bulkheads and penthouses be provided with perimeter access and clear paths just as the main roof?**

Generally, no. A roof of a bulkhead or penthouse that is not accessible from the frontage space of the building or any other exposure accessible to fire apparatus access (i.e., where the roof is set well back from the perimeter of the building) generally need not comply with the requirements of **FC504.4**. However, there may be instances where the location and/or size of the bulkhead or penthouse are such that its roof will be treated as a separate rooftop. For example, where the bulkhead or penthouse roof is located at the perimeter of an accessible building exposure and/or occupies a substantial portion of the building rooftop, compliance will be required. The Fire Department often vents stairways and buildings from bulkhead and penthouse roofs, using portable ladders to gain access, and building owners are encouraged to maintain reasonable access for such firefighting operations even if not required by **FC504.4**.

11. **With respect to rooftop access and obstructions, if the accessible building perimeter is not a whole number multiple of 12, should the number of clearance openings be rounded to the upper or lower multiple of 12?**

The rooftop access clearance openings required by **FC404.4.1** should be calculated based on the whole number multiple of 12 (linear feet of fire apparatus-accessible building perimeter), not fractions. Accordingly, a 30 foot wide building requires two such openings.

12. **For purposes of the rooftop access clearance required by FC504.4.1(1), is the accessible building perimeter measured from the inside or outside dimensions of the parapet?**

It should be calculated using the inside dimensions of the parapet walls, reflecting the rooftop that is actually accessible.

13. **If rooftop installations are located on the corners of the building, should the perimeter dimensions for purposes of the rooftop access clearance openings required by**

FC504.4.1(1) be calculated separately for each fire-apparatus accessible exposure, or as one continuous exposure?

FC504.4.1(1) allows the two exposures to be treated together or separately, to afford maximum flexibility while ensuring rooftop access.

14. **With respect to rooftop access and obstructions, if a building has indented light courts along the building façade accessible to fire apparatus, are the light courts counted in the perimeter distance?**

Yes. Exclusion of such areas from the calculation of the building perimeter could result in elimination of the Fire Code requirement for rooftop access.

15. **If a rooftop spans multiple buildings, can it be treated as a single rooftop for purposes of the Fire Code's rooftop access and obstruction requirements?**

Yes, with the written consent of all building owners, provided that a clear path complying with the requirements of **FC504.4** can be established across the multiple rooftops. Such a combined rooftop would be considered a single rooftop for all purposes relating to **FC504.4**.

16. **Is a telecommunications company that has installations on the roof of a building responsible for the signage required by FC504.3 for stairway access to the roof, or only the signage on the roof required by FC504.4.8?**

The signage requirements of **FC504.3** serve to identify stairway access to the roof for egress and other purposes, and are not related to the rooftop access and obstruction provisions of **FC504.4.8**.

17. **Are antennas mounted on the walls of a building that do not extend above the building parapet considered rooftop obstructions?**

Yes, if the antenna is above the level of the roof, even if it not above the top of the parapet. Such flush-mounted antennas may not be installed in a manner that interferes with rooftop access.

18. **With respect to rooftop access and obstructions, can the clear path required by FC504.4.4 twist and turn if need be?**

It would be preferable if the clear path be a straight route from one side of the building to another. However, the Fire Department recognizes that this may cause practical difficulties for some buildings. In such cases, the Fire Department will accept a clear path that "jogs" around a bulkhead or other rooftop obstruction, provided that the path is still "clear" and not confusing or dangerous. Multiple turns in the path should be avoided, and, if excessive, may result in the Department determining that the route does not meet the requirement for a clear path.

19. **With respect to rooftop access and obstructions, in an irregularly-shaped building, such as an "H" shaped building, is a 6 foot clear path as set forth in FC504.4.4 required at 3 locations (front to back, and from side to side in each wing of the building)?**

Yes. In order to accomplish the purposes for the clear path, an "H" shaped building would be required to provide 3 clear paths, as you describe, unless the size of the building, or the air shafts or other openings separating the two wings of the building, is sufficiently small to obviate the need for a second clear path. This issue will likely need to be addressed in a future rulemaking.

20. **With respect to the clear path required by FC504.4.4, are steps and ramps only necessary to the extent they are required under the Building Code?**

No. The applicable requirements for steps and ramps are set forth in **FC504.4.7**. However, the design of steps, ramps and railings shall be in accordance with Building Code requirements.

21. **With respect to rooftop access and obstructions, where conduit or piping crosses the clear path, is it permissible to have a step over the piping or conduit that is less than the six feet width of the clear path (for example, a step or ramp that is only 3 feet wide)?**

No. The step or ramp over the conduit must be the full width of the 6-foot clear path (less approximately 6 inches on each side for handrail clearance). Otherwise, the required clear path would be constricted to the width of the step.

22. **With respect to the clear path required by FC504.4.4, are handrails required on both sides of the steps and ramps or just one side?**

Handrails are required on both sides of steps and ramps.

23. **FC504.4.7(1) requires high voltage wiring to be color-coded red. What constitutes high voltage?**

The Department interprets this provision to refer to the definition of "high voltage wiring" in the New York City Electrical Code, which defines the term to include 120, 208, 277 and 480-volt circuits. Examples of wiring that would not be high voltage include coaxial and telephone cable, unless otherwise provided in the Electrical Code.

24. **With respect to the marking requirements for rooftop conduits and piping of FC504.4.7, is metallic/reflective tape acceptable?**

FC504.4.7 requires continuous, durable and weatherproof reflective or luminescent markings. Any tape satisfying these requirements may be utilized.

25. **Do piping and conduits enclosed within walls or other enclosures require markings in accordance with FC504.4.7?**

No. Only piping and conduits that are not enclosed need be marked.

26. **Do the markings for rooftop conduit and piping required by FC504.4.7 need to be continuous for the entire length of the conduit and piping or can it be spaced out at intervals?**

The marking are required to be continuous. Continuous markings may be interrupted where it is impractical to mark the piping or conduit. Typically, such interruptions would be limited unless conduit or piping is enclosed.

27. **Do the markings required of FC504.4.7 apply to conduit and piping affixed to the exterior of a building?**

No. This requirement is meant to apply only to rooftop conduits and piping.

28. **Are landmark buildings exempt from the marking requirements for rooftop conduits and piping of FC504.4.7?**

No. However, if the marking of pipe or conduit could give rise to a violation of Landmarks Commission or other legal requirements relating to landmarks, an application for modification of the requirements should be made to the Fire Department.

29. **Where more than one transmitting antenna is mounted on the same mounting or support structure, can the lettering required by FC504.4.8 only appear once on the mount or support structure?**

This section provides that the sign be posted "on or near" any installation. If the location of the sign and/or markings on a sign (such as arrows) clearly identifies more than one transmitter, it complies with the code requirements.

30. **Does the lettering required by FC504.4.8 only need to be visible from the rooftop of the building on which it is installed?**

FC504.4.8 requires that the lettering be 3 inches in height. The signage should be visible from the parapet area or from the clear path that traverses the building.

31. **Is there a process to request a variance/reconsideration of these requirements for rooftop access and obstructions? If so, what is the process to apply?**

Yes. A modification may be requested in accordance with **FC104.8**.

32. **What is the purpose of the multiple grouped clearance openings for rooftop access set forth in FC504.4.1(3)?**

This was intended to provide maximum flexibility on large roofs. In place of multiple clearance openings, this section allows fewer but larger openings, provided that they are not separated by less than 12 feet linear distance.

33. **With respect to rooftop access and obstructions, what is the definition of building rooftop height?**

The Fire Department interprets this provision to refer to the definition of "height, building" set forth in Building Code Section 502.1, which refers to the vertical distance from the grade plane to the average height of the highest roof surfaces.

34. **I filed or pre-filed with the New York City Department of Buildings and the New York City Fire Department for solar panel installations on one and two family dwellings with pitched roofs before the effective date of the 2014 Fire Code. Do I have to comply with the 2014 Fire Code requirements for solar panel installations on pitched roofs?**

Yes, but consideration will be given to certain projects in progress as set forth in Chapter 1, Frequently Asked Question #13, and below.

Generally speaking, any new installation on or after March 30, 2014 (the effective date of the 2014 Fire Code) is subject to 2014 Fire Code design and installation requirements. However, special consideration is given to certain "projects in progress" in recognition of the hardship that would result if the new design and installation requirements were imposed on buildings or other projects that are fully designed and/or in the process of being constructed or installed.

Any solar panel installation on a pitched roof *that obtained a Department of Buildings work permit* prior to March 30, 2014, may be eligible to be deemed a project in progress. See Chapter 1, Frequently Asked Question #13.

The Rooftop Access Unit of the Fire Department's Bureau of Fire Prevention has previously utilized the date of filing with the Department of Buildings for various purposes. The solar industry may have filed various solar installation projects on pitched roofs prior to March 30, 2014, with the understanding that such filing would serve to ensure that the projects could be designed in compliance with the 2008 Fire Code. Additionally, the solar industry has "pre-filed" various projects with the Department of Buildings (without submitting design and construction documents).

Filing or pre-filing of an application with the Department of Buildings, which does not constitute Department of Buildings approval of the work or issuance of a work permit, is not sufficient to deem a project "in progress" such that it would not be subject to 2014 Fire Code design and installation requirements.

However, in recognition of the prior Fire Department practice, the Fire Department will grant modifications pursuant to **FC104.8** approving completed submissions (including all required design and construction documents) based on the filed or pre-filed applications, even though such submissions do not fully meet 2014 Fire Code design and installation requirements for solar installations on pitched roofs.

In order to be considered for a modification based on a filing or pre-filing with the Department of Buildings, the completed submission must meet the following criteria:

1. The application must have been filed or pre-filed with the Department of Buildings between April 1, 2013 and March 30, 2014.
2. The application must be for installation of solar panels on a pitched roof subject to **FC512.3**, not on a flat roof subject to **FC504.4** and **FC512.2**.
3. The completed submission, a modification application and applicable fees must be filed with the Fire Department by August 1, 2014. Any project for which a completed submission is not received by the Fire Department by August 1, 2014, must comply with the requirements of the 2014 Fire Code.
4. The completed submission, together with the Fire Department modification, must be filed with the Department of Buildings within thirty (30) days of Fire Department approval of the modification.
5. A Department of Buildings work permit must be obtained, the installation completed, and Department of Buildings sign-off obtained, by August 1, 2015.
6. The 3-foot wide clear access area required by **FC512.3** must be provided on *one side* of the ridge of the roof, for the full length of the roof. The clear access area must be unobstructed by solar panel supports or other rooftop installations. The applicant may determine the side of the roof to be left clear.
7. The building is protected throughout by a sprinkler system, or, if not protected throughout by a sprinkler system, the height of the building does not exceed 35 feet (as defined by the Building Code).

35. **Can you clarify for solar panel installers and homeowners when the rooftop clear path requirement of FC504.4 applies to pitched roofs and when the 3-foot ridge line clearance of FC512.3 applies? Does the Fire Code require a rooftop clear path on the pitched roofs of the typical one or two-family home?**

The rooftop access and clear path requirements of **FC504.4** are meant to apply to “flat” roofs (on buildings 100 feet or less in height). **FC504.4** specifically states that it does not apply to building rooftops with slope exceeding 20 degrees (0.35 rad). Except as otherwise explained below, a building with a roof slope more than 20 degrees is a “pitched” roof that is subject to **FC512.3**. **FC512.3** requires a 3-foot wide clear access along the ridge of each roof slope upon which solar panels are installed.

The reason for this distinction is that, for safety reasons, New York City firefighters typically do not walk on pitched roofs, but conduct firefighting operations from an aerial ladder.

The City’s solar coordinator has brought to the Fire Department’s attention that many one-and-two family dwellings have roofs that, by all appearances, are pitched, but when measured, have a roof slope of less than 20 degrees. These shallow-pitched roofs have slopes of 2, 3 or 4 units vertical in 12 units horizontal, or, in industry parlance, “2/12,” “3/12” or “4/12” pitches.

Such shallow-pitched roofs are typically found on one or two family dwellings. There is confusion as to whether such shallow-pitched roofs should comply with **FC504.4** or **FC512.3**.

As stated above, the rooftop access and clear path requirements of **FC504.4** were intended to apply to “flat” roofs. All roofs have some pitch, for drainage purposes, and the 20 degree standard was derived from the 2008 Building Code. However, the Fire Department did not anticipate that **FC504.4** would be applied to the shallow-pitched roofs found on many one or two-family homes. On such roofs, firefighting operations are generally better served by access to the ridge line (to

allow the roof to be cut to ventilate the heat and smoke of a fire), not a path up one side of a pitched roof and down the other.

Accordingly, pending code revision or promulgation of a rule, the Fire Department will interpret FC504.4 and FC512.3 in accordance with the following interim guidelines:

1. A one or two-family home with a shallow-pitched roof (a roof slope of not less than 2/12, or 9.5%) shall comply with **FC512.3**, not **FC504.4**.
2. A one or two family dwelling that is primarily a flat-roof building shall comply with **FC504.4**, even if a portion of the roof is shallow-pitched or has a pitch exceeding 20%. For example, a brownstone-type building shall comply with **FC504.4**, not **FC512.3**, notwithstanding it having a pitched roof element (such as a mansard) or a penthouse or bulkhead with a pitched roof.

A shallow-pitched or pitched portion of the building rooftop must be kept free of obstructions if it can be traversed to gain access onto, or across, the otherwise flat roof. Owners may request guidance from the Bureau of Fire Prevention as to the appropriate treatment of shallow-pitched or pitched portions of flat-roofed buildings.

3. This interim guideline shall not apply to shallow-pitched roofs on buildings other than one or two family dwellings (Occupancy Group R-3).

36. FC504.4.2 requires reasonable access to rooftop doors, fire escapes, access ladders and other building features, including a 3-foot clearance around three sides of any skylight or scuttle. Can such access and clearance be provided using the six-foot-wide clear path required by FC504.4?

Yes, if the building feature is located adjacent to the rooftop clear path but does not obstruct the clear path.

The rooftop clear path can serve as the required 3-foot clearance on the one or more sides of a skylight or scuttle or other rooftop feature that adjoins the clear path. Similarly, the clear path can provide reasonable access to any other adjoining building feature, such as rooftop bulkhead doors, fire escapes, and access ladders.

37. I am altering the rooftop so I need to demonstrate compliance with the rooftop access and clear path requirements of FC504.4. The rooftop skylight and scuttle on my building are less than three feet from other building features, so, short of reconstructing the rooftop, it is impossible to comply with the Fire Code rooftop requirement that there be at least three feet of clearance on three sides of a skylight and scuttle. Do I need to obtain a modification from the Fire Code's rooftop requirements?

No, not if the rooftop meets the criteria set forth below.

Fire Code Section **FC504.4.4(2)** requires that the rooftop clear path provide "reasonable access" to certain rooftop building features, and "to the maximum extent practicable, 3-feet (914 mm) clearance on three sides of the skylight or scuttle." A scuttle is a hatch with a movable lid that provides rooftop access from within the building.

The skylight and scuttle clearance requirement is intended to provide firefighters access to these building features to allow heat and smoke to be vented from the building during a fire. Such venting facilitates interior firefighting operations and helps control fire spread. Clearance in several directions affords firefighters the maneuverability they need to breach the skylight or open the

scuttle, and allows firefighters to remain upwind of the heat and smoke that pours out once they accomplish this task.

By stating "to the maximum extent practicable," the Fire Code recognizes that an owner's ability to provide three feet of clearance around rooftop skylights and scuttles may be constrained by the layout of the rooftop. It would be impossible or impracticable to move parapet walls and other permanent building features that lie within three feet of a skylight or scuttle (including most building features termed "Qualifying Encroachments" in Frequently Asked Question #38 of Chapter 5 of the Fire Code Guide).

Accordingly, the Fire Department interprets the "maximum extent practicable" language of FC504.4.4(2) with respect to skylight/scuttle clearance as follows:

A skylight or scuttle will be deemed in compliance with FC504.4.4(2), even though there is less than three feet of clearance on three of its sides, when:

- 1. the rooftop was constructed pursuant to plans approved by the Department of Buildings or Fire Department on or before December 31, 2017; and**
- 2. the clearance is limited by any parapet wall or Qualifying Encroachment – attic ventilator, bulkhead, chimney, hatch, plumbing ventilation pipe, scuttle, skylight, or roof-mounted heating/air conditioning equipment (HVAC) – except a freestanding HVAC condenser with a capacity of 5 tons or less.**

A solar, telecommunications or other rooftop installation will not be disapproved by the Department of Buildings and/or the Fire Department based on the lack of the required skylight/scuttle clearance, provided it meets the foregoing guidelines.

Newly-designed and constructed buildings should provide such clearance or obtain a modification (variance) from the Fire Department in accordance with **FC104.8**. An applicant unable to comply with any other requirement of **FC504.4.4** also may request a modification. The application form for a modification is posted on the Fire Department's website. The link is: <http://www1.nyc.gov/assets/fdny/downloads/pdf/business/tm-5-plan-review-rooftop-access.pdf>.

38. **FC504.4.7 allows "conduits and piping" to cross the clear path required by FC504.4 on flat rooftops 100 feet or less in height. Does "piping" include plumbing ventilation pipes? I am referring to the vertical pipes on rooftops that are the termination of the "vent lines" for plumbing waste pipes. Rooftop ventilation pipes may be no higher than many rooftop conduits and piping.**

No, the reference to "piping" in **FC504.4.7** does not include rooftop ventilation pipes. The exception in that section was intended to address utility piping and telecommunications conduits that must traverse the entire width of a building. Recognizing that these obstructions to the clear path cannot be avoided, **FC504.4.7** requires provision of a step or steps over the conduits or piping.

FC504.4 requires that the clear path be situated to avoid rooftop obstructions, including such building features as skylights, hatches, loft ventilators and ventilation pipes, even if they are less than one foot in height.

This requirement has been part of the Fire Code since the enactment of **FC504.4** in 2008. The Fire Department's interpretation of this requirement has not changed.

The Fire Department notes that the height of a rooftop ventilation pipe must comply with Plumbing Code requirements (that serve to ensure proper dispersal of plumbing waste line gases) and Department of Buildings-approved plans, and cannot be unilaterally altered. In any event, a short ventilation pipe is precisely the type of tripping hazard that **FC504.4** seeks to avoid.

The Fire Department appreciates that, on some buildings, the location of the various rooftop building features may make it difficult to establish a compliant clear path. The Fire Code, as interpreted and applied by the Fire Department, affords three remedies in these circumstances:

- **FC504.4** does not require the clear path to be absolutely straight. It can make a limited number of "jogs" around obstructions. (See Chapter 5, Frequently Asked Question #18.)
- If the existence of multiple obstructions on a rooftop renders it impossible or impracticable to provide a Fire Code-compliant clear path, application may be made to the Fire Department pursuant to **FC104.8** for a modification of one or more clear path requirements.

39. **I am the owner of a brownstone building. I am considering a photovoltaic solar panel installation on my rooftop. The solar installer informs me that a solar panel installation is not economically viable on my rooftop because the area for solar panels is limited by the presence of a skylight, vent pipe, chimney and other building elements, and because the Fire Code requires an unobstructed 6 foot wide clear path.**

I understand the importance of rooftop access for firefighting operations, but given the City policy of promoting solar power, has any consideration been given to accommodating solar panel installations on small buildings with narrow roofs?

Yes. The 2014 Fire Code makes allowance for solar panel installations on buildings with limited roof area, in recognition of the fact that such installations must achieve a certain size to be economically viable. Solar panel installations are increasingly popular and cost-effective on brownstones and other small residential buildings.

FC512.2 allows permanent building features – attic ventilators, bulkheads, chimneys, hatches, plumbing ventilation pipes, scuttles, skylights, and roof-mounted heating, air conditioning equipment, and other rooftop building service equipment – to encroach upon the clear path required by **FC504.4** to a limited extent and only under the following circumstances:

- The building rooftop must be 25 feet or less in width and/or depth; and
- The design of the solar panel installation necessitates coverage of all or substantially all of the width and/or depth of the rooftop; and
- The encroachment does not obstruct and thereby reduce the width of the clear path beyond the amount approved by the Fire Department.

Pending code revision or rule promulgation, the Fire Department will implement FC512.2 by applying the following interim guidelines to rooftop clear path encroachments by permanent building features:

1. The building rooftop has a width or depth of not more than 25 feet; and
2. The filed plans indicate (in a note or other approved manner) that encroachment on the clear path is necessary to accommodate the design of the solar installation, which requires coverage across all or substantially all of one or more of the rooftop dimensions; and
3. Only the following permanent obstructions ("Qualifying Encroachments") may encroach upon and thereby reduce the clear path width at one or more locations: attic ventilators; bulkheads; chimneys; hatches; plumbing ventilation pipes; scuttles; skylights; and roof-mounted heating, air conditioning equipment; and
4. The 6-foot rooftop clear path width required by **FC504.4** shall be provided and maintained across the rooftop in accordance with **FC504.4**, except that Qualifying Encroachments may encroach upon and reduce the width of such clear path up to 2 feet (24 inches). The

Qualifying Encroachments are not limited in length or height, but shall not reduce the width of the clear path at any point to less than 4 feet (48 inches); and

5. The Qualifying Encroachments may not encroach upon the rooftop landing areas required by **FC504.4.3**, which shall be kept free of obstructions for the required six-foot by six-foot dimension; and
6. The rooftop solar panel installation is filed with the New York City Department of Buildings for full plan review in accordance with that agency's filing procedures (not under professional certification in lieu of plan review), or is filed with the Fire Department's Bureau of Fire Prevention for plan review in accordance with Fire Department filing procedures; and
7. The solar panel installation complies with all other Fire Code requirements, including all other requirements of **FC504.4**.

The Department of Buildings will approve a solar panel installation with Qualifying Encroachments in the clear path (and the Fire Department will approve a rooftop access plan with such encroachments) if the plan meets these guidelines.

An applicant seeking any other or further modification of the rooftop access and clear path requirements of **FC504.4**, or to authorize encroachment upon the clear path by any type of building feature not listed above as a Qualifying Encroachment, must file a modification application with the Fire Department in accordance with **FC104.8**. A modification application may be obtained using this link: <http://www1.nyc.gov/assets/fdny/downloads/pdf/business/tm-5-plan-review-rooftop-access.pdf>.

40. **I have read the Fire Department rules that implement FC505.3 and 505.4, which require that apartment buildings and hotels have room numbers, hallway directional signs, and "fire emergency markings" on entrance and stairwell doors. The requirements differ depending on whether the building is sprinklered and has more than 8 apartments or guest rooms on a floor, and whether any apartment or guest room has more than one entrance on one or more floors. Frankly, I find the requirements confusing. Could you provide a simple explanation?**

We will try to do so. The different standards for requiring installation of these new fire safety markings and signage resulted from compromises intended to minimize the burden of compliance. For example, it was agreed in drafting the 2014 Fire Code that building hallway directional signs, which are intended to speed a medical or other non-fire emergency response to a building, should not be required if the building has 8 or fewer apartments on a floor.

There are basically five (5) separate compliance obligations. They may be summarized as follows:

Apartment/guest room entrance door identification. These are "eye-level" markings on the main entrance door to each dwelling unit in the building hallway (public) corridor. They are required in all buildings, whether or not they are sprinklered and regardless of the number of units on the floor. See **FC505.3** and Fire Department rule 3 RCNY 505-01(c). Compliance is required by March 30, 2017.

Lobby and hallway corridor directional signs. These are "eye-level" markings. They are required in all buildings that have more than 8 dwelling units on a floor whether or not they are sprinklered. There is an exception if all of the apartments are located in a single direction from the elevator lobby or stairwell. See **FC505.3.2** and Fire Department rule 3 RCNY 505-01(d). Compliance is required by March 30, 2017.

Apartment/guest room entrance door fire emergency markings. These are "floor level" markings on the door jamb of each dwelling unit (on the inside of the door frame in the building hallway corridor, from 12 inches above the floor, downwards), which enable firefighters crawling on the floor during a fire or smoke condition to identify the apartment or room. They are required in buildings that are NOT protected throughout by a sprinkler system AND that have more than 8 dwelling units on a

floor. See **FC505.4.2** and Fire Department rule 3 RCNY 505-02(d). Compliance is required by March 30, 2018.

Stairwell door fire emergency markings. These are “floor level” markings on the door jamb of stairwell entrance doors (on the inside of the door frame in the building hallway corridor, from 12 inches above the floor, downwards). They are required in buildings that are NOT protected throughout by a sprinkler system, regardless of the number of apartments on the floor. The markings are not required if the stairwell doors have photoluminescent path of egress markings in compliance with Building Code Section 1024.2.6.1. See **FC505.4.3** and Fire Department rule 3 RCNY 505-02(f). Compliance is required by March 30, 2018.

Multi-floor dwelling unit entrance door fire emergency markings. These are “floor level” markings on the door jamb (on the inside of the door frame in the building hallway corridor, from 12 inches above the floor, downwards). They are required for all “multi-floor dwelling units” (a term defined in FC502.1), regardless of whether the building is protected throughout by a sprinkler system and regardless of the number of dwelling units on the floor. See **FC505.4.1** and Fire Department rule 3 RCNY 505-02(e). Compliance is required by March 30, 2017.

These requirements have been summarized in the following table, which was developed by the Real Estate Board of New York for its members, and which is used here by permission:

**R 505-01 Apartment and Guest Room Identification and Directional Markings and Signs
(located on or adjacent to door at eye-level)**

	Sprinklered buildings with 8 or fewer units per floor				Non Sprinklered Buildings with 8 or fewer units per floor				Sprinklered buildings with 9 or more units per floor				Non Sprinklered buildings with 9 or more units per floor			
	Yes/No	Compliance Date	Photoluminescent or retroreflective Yes/No	Height	Yes/No	Compliance Date	Photoluminescent or retroreflective Yes/No	Height	Yes/No	Compliance Date	Photoluminescent or retroreflective Yes/No	Height	Yes/No	Compliance Date	Photoluminescent or retroreflective Yes/No	Height
Apartment main entrance identification ("apartment number")	Yes	3/30/2017	No	48" - 60"	Yes	3/30/2017	No	48" - 60"	Yes	3/30/2017	No	48" - 60"	Yes	3/30/2017	No	48" - 60"
Directional markings on wall at elevator lobby	No	NA	NA	NA	No	NA	NA	NA	Yes *	3/30/2017	No	48"- 60"	Yes *	3/30/2017	No	48"- 60"
Directional markings on wall opposite each stairwell entrance	No	NA	NA	NA	No	NA	NA	NA	Yes *	3/30/2017	No	48"- 60"	Yes *	3/30/2017	No	48"- 60"

* only required if apartments are not in a single direction from entry point

**R505-02 Apartment, Guest Room and Stairwell Fire Emergency Markings
(located on door jambs at floor level)**

Fire emergency markings for single-floor, single-entrance apartments	No	NA	NA	NA	No	NA	NA	NA	No	NA	NA	NA	Yes	3/30/2018	Yes	12" from floor, downwards
Fire emergency markings for single-floor apartments with multiple entrances on same floor	No	NA	NA	NA	No	NA	NA	NA	No	NA	NA	NA	Yes	3/30/2018	Yes	12" from floor, downwards
Fire emergency markings for multi-floor apartments (apartments with entrances on different floors)	Yes	3/30/2017	Yes	12" from floor, downwards	Yes	3/30/2017	Yes	12" from floor, downwards	Yes	3/30/2017	Yes	12" from floor, downwards	Yes	3/30/2017	Yes	12" from floor, downwards
Fire emergency marking on stairwell entrance door	No	NA	NA	NA	Yes**	3/30/2018	Yes	12" from floor, downwards	No	NA	NA	NA	Yes**	3/30/2018	Yes	12" from floor, downwards

** not required if building has Building Code-compliant photoluminescent exit path markings on stairwell entrance doors

41. **I understand that the Fire Code requires fire emergency markings only in unsprinklered buildings with more than 8 dwelling units on a floor. Some apartment buildings have floors of different sizes: some floors with more than 8 dwelling units and some with 8 or fewer. How do I comply with FC505.4 in these circumstances?**

The predominant floor layout in the building would determine whether compliance with **FC505.4** is required. If the majority of floors have more than 8 dwelling units, fire emergency markings would be required in the building on all floors, including those with 8 or fewer dwelling units. If the majority of floors in the building have 8 or fewer dwelling units, fire emergency markings would not be required in the building on any floors, including those with more than 8 dwelling units.

42. **I understand that the Fire Code requires fire emergency markings only in unsprinklered buildings. If the hallways of the building are sprinklered, but not the rest of the building, is the building exempt from the fire emergency marking requirement?**

No. FC505.4.2 excludes buildings “protected throughout by a sprinkler system.” As used in the Fire Code, this term refers to “fully sprinklered” buildings, not buildings with sprinklered hallways or other partial sprinkler systems.

43. **If I have multi-floor dwelling units, must I install fire emergency markings on non-multi-floor (single-floor) dwelling units at the same time?**

No, there are separate compliance deadlines. The deadline for installation of fire emergency markings on single-floor apartments is March 30, 2018.

The Fire Department prioritized the installation of multi-floor fire emergency markings with an earlier compliance deadline (March 30, 2017) because there are many fewer multi-floor dwelling units, but also because they are a significant enhancement of firefighter safety. Markings identifying a dwelling unit with more than one floor and indicating whether the floor is an upper or lower floor is a critical piece of information to a firefighter in a fire. Rising heat from a fire on a lower floor of a multi-floor apartment can make the upper floors of an apartment unsafe even for a firefighter in bunker gear.

44. **Fire Department rule 3 RCNY 505-02(d)(4) indicate that the numbers, letters and symbols of the fire emergency markings contrast with the background against which they are viewed. Is there any requirement with respect to whether the background is darker or lighter than the numbers, letters and symbols?**

No. The goal is to achieve maximum visibility and legibility under smoke conditions. Generally, retroreflective or photoluminescent markings should be visible regardless of whether the numbers, letters and symbols are lighter or darker than the contrasting background. The determination as to whether to make light numbers, letters and symbols against a dark background, or dark numbers, letters and symbols against a light background, should be determined by the owner, taking into consideration the overall entrance door or hallway color scheme.

45. Do the fire emergency markings have to be a specific color? One vendor advertises that it is selling FDNY-approved colors.

No. Contrary to the vendor's assertions, there are no "approved" colors for the fire emergency markings required by **FC505.4** and 3 RCNY 505-02.

As the response to Frequently Asked Question #44 states, "the goal is to achieve maximum visibility and legibility under smoke conditions. . . . The determination as to whether to make light numbers, letters and symbols against a dark background, or dark numbers, letters and symbols against a light background, should be determined by the owner, taking into consideration the overall entrance door or hallway color scheme."

The same considerations apply to color selection. So long as the markings are retroreflective or photoluminescent, any color may be used. Contrasting lettering (as compared to the background against which it will be seen) serves to enhance the visibility and legibility of the apartment number. A full range of colors (including bright colors, if preferred) may be used to satisfy hallway aesthetic concerns, provided that they do not sacrifice visibility or legibility.

46. Is there a required size for the apartment room number for the other floors on a multi-floor dwelling unit fire emergency marking? I am referring to the room numbers that appear horizontally above or below the upward or downward-pointing arrows.

No, there is no specific dimension for the room number on the upper or lower floor of a multi-floor dwelling unit, as shown on Figure B3 in Appendix B to Fire Department rule 3 RCNY 505-02.

The Fire Department did not specify a dimension for the upper or lower-floor room numbers because the space available for the room number may vary depending on the width and height of the marking.

As set forth in Fire Department rule 3 RCNY 505-02(d)(4), numbers should be made legible by applying established standards for stroke width, character height and character width, and contrasting background. A dimension should be selected for the room number of the dwelling unit(s) on other floors based on the overall size of the marking, but care should be taken to ensure that it is clearly legible.

47. The apartment buildings I manage have existing apartment room numbers and hallway signage. The apartment numbers are clearly legible but may be a little smaller than required by Fire Department rules. Also, some of the buildings previously installed reflective stickers with the apartment numbers on the bottom of the apartment entrance doors in the building hallways. The stickers are in good shape and are clearly visible to flashlight in low light conditions. However, they are not on the door jamb and not in the format required by FC505 and the rules. Do I need to replace all of these markings and signs?

Not necessarily. Fire Department rule 3 RCNY 505-01(b)(3) and 505-02(c)(3) allow owners to retain existing markings and signage if they are substantially similar to the markings and signage now required by the Fire Code and the rules. The Fire Department will accommodate pre-existing markings that adequately serve the purposes intended by these Fire Code requirements. Considerations include:

- Are pre-existing markings or signage clearly visible and legible?
- Are the pre-existing markings durably affixed and in good condition?
- Are pre-existing markings consistently applied throughout the building?

- Are the pre-existing markings applied or posted at a suitable location on or adjacent to the apartment or stairwell door, and/or in the building hallway corridors?
- Are pre-existing fire emergency markings adequately reflective or photoluminescent (or other material acceptable to the Fire Department)?
- Do the pre-existing fire emergency markings communicate substantially similar information as the markings required by the Fire Code?
- Is the format of the markings and any symbols used immediately understandable, without any prior familiarity?

If you believe that the pre-existing apartment identification and/or fire emergency markings are adequate, contact the Fire Department for guidance before replacing them. An initial inquiry can be made using the Public Inquiry ("Feedback/Comment") form on the Fire Department's website. Please include photographs, dimensions and all other relevant particulars. We will evaluate your submission and suggest an appropriate course of action.

48. The apartment building I manage has stairwells that open directly into the public corridors, without any doors. Do I need a fire emergency marking for such a stairwell? If so, where would I install the marking?

No. A stairwell fire emergency marking is not required to identify an unenclosed stairwell that opens directly into the public corridor, without doors, and that is immediately identifiable as such.

FC505.4.3 and Fire Department rule 3 RCNY 505-02(f) require that a fire emergency marking that reads "Exit" be placed on the public corridor side of each exit stairwell entrance *door*. See Appendix D to Section 505-02. This is intended to clearly identify exit stairwell entrances and distinguish them from dwelling unit entrances.

Generally speaking, an unenclosed stairwell without doors would be immediately identifiable as a stairwell and a marking would be superfluous. However, Fire Department guidance should be sought (using the website public inquiry form) for any open stairwell configuration that does not have doors but which may not be immediately identifiable as a stairwell entrance because the stairs are recessed from the public corridor. In such circumstances, a fire emergency marking may be required.

49. I understand that fire emergency markings are only required in buildings that are not protected by a sprinkler system and that have more than eight dwelling units on a floor. However, are the fire emergency markings required in buildings with two or more wings that collectively have more than eight dwelling units on a floor, if each wing has eight or fewer dwelling units? Similarly, is compliance required in buildings that collectively have more than eight dwelling units on a floor but have separate entrances, corridors and stairwells serving eight or fewer or dwelling units per floor?

The answer to your questions depends on the building configuration and whether firefighters will separately access each part of the building or will access them from common entrances, corridors, stairwells or elevators. As explained below, a building with separate wings accessed from a common entrance or stairwell must comply with fire emergency marking requirements, whereas a building with entirely separate entrances, corridors, stairwells and elevators serving eight or fewer dwelling units per floor will not be required to have fire emergency markings.

To facilitate firefighting and emergency rescue operations, **FC505.4.2** and Fire Department rule 3 RCNY 505-02(d)(1) require that each entrance door to a dwelling unit be identified on the door jamb in the public corridor side of the door by an approved fire emergency marking in an unsprinklered building with "more than eight dwelling units on a floor." (This does not apply to multi-floor dwelling units. **FC505.4.1** requires that fire emergency markings must be placed on all

entrance doors to multi-floor dwelling units regardless of whether the building is sprinklered or the number of dwelling units on a floor.)

Certain buildings, especially older walk-up buildings, may structurally be a single building, have a single heating system and/or have a single certificate of occupancy, but have separate street entrances (or other outdoor ground level entrances) such that, in terms of building access, they are effectively a row of separate buildings. In these buildings, each street entrance leads to a separate public corridor, separate stairwell and separate elevator (if any). There is no connection from the corridor, stairwell or elevator served by one street entrance to any portion of the building served by a different street entrance (except that the stairwells may lead to a common rooftop or common basement/cellar). Nor do any of the apartments exit into an area of the building served by a separate street entrance (except for fire escapes).

Typically, such buildings have a separate street address, or at least a suffix to a common street address (for example, 120-10A, 120-10B). Additionally, such buildings typically have separate apartment numbering in each of the buildings (for example, each street entrance leads to Apartments A to F).

As such, firefighters would not need to orient themselves to more than eight units on a floor. They would need to be aware of which building in the "row" of buildings they are entering, but fire emergency markings on apartment entrance doors (as opposed to building entrance, stairwell and rooftop signage) would not aid them in this regard.

A different conclusion applies to buildings with separate towers or "wings" that are served by a common entrance or are otherwise accessible from common corridors, elevators or stairwells. Typically such buildings have a single building address and use continuous or coordinated apartment numbering (Apartments A to F in the East Wing; Apartments G to M in the West Wing). Although each wing of the building may have eight or fewer dwelling units, firefighters will be operating in a single, interconnected building that has a total of more than eight dwellings on a floor, and would be aided by fire emergency markings on apartment entrance doors.

Accordingly, the Fire Department interprets **FC505.4.2** as follows:

Any building with separate street entrances (or other outdoor ground level entrances) is not required to comply with the fire emergency marking requirements (excluding any individual dwelling unit that is a multi-floor dwelling unit, as that term is defined in FC202.1) when all of the following conditions exist:

- 1. Each street entrance has a separate street address, or other distinguishing numbering or lettering (such as a suffix or entrance number); and**
- 2. Each street entrance leads to a public corridor, stairwell(s) and elevator(s) that serve floors with eight or few dwelling units per floor; and**
- 3. Such entrance, corridor, stairwells and elevators do not provide access to dwelling units in any "adjoining" building (part of the building served by a separate entrance), except that the stairwells may lead to a common basement or cellar or a common rooftop; and**
- 4. No apartments served by such entrance, corridor, stairwells and elevators exit into an area of the building served by a separate entrance, except for fire escapes; and**
- 5. Each stairwell entrance from a common rooftop (bulkhead door) and from a common basement or cellar is clearly marked with the entrance address to that part of the building.**

A building with separate towers or wings that are accessed from common street entrances, elevators or stairwells must comply with the fire emergency marking requirements. An owner of a building with separate towers or wings that effectively meets the above criteria but for minimal interconnections may request individual guidance from the Fire Department using the public inquiry form on the Fire Department's website.

50. **Fire Department rules require that apartment identification and fire emergency markings and signage be in place prior to occupancy of a newly-constructed building or occupancy. Will I need Fire Department approval of the installation in order to obtain a Certificate of Occupancy?**

No. Your design professional should certify compliance with **FC505.3** and **505.4** and 3 RCNY 505-01 and 505-02 in the required submissions to the New York City Department of Buildings, after confirming that the installation meets the applicable requirements of those Fire Code and Fire Department rule provisions.

If a subsequent Fire Department inspection of the building or occupancy reveals that the markings and signage are not compliant with the Fire Code and rules, a violation will be issued and the owner ordered to replace all non-compliant markings and signage.

51. **The 2014 New York City Building Code requires a Fire Department In-Building Auxiliary Radio Communication System (ARC System) in all high-rise buildings, except where the Fire Department determines it is not required. Has the Fire Department determined to exempt any building or class of buildings from this requirement?**

The Fire Department will *consider* exempting buildings that meet the parameters set forth below from the Building Code requirement of an ARC System.

An ARC system is a wireless two-way building communication system consisting of a transceiver (base station) connected to a building-wide antenna system, with a radio console in the building lobby. It is designed to receive and transmit Fire Department portable radio communications within the building, thereby facilitating firefighting operations and promoting firefighter safety.

The portable radios carried by Fire Department firefighters are limited in terms of the distance that they can transmit within a building, depending on the building's construction. ARC Systems allow on-scene communications throughout the building.

The 2014 NYC Building Code (BC) provision that requires installation of ARC Systems in high-rise buildings (BC907.2.13.2) contains the following exception: "Where it is determined by the Fire Department that a radio communication system is not required."

Pending code revision or promulgation of a rule, the Fire Department is implementing BC907.2.13.2 by establishing the following interim guidelines and application procedures for exemption from ARC System requirements:

1. **Building size.** Applications for exemption from the ARC System requirements will be accepted only for existing or proposed buildings with a footprint not greater than 10,000 square feet; not more than one floor level below grade; and with a building height (as defined in BC502.1) not greater than 125 feet.
2. **Existing buildings.** The obligation to install an ARC System in an existing building is typically triggered by building alterations. To request exemption from the ARC System requirement, a TM-4 application must be submitted to the Technology Management unit of the Bureau of Fire Prevention, together with a commissioning test report prepared by an ARC System Professional who holds a Fire Department Company Certificate and Certificate of Fitness. The commissioning test shall be conducted and the report prepared as set forth in Fire Department rule 3 RCNY §511-01(f)(2), except that, as there is no ARC System, the ARC System Professional shall:
 - Use FDNY-programmed portable radios to communicate with all areas of the building;
 - The portable radio transmissions shall be made from the lobby location at which the ARC System radio console would have been installed pursuant to Building Code requirements; and
 - Only Delivered Audio Quality (DAQ) measurements need to be taken and reported.

If the commissioning report is satisfactory, the Fire Department's Bureau of Operations will conduct a DAQ acceptance test in accordance with 3 RCNY 511-01(d)(3)(D) to verify that the Fire Department can satisfactorily operate its portable radios within the building without an ARC System. A letter granting the exemption will be issued upon satisfactory completion of the acceptance test.

3. **Proposed buildings.** To request exemption from the ARC System requirement for a building not yet constructed, a TM-4 application must be submitted to the Technology Management Unit of the Bureau of Fire Prevention, together with an affidavit of a professional engineer certifying that, based upon an analysis of the building design, Fire Department portable radios would operate without interference and attain a minimum DAQ of 3.4 in all areas of the building without an ARC System.

The Fire Department will grant conditional approval of the exemption based on the engineer's certification, subject to the following conditions:

- Upon completion of the building but prior to issuance of any temporary or final Certificate of Occupancy, a commissioning test must be conducted in the manner set forth in #2 above and a commissioning test report must be submitted to the Technology Management Unit.
- If the commissioning test results or the Fire Department's acceptance test determine that a DAQ 3.4 level is not attainable, the conditional waiver will be rescinded and an ARC System must be installed irrespective of financial hardship.

For additional information you may contact the Technology Management Unit of the Bureau of Fire Prevention at (718) 999-2405.

FC CHAPTER 6 - BUILDING SERVICES AND SYSTEMS

1. **Is FC604.2, which requires that emergency power systems comply with the requirements of NFPA 110 and NFPA 111, applicable to both existing and new installations?**

Yes. **FC604.2** requires that emergency power systems for both new and existing installations be operated and maintained (not designed and installed) in accordance with NFPA 110 and NFPA 111.

2. **Does the Fire Code require signs warning of electrical hazards in electrical control panel rooms (sometimes called electrical utility closets)?**

Yes. **FC605.3.1** requires that doors into electrical control panel rooms be marked with a sign stating "ELECTRICAL ROOM."

3. **Does the Fire Code allow individuals working in an office building to plug in and use refrigerators, toasters, microwaves, coffee makers and/or electric space heaters in their offices?**

The New York City Electrical Code, not the Fire Code, directly addresses this issue. Table 210.21(B)(2) of the Electrical Code establishes maximum electrical loads where electrical appliances are connected to receptacles by cords and plugs. The table allows a maximum load of 12 amperes for a 15-ampere-rated circuit, and a maximum load of 16 amperes for a 20 ampere-rated circuit.

Refrigerators, toasters, microwaves, coffee makers and electric space heaters typically draw a significant amount of current. For example, a 1500-watt electric space heater draws a current of 12.5 amperes, and toasters and toaster ovens often draw 12 amperes or more.

Accordingly, to avoid creating a hazardous condition that could cause a fire, building occupants should consult with the building owner or manager before plugging in and using any portable electrical appliance.

4. **I am a building owner/manager. I am responsible for compliance with the Fire Code requirement that building elevators be tested every month to confirm that elevator firefighter service is operable "at all times." Building elevators are programmed to operate in various modes, including out-of-service modes used for servicing and repair. Can you clarify what is meant by firefighter service being operable at all times?**

The equipping and programming of an elevator for firefighter emergency operation (commonly referred to as "firefighter service") is a life safety measure intended for the exclusive use of firefighters and emergency medical personnel during emergencies. Firefighter service should override all other modes of automatic elevator operation, with a few limited exceptions, as explained below.

Firefighter Service

In accordance with New York City Building Code Sections BC3003.2 and BC3003.3, elevators are equipped and programmed for firefighter service. There are two aspects of firefighter service: emergency recall operation (Phase I) and emergency in-car operation (Phase II).

Phase I firefighter service can be activated automatically by the building's fire alarm system, or manually, using key-operated switches at approved locations that recall all elevators in a bank to a designated level.

Phase II firefighter service requires that each elevator car have a key-operated switch inside the car that allows the emergency responder to operate the car manually.

Maintenance Requirements

New York City Fire Code Section **FC607**, entitled "Elevators in Readiness," regulates maintenance of elevators. **FC607.4** requires that elevators equipped with firefighter service be maintained in proper working order "such that the emergency elevator operations are operable at all times."

FC607.4 further provides that, on at least a monthly basis, "all elevators" equipped with Phase I firefighter service be subjected to a recall test, and all elevators equipped with Phase II firefighter service be subjected to a minimum of a one-floor operational test.

The Building Code's Referenced Standard for elevators (Section 8.6.10 of ASME Standard A17.1 (2000 edition, with 2002 and 2003 addenda), as modified by Building Code Appendix K) contains identical requirements. Both the Building Code Referenced Standard and **FC107.7** require that a record be kept of the inspection and made available to agency representatives upon request.

Other Modes of Elevator Operation

Automatic elevators may be programmed to operate in a manner that meets the needs of building occupants. This could include: express service, when floors are bypassed; automatically stopping on all floors, such as during Sabbath observance; hospital emergency service, that overrides normal automatic operation and allows the elevator to be operated manually; occupant evacuation service, specially-designed elevators that bypass floors during emergency evacuation of building occupants; and inspection and hoistway access service, for elevator servicing and repair.

Priority of Elevator Programming

FC607.4's requirement that emergency elevator operations be operable "at all times" mandates that Phase I and Phase II firefighter service override all other elevator functions except for elevator inspection and hoistway access and the hospital emergency service, as follows:

- Inspection and Hoistway Access service. Firefighter service does not override these modes of operation, as causing the elevator to respond could endanger personnel engaged in elevator servicing and repair. The Building Code Referenced Standard requires that an alarm sound to alert service personnel that firefighter service is requested when the elevator is in these modes. Inspection and hoistway access service cannot be initiated when the elevator is already in firefighter service.
- Hospital Emergency service. Elevators in hospitals and other medical facilities are equipped to function in a manner similar to firefighter service, allowing medical personnel to override regular elevator operation for emergency patient care. Firefighter service does not override hospital emergency service as delaying emergency patient care may endanger the patient. Hospital emergency service cannot be initiated when the elevator is already in firefighter service.

The monthly elevator test should ensure that all of the building's elevators have been programmed to operate in compliance with these requirements. All of the different modes of elevator service currently in use in the building should be overridden by firefighter service, with the exception of elevators operating in the inspection and hoistway access and hospital service modes.

Further Guidance

Further guidance about Fire Code requirements may be obtained using the Fire Code and Rules Public Inquiry form, available on the Fire Code page of the Fire Department's website, www.nyc.gov/fdny.

Guidance about Building Code requirements may be obtained from the Elevator Division of the New York City Department of Buildings.

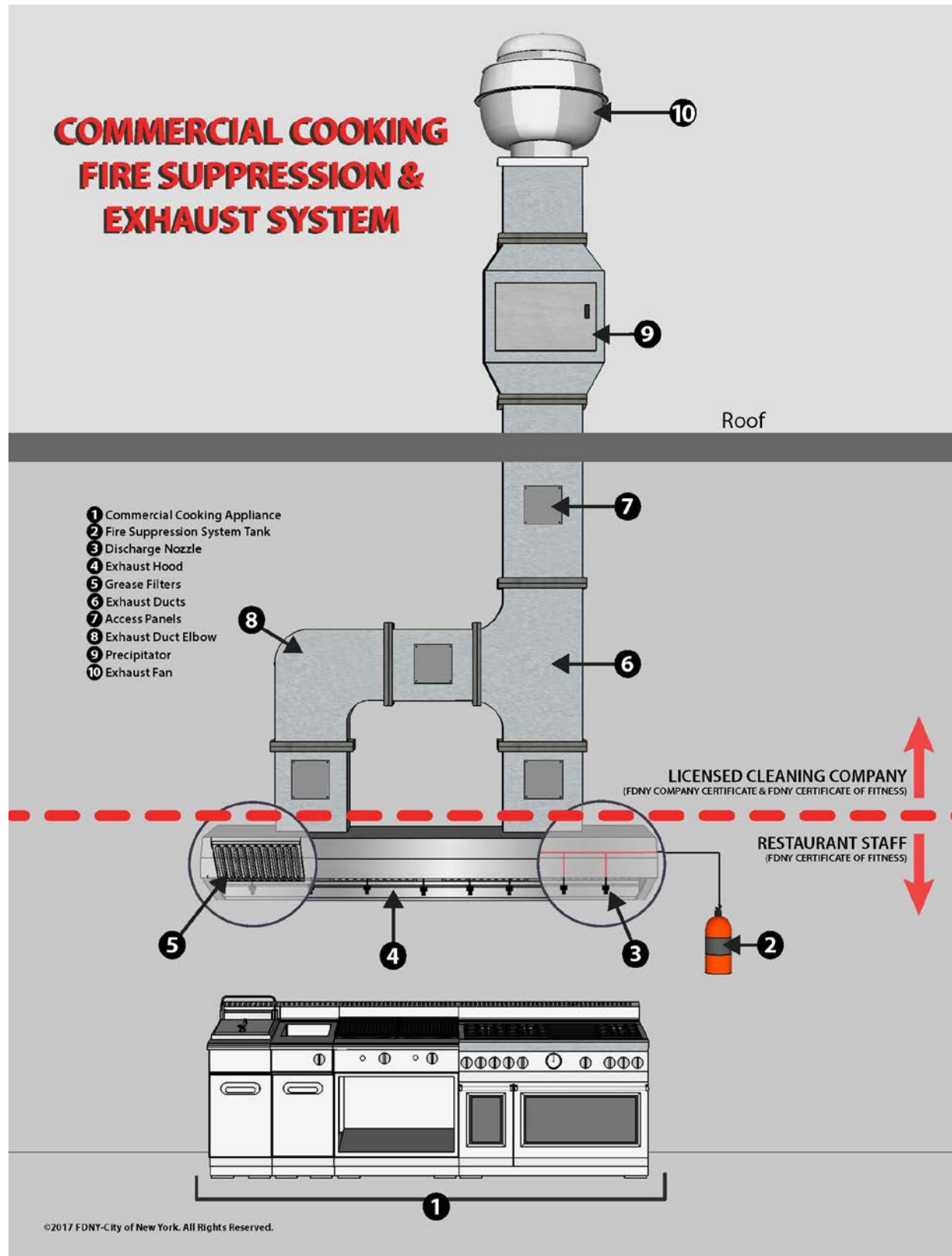
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5. **I understand that the Fire Code requires that commercial cooking appliances and exhaust systems must be cleaned by companies licensed by the Fire Department. What is a commercial cooking appliance and what is a commercial cooking exhaust system?**

FC602.1 defines "commercial cooking appliance" as an appliance used in a commercial food service establishment (commercial kitchen) for heating or cooking food and which produces grease-laden vapors, steam, fumes, smoke or odors that must be removed by a ventilation system. Such appliances include broilers, deep fat fryers, griddles, grills, ovens, rotisseries and similar appliances. Domestic (non-commercial) cooking appliances that are used for commercial purposes are also subject to the requirements for commercial cooking appliances.

Because of the health and fire safety hazards associated with grease-laden vapors, Chapter 5 of the New York City Mechanical Code (and the industry standard it references, National Fire Protection Association Standard 96) requires that commercial cooking appliances be equipped with ventilation systems that exhaust the vapors to the outdoors (exhaust systems). The exhaust system consists of hoods, filters, fans and ducts, and, in many systems, air pollution control devices, such as precipitators, as illustrated below.

Grease is deposited in the exhaust system from cooking vapors. The grease deposits are combustible and can be ignited by the flames, heat and particles generated by cooking. The exhaust system must be regularly cleaned to prevent grease build-up from becoming a serious fire hazard. Grease fires are not uncommon, given the number of restaurants in New York City and the volume of cooking that they do on a daily basis. Because the exhaust ducts are installed inside the building, frequently all the way to the roof, a grease fire in the exhaust system can spread throughout the building.

COMMERCIAL COOKING FIRE SUPPRESSION & EXHAUST SYSTEM



6. What are the cleaning requirements for commercial kitchen exhaust systems?

FC609 sets forth Fire Code requirements for commercial cooking systems, including the cleaning of commercial cooking appliances. The Fire Code does not specify the amount of grease build-up at which cleaning should be conducted. **FC609.4.1** only requires that it be done at least every three months (every sixth months in ducts more than three floors above the cooking equipment), and more frequently "as necessary." Grease filters must be cleaned at least once a month.

The minimum cleaning requirements set forth in the Fire Code may not be adequate to prevent grease build-up in commercial kitchens that generate a large volume of grease-laden vapors by making constant use of char broilers, chicken rotisseries or deep fat fryers; by a large amount of meat grilling; and/or by extended daily cooking operations.

The particulates generated by wood or charcoal-burning (solid fuel) cooking appliances compound the fire safety hazards associated with grease-laden cooking fumes, and therefore such systems must be inspected on a monthly basis by a trained and knowledgeable person, as set forth in **FC609.4.1(1)**.

Businesses generating a large volume of grease-laden vapors or using solid fuel will need to clean the *grease filters* in the hoods above the cooking appliances more frequently than once a month. To maintain sanitary conditions and prevent grease build-up, they may need to be cleaned weekly or even daily.

Such businesses will likely also need to clean the *exhaust ducts* more frequently than once every three months, but because the ducts are enclosed and less accessible, businesses may be less aware of the grease build-up.

The industry standards for commercial cooking exhaust system cleaning (as set forth in Section A.11.6.2 of NFPA 96-2014 and Section 9.1.3 of ANSI/IFECA Standard C10-2011) recommend use of a depth gauge comb, a comb-like device, to measure the amount of grease build-up. The depth gauge comb recommends cleaning of the ducts and fans when there is grease build-up of as little as one-thirteenth inch (.078"), and deems a grease build-up of one-eighth inch (.125") to require immediate cleaning.

This industry standard offers a useful guideline for ensuring that ducts are being maintained in a safe condition and are being cleaned "as necessary" in accordance with **FC609.4.1**.

7. Who can clean commercial kitchen exhaust systems?

The hood and the grease filters (which are installed in the hood) may be cleaned by trained restaurant employees with a valid Certificate of Fitness. However, all cleaning of the exhaust system ducts and other system components above the hood must be conducted by licensed companies and individuals.

Commercial cooking exhaust system servicing company certificates. **FC901.6.3.3** requires that all companies that clean commercial cooking exhaust systems hold a Fire Department commercial cooking exhaust system servicing company certificate. This is to ensure that the cleaning is properly done and to prevent unqualified companies from charging business owners for duct cleaning. The Fire Department posts on its website the list of companies who have been issued a company certificate. Here is the link: <http://www1.nyc.gov/site/fdny/business/all-certifications/certificates-commercial-cooking-exhaust.page>.

Restaurants and other business owners can, if they wish, clean their own commercial kitchen exhaust systems, but they will be required to obtain the same licenses and possess the same type of equipment as businesses that perform such cleaning.

To ensure a proper cleaning is being conducted, effective August 1, 2017, all servicing companies and other businesses holding a Fire Department commercial cooking exhaust system servicing company certificate must have at least two employees holding a Fire Department Certificate of

Fitness. Company certificates will not be approved or renewed unless two Certificate of Fitness holders are listed on the application.

Individual certificates of fitness. Each person engaged in cleaning commercial cooking exhaust systems must be employed by a servicing company licensed by the Fire Department (or employed by the restaurant or business) AND must personally hold a valid, current (not expired) Fire Department Certificate of Fitness. This includes any "helpers" who assist the persons who actually perform the cleaning.

There are three types of Certificate of Fitness for cleaning commercial cooking exhaust systems.

- **Premises-Specific (F-64).** This Certificate of Fitness authorizes the cleaning of all standard kitchen cooking appliances at a particular premises, as noted on the Certificate of Fitness.
- **City-Wide (W-64).** This Certificate of Fitness authorizes the cleaning of all standard kitchen cooking appliances at any premises, citywide.
- **Pollution Control (P-64).** This Certificate of Fitness authorizes the cleaning of all standard kitchen cooking appliances citywide, and additionally authorizes the cleaning of air pollution control devices, such as precipitators, that are installed in exhaust ducts to filter out particulates (soot particles) generated by the burning of solid fuel (such as from wood-burning ovens). Precipitators and other air pollution control devices are generally more difficult to clean as the filters and other components first need to be removed.

Fire Department rule 3 RCNY 113-08(d) requires that applicants for the P-64 Certificate of Fitness demonstrate to the satisfaction of the Fire Department that they possess the training and knowledge necessary to properly service particular types of precipitators or other air pollution control devices, and possess the manufacturer's certification and servicing manuals (or other acceptable verifiable training) for such devices. The types of air pollution control devices they are qualified to service will be endorsed on their Certificate of Fitness.

The Certificate of Fitness specifies the name of the commercial cooking servicing company (or employer) for which the individual is authorized to work. An individual working for two servicing companies must apply for and maintain two separate Certificates of Fitness, and each company must list the individual on their company application. If the holder changes employment, the individual submit to the Public Certification Unit a letter from the servicing company who is now employing him or her, and request that the Certificate of Fitness be updated.

8. **Who is responsible for ensuring that the commercial kitchen exhaust system is properly cleaned?**

The owner of the commercial cooking exhaust system, and the servicing company that has been retained, are both responsible for complying with the Fire Code's cleaning requirements.

The owner must ensure that the commercial cooking exhaust system is cleaned on a regular basis, use companies and individuals that hold the required Fire Department certificates, and otherwise ensure compliance with Fire Code requirements.

The servicing companies and personnel that clean the exhaust systems must do so in compliance with Fire Code standards for cleaning such systems, including cleaning down to bare metal, and must keep their Fire Department certificates current and comply with all other terms and conditions of their certificates.

Servicing companies are also responsible for advising their customers if the amount of grease build-up requires more frequent cleaning than the schedule originally established by the company. Such notice should be in writing and include photographs of conditions in the ducts found upon arrival.

Servicing companies are required to advise their customers if they cannot access any portion of the exhaust duct system and are unable to perform the cleaning required by the Fire Code. Such notice should be in writing and include photographs of the inaccessible areas or equipment. The owner is responsible for promptly addressing any access issues to allow a proper cleaning. If the owner does not promptly address the access issues, the servicing company should report the unsafe condition to the Fire Department. Failure to do so may be deemed to constitute misconduct relating to the company's Fire Department certificate.

9. Can a servicing company conduct cleaning if their approval expired?

No. A commercial cooking exhaust system servicing company can submit a renewal application as early as 60 days prior to the date of expiration. The Fire Department promptly processes such renewal applications and mails to the company a new approval letter. This allows sufficient time for renewal without interfering with the company's business operations.

10. Can a servicing company conduct cleaning if their insurance expired?

No. Pursuant to **FC115.10**, the commercial cooking exhaust system servicing company certificate expires by operation of law any time general liability insurance coverage lapses. The servicing company must submit proof of insurance coverage (ACORD form) to Fire Department's Public Certification Unit prior to the expiration of the current insurance policy. The new insurance expiration date will be reflected on the list of approved servicing company or the company can request a new approval letter.

Before hiring a company to clean a commercial cooking exhaust system, the owner should check the Fire Department's list of commercial cooking exhaust system servicing companies who have been issued a company certificate to clean such systems (see above).

11. What records must be kept of the cleaning?

The servicing company is required to place a sticker on one or more hoods identifying the servicing company, its address and phone number, FDNY certificate number; the individual Certificate of Fitness holders who conducted the cleaning, and the date the cleaning was performed.

Servicing companies will be held responsible for failing to affix a sticker documenting its cleaning of a commercial kitchen exhaust system, and the lack of a sticker will be considered evidence of misconduct if the cleaning is found to have been inadequate. Servicing companies must safeguard the stickers to prevent misuse of stickers to misidentify the company that performed the cleaning.

A checklist has been included in the Study Material for the Certificate of Fitness (W-64 or P-64) to facilitate proper recordkeeping of each cleaning. The checklist (or an equivalent record) should be completed and kept on file by the servicing company for a minimum of three years (the time period required by **FC107.7**).

Business owners must keep a record of all hood inspections and grease filter cleaning.

12. **What are the consequences for a servicing company or Certificate of Fitness holder that performs an inadequate cleaning, continues to clean exhaust systems after their certificate or insurance coverage expires, fails to maintain proper recordkeeping, or fails to affix or safeguard stickers?**

The company, its principals and/or individual employees may be issued a Criminal Court summons or subjected to other civil or criminal enforcement action.

Pursuant to Fire Department rules 3 RCNY 113-01(g) and 115-01(i), Certificate of Fitness and company certificate holders who commit acts of misconduct may have their certificates suspended or revoked and be denied renewal of their certificates, and their acts and omissions may be taken into consideration in connection with other Certificate of Fitness applications.

FC CHAPTER 8 –INTERIOR FURNISHINGS, DECORATIONS AND SCENERY

1. **It has come to my attention that a number of retail stores are storing and selling Christmas trees indoors. It was my understanding that the Fire Code prohibits the indoor retail storage and sale of conifers, including Christmas trees. Could you clarify whether indoor storage and sale of Christmas trees is allowed?**

You are correct. Indoor *storage* of Christmas trees (including storage for sale) is prohibited. Christmas trees must be stored outdoors.

Indoor *display* of Christmas trees is also prohibited in retail stores and most other occupancies. However, indoor display of cut Christmas trees is allowed in one and two family homes; in dwelling units in apartment buildings; and in houses of worship.

FC804 regulates decorative vegetation, including the storage and display Christmas trees and other conifers, which are a fire hazard because they contain pitch, which burns rapidly.

FC804.1.1, **FC804.1.2** and **FC804.1.3** prohibit the *indoor* storage and display of conifers, whether cut or a natural tree (rooted in soil), except as allowed in the dwellings and houses of worship noted above. The Fire Code does not define “indoor.” However, the plain meaning of that term would encompass any area inside of a building. (A “building” is defined by **FC202** as an “enclosed structure.”)

Whether an area of a building that is only partially enclosed (open on one or more sides and/or not covered by a roof) is an “indoor” area for purposes of conifer storage and display is a determination that the Fire Department would make on a case-by-case basis. Further guidance may be obtained using the public inquiry form on the Fire Code page of the Fire Department’s website.

FC804 sets forth certain fire safety requirements for Christmas tree display, including proper support and maintenance. Safe maintenance requires a freshly cut tree trunk at time of purchase or display; keeping the tree trunk in the water at all times; keeping the tree away from any flames or heat source; and prompt disposal of the tree upon significant needle loss or brittleness (as described in **FC804.1.5**). **FC804.1.6** requires that merchants selling cut Christmas trees attach to the tree a printed tag containing such fire safety instructions.

Any complaints regarding the indoor storage or display of Christmas trees can be reported to the Fire Department’s Bureau of Fire Prevention Field Public Operations Support Unit at (718) 999-2541.

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2. **Does the Fire Code regulate furnishings and decorations in hotel guest rooms?**

No. The Fire Code and the Fire Department rules do not regulate furnishing and decoration inside guest rooms in hotels and motels (Group R-1 occupancies). However, **FC Chapter 8** does regulate curtains, drapes and other decorations in the public areas of hotels and motels, including places of assembly and places of public gathering.

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3. **I am a managing agent for office and residential buildings, many of which have assembly and mercantile tenants. Every year building owners and tenants make inquiries about Fire Department regulations relating to the display of Christmas and other holiday decorations. Can you assist me in providing appropriate guidance?**

Thank you for requesting our guidance.

The requirements for the display of decorations, including Christmas and other holiday decorations, are set forth in **FC 801, 804 and 805**, and Fire Department rule 3 RCNY 805-01.

This response is intended to highlight and summarize the requirements for display of decorations in assembly, business, educational, institutional, mercantile and residential buildings and occupancies. See **FC202.1** for a definition of each of these types of occupancies.

Be sure to review the Fire Code and rule provisions themselves (which can be viewed on the Fire Department's website) to check for requirements that may be applicable to specific circumstances in the buildings you manage.

There are different requirements for display of decorations in other types of buildings and occupancies. Please check the Fire Code and rule provisions if you are responding to an inquiry relating to a building or occupancy other than an assembly, business, educational, institutional, mercantile or residential building or occupancy.

Cut Christmas Trees

Cut Christmas trees (real trees that have been cut down) are easily ignitable once they dry out. They must be properly maintained and removed from the building at the first evidence that they have become dry.

Because they are a potentially serious fire hazard, cut Christmas trees are not allowed in any part of the types of buildings this response addresses, including building lobbies, offices, stores, or assembly spaces.

The only exceptions to this rule are in one and two family dwellings, individual residential apartments and houses of worship. Cut Christmas trees may be displayed in these places subject to the fire safety requirements set forth below.

The Christmas trees that you see in office lobbies and other building locations should be artificial (a plastic or other material that is flame-resistant or flameproofed). (The requirements for artificial holiday decorations are discussed below.)

If you are buying a cut Christmas tree for your house or apartment, it should bear a printed tag containing instructions for its safe and lawful display and disposal. Retail merchants are required to attach such instructions, which are readily available from a variety of reputable sources.

If you are displaying a cut Christmas tree in your house or apartment, be sure to comply with the following fire safety measures:

- Use a device that securely supports the tree and that contains at least a two day supply of water.
- Check the tree daily for dryness. Upon first evidence that the tree is getting dry and dropping needles, remove it from the building.
- Do not place candles or other open flames on or near the tree.
- Keep the tree away from heat sources, including fireplaces, portable heaters, heat vents, stoves and other heat-producing devices.
- Use only electrical wiring and lighting that bears a "UL" (Underwriters Laboratories) label or the label of another recognized testing laboratory.

Cut Christmas trees for sale or that are being discarded may not be stored inside the building. They must be kept outdoors.

If you are thinking of getting a living tree planted in soil for your home or place of business, the basic rule is as follows: natural (live) trees that have not been cut can be kept indoors in all occupancies, except for Christmas trees (conifers). Conifers have pitch, a sticky substance that will burn, even if the tree is watered. As set forth in **FC801.4.3**, live trees must be regularly watered and kept healthy to avoid becoming a fire hazard. A live tree that becomes dry must be removed from the building.

Artificial Holiday Decorations

Artificial Christmas trees, holiday wreaths and other artificial decorative vegetation must meet one of the following standards:

- The tree or other decoration must be “inherently flame resistant,” meaning that the materials used to make the item do not catch fire under normal circumstances. There should be a label, tag or other documentation from the manufacturer certifying that it meets this standard.
- If not inherently flame resistant, the tree or other decoration must be certified as having a “limited heat release rate.” Again, there should be a label, tag or other documentation to this effect.
- If not inherently flame resistant, the tree or other decoration must have been treated with a flameproofing chemical to render the decoration flame resistant. Typically, this would be a custom decoration, not an item purchased in a store. The chemical used to flameproof the decoration must be approved by the Fire Department and the person certifying that it has been flameproofed must hold a Fire Department Certificate of Fitness for this purpose.

Consult Fire Department rule 3 RCNY 805-01 for full details about flame resistance and flameproofing.

Building owners, commercial tenants and other business owners must maintain documentation on the premises confirming compliance with the above requirements, and provide such documentation to Fire Department representatives upon request.

Natural Decorative Greens

While “natural” decorative greens (actual tree boughs) are the most authentic and fragrant of decorations, many commonly available decorative greens are not allowed in any building. Balsam, hemlock, pine and Spanish moss and any other decorative green containing “pitch” (a sticky “pine tar” substance) are not fire safe.

The only decorative greens that can be displayed are those that do not contain pitch. This would include, among other items, grapevine, boxwood and berries.

Decorative greens cannot readily be watered and quickly become dry. Once dry, they are readily ignitable and can set other decorations and furnishings on fire. Dry decorative greens must be removed from the building.

Decorative greens, except conifers, can be displayed and stored for sale in mercantile establishments, but must be removed when they become dry.

Questions and Complaints

Questions about holiday decorations may be submitted to the Fire Department using the public inquiry form on the Fire Department’s website.

Complaints of potential Fire Code violations may be submitted to the Fire Department's Field Public Operations Support Unit at (718) 999-2541.

FC CHAPTER 9 - FIRE PROTECTION SYSTEMS

1. **I can't find in the Fire Code detailed requirements for the design and installation of sprinkler systems, standpipe systems, fire alarm systems and means of egress. Where are these requirements?**

In the New York City Building Code. The requirements for the design and installation of such systems and means of egress are part of the requirements for building construction set forth in the Building Code, which can be viewed on the New York City Department of Buildings' web site, www.nyc.gov/buildings.

While the Fire Code does not contain the design and installation requirements for sprinkler systems, standpipe systems, fire alarm systems and means of egress, it does set forth operational and maintenance requirements for such systems and means of egress. For additional information about such requirements, see Chapter 1 Frequently Asked Question #9.

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2. **Is a portable fire extinguisher required to be installed in an area that contains stationary oil-burning equipment?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC603.3.1** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

Yes. Building owners seeking to replace sand pails with a portable fire extinguisher should install a dry chemical extinguisher with a minimum 20 B:C rating, or a carbon dioxide extinguisher with a minimum 2 B:C rating.

Previously, the requirement for a portable fire extinguisher to be provided in an area that contains oil-burning equipment was set forth in the rules of the New York City Board of Standards and Appeals (BSA), 2 RCNY 16-01(n)(7). Such provision required one approved hand held fire extinguisher of not less than a two quart capacity suitable for oil fires, or two rounded bottom pails filled with sand. This BSA provision has long been interpreted to require either a 10 pound carbon dioxide (CO₂), or a 5 pound dry chemical portable fire extinguisher, or the two sand pails.

The new Fire Code no longer accepts sand pails as an approved portable fire extinguishing medium, and effective July 1, 2008, sand pails must be replaced with a portable fire extinguisher of an appropriate size and type.

The industry standard applicable to portable fire extinguishers, NFPA 10, which has been adopted by reference in **FC906.2**, classifies such extinguishers based upon the type and capacity of fires that they are suitable for extinguishing, and the travel distance to the extinguishers. Consistent with the BSA rule and the NFPA standard, the Fire Department has adopted a new rule, 3 RCNY 906-02, requiring a minimum 20 B:C rated dry chemical type portable fire extinguisher, or a minimum 2 B:C rated carbon dioxide portable fire extinguisher, in areas containing stationary oil-burning equipment.

3. **I live in a multiple dwelling and the building has no portable fire extinguishers. How can I find out if my building is required to have portable fire extinguishers, and if it does require them, how high off the floor do they have to be mounted?**

The types of occupancies in which portable fire extinguishers must be provided are set forth in **FC906**. Portable fire extinguishers are not required to be provided in multiple dwellings. If they are provided, such extinguishers are required to be mounted so that the top of the extinguisher is not more than 5 feet off the floor for extinguishers weighing 40 pounds or less, and not more than 3½ feet off the floor for extinguishers weighing more than 40 pounds, but in no case less than 4 inches off the floor.

4. **FC901.6.3.2 requires companies engaged in the business of selling portable fire extinguishers door to door to owners of buildings or business for use on their premises to obtain a portable fire extinguisher sales company certificate. FC901.6.3.3 requires that companies engaged in the business of inspecting and cleaning commercial cooking exhaust systems to obtain a commercial cooking exhaust system company certificate. How can I obtain these certificates?**

FC115 sets forth basic requirements for such company certificates. Fire Department rule 3 RCNY 115-01 sets forth the standards, requirements and procedures for issuance of company certificates, including fire extinguisher sales and inspecting and cleaning commercial cooking exhaust systems. Application forms for and information about such company certificates are posted on the Fire Department web site.

5. **I see that FC903.5 requires periodic inspection and flow testing of sprinkler systems in most buildings, but there is an exception for one and two-family dwellings. Am I to understand that the Fire Code's requirements for a monthly inspection of a sprinkler system by a certificate of fitness holder, as well as a flow test by a licensed professional every few years, do not apply to sprinkler systems in one and two-family dwellings? What are the testing requirements for such sprinkler systems?**

The Fire Code does not specify inspection and testing requirements for sprinkler systems in one and two-family dwellings (Group R-3 occupancies). The Fire Department does not regularly inspect such dwellings.

This does not mean that a sprinkler system in a one or two-family dwelling does not need to be maintained. To the contrary, **FC903.5.3** requires that it be maintained in perfect working order. **FC107.5** states that a building owner is responsible for the safe maintenance of a building at all times. Accordingly, a homeowner should arrange to have the sprinkler system periodically inspected and tested to ensure that it maintained in perfect working order.

The industry standard applicable to the installation and maintenance of sprinkler systems in one and two-family dwellings, National Fire Protection Association Standard 13D (2016 edition), provides guidance as to the appropriate testing procedures and other maintenance for a sprinkler system in such dwellings.

All testing and servicing of fire protection systems should be conducted by a qualified professional, and appropriate recordkeeping maintained by the homeowner and/or the professional.

6. **I recently installed a fire pump as part of a standpipe system installation. Do I need to arrange for a Fire Department inspection of the installation?**

Yes. A Fire Department inspection is required upon the installation of any fire pump pursuant to **FC913.5.1**. That section provides: "Acceptance testing shall be done in accordance with Section **901.5** and NFPA20...before a representative of the Department." The Department will conduct an electrical inspection of the installation of the fire pump. A mechanical inspection is also conducted for installations located on waterfront properties. To obtain information on the required filings and to schedule an inspection, contact the Fire Alarm Inspection Unit of the Bureau of Fire Prevention at (718) 999-2467 (for electrical inspections) and the Fire Suppression Unit of the Bureau of Fire Prevention at (718) 999-2519 (for mechanical inspections).

7. **When is an impairment coordinator required at a construction site, and at what point in the construction process?**

Fire Code Section **FC901.7.1** requires that the owner of a building designate an "impairment coordinator" to take the actions required by the Fire Code in the event that a standpipe system, sprinkler system or fire alarm system is out of service. If no impairment coordinator is designated, the building owner is deemed to be the impairment coordinator and must fulfill the duties of the impairment coordinator.

FC1408.6 provides that, at a construction site, the fire safety manager or the impairment coordinator shall comply with the requirements of **FC901** in the event that a fire protection system is impaired. The fire safety manager can be designated as the impairment coordinator.

FC901.7 sets forth the actions to be taken in the event a fire protection system is removed from service for repair, maintenance or construction (planned removal from service) or unexpectedly malfunctions (unplanned out of service condition). **FC901.7.7** specifically addresses the actions to be taken by the fire safety manager or impairment coordinator in the event of an out-of-service standpipe system at a construction site.

Accordingly, an impairment coordinator is required at a construction site that has an operational standpipe system, sprinkler system or fire alarm system. As detailed below, the Fire Code obligation to designate an impairment coordinator arises at such time, and continues for so long as, a fire protection system is operational at the site. For purposes of this Frequently Asked Question, "operational" means that the fire protection system has been installed (in whole or in part) and all required approvals have been obtained.

In a building under construction, the impairment coordinator will be primarily responsible for the standpipe system, which is installed early in the construction process and provides fire protection during the construction process. The impairment coordinator must be designated at such time as the Building Code requires that the construction site standpipe system be operational.

An impairment coordinator is required for a sprinkler system and/or a fire alarm system upon the system(s) becoming operational. Generally, such systems are not operational until the building is nearing completion. An impairment coordinator must be designated no later than the date of the certificate of occupancy or temporary certificate of occupancy that authorizes the building, or a portion of the building, to be occupied.

For a table outlining impairment coordinator, fire watch and hot work requirements at construction sites, see the NYC Fire Code Guide, Chapter 9, Frequently Asked Question #12, addressing fire watch requirements at construction sites.

8. **Is an impairment coordinator required on other construction sites?**

Yes. The Fire Code's definition of "construction site" (in **FC1402.1**) is not limited to new construction but encompasses demolition and alteration projects.

The Building Code (in BC 3303.7 and 3303.8) generally requires that standpipe and sprinkler systems be removed in a building under demolition on a floor-by-floor basis (except for "wrecking ball" and other mechanical demolitions that do not proceed floor-by-floor), so an impairment

coordinator must be maintained at a demolition construction site until all fire protection systems are lawfully rendered inoperable.

An impairment coordinator is required on alteration projects if the building has an operational standpipe, sprinkler or fire alarm system.

9. **Is an impairment coordinator required when a sprinkler system or fire alarm system is being removed in connection with building alterations?**

Yes, in almost all circumstances.

FC311.2.2 requires that fire protection systems in a temporarily vacant floor or other space of an existing building be maintained in good working order. Removal of building fire protection systems must be authorized by the Department of Buildings (DOB) by issuance of work permit with the concurrence of the Fire Department and/or in accordance with Fire Department requirements. (See Building Code Sections BC 3303.7.4.3 and 3303.9.)

When building renovations require removal of existing fire protection systems, it is DOB policy (set forth in DOB Buildings Bulletin 2012-009) to mandate installation of a temporary loop sprinkler system around the building core. DOB policy also requires that fire alarm systems be maintained during alteration work to the maximum extent feasible. Fire alarm system detectors may be covered or removed to prevent unnecessary alarms resulting from construction work, but DOB policy generally requires that other fire alarm system components, including sprinkler flow alarms and manual pull stations, be maintained in an operational condition.

In such circumstances, an impairment coordinator must be designated for the temporary loop sprinkler system and the fire alarm system components that remain operational, in addition to the building standpipe system, if the building has one. Designation of separate building and construction site impairment coordinators is addressed in NYC Fire Code Guide, Chapter 9, Frequently Asked Question #10.

In the rare circumstance that DOB authorizes removal of the building's fire protection systems without installation of a temporary sprinkler system or maintenance of alarm system components, and the building has no standpipe system, no impairment coordinator is required. An impairment coordinator is required for any premises at which there is an operational standpipe, sprinkler system or fire alarm system. An impairment coordinator is not required at any premises that lawfully has none of these systems or lawfully removes the system(s).

10. **When alteration work is being performed in an existing building is the building's impairment coordinator responsible for the construction site or can there be a separate impairment coordinator for the floors on which construction or alteration work is being performed?**

Either arrangement is acceptable.

It is the building owner's decision whether to make the building's impairment coordinator responsible for out of service fire protection systems in the areas of the building undergoing alteration or to designate a separate impairment coordinator.

If separate impairment coordinators are designated, the persons designated to perform this function must coordinate their respective responsibilities for the building's fire protection systems.

11. **Must the impairment coordinator be present at the construction site at all times?**

No. An impairment coordinator does not need to be present at a construction site at all times. However, in the absence of the designated impairment coordinator, the owner is responsible for making the notifications and taking the other actions required by the Fire Code in the event that a fire protection system is out of service. Accordingly, an owner may wish to designate more than

one individual to serve as the impairment coordinator so that there is a trained and knowledgeable person on the premises at all times during construction activities.

12. **Except for standpipe systems, fire protection systems are typically not in service in buildings under construction, and sprinkler and fire alarm systems are commonly removed from service, in whole or in part, during building alteration or demolition. When does the Fire Code require fire guards at a construction site for “out of service” fire protection systems?**

A fire watch must be maintained by fire guards at a construction site whenever a fire protection system is “out of service.” Whether and when a fire protection system is deemed to be out of service at a construction site is discussed in this Frequently Asked Question and response.

Fire Code Section **FC901.7.2** generally requires that a building be “evacuated or a fire watch maintained in accordance with this section when a standpipe system, sprinkler system or fire alarm system is out of service.” **FC901.7.7** specifically requires that a fire watch be maintained at a construction site when the standpipe system is out of service.

FC901.7.2.2 requires that a fire watch for an out of service fire protection system be maintained by a fire guard, an individual who has obtained a Fire Department certificate of fitness to perform this important fire safety function. **FC901.7.2.1** and **FC901.7.2.2** set forth the duties and responsibilities of a person conducting a fire watch at a premises with an out of service fire protection system.

FC1404.5 also authorizes the Fire Commissioner to require that a fire watch be maintained by fire guards at a demolition site or other construction site that is unusually hazardous in nature.

The issue of whether a fire protection system is “out of service” at a construction site is complicated by the fact that fire protection systems are not yet operational in new buildings under construction, and may be removed in connection with construction activity in an existing building undergoing demolition or alteration. For purposes of this Frequently Asked Question, “operational” means that the fire protection systems have been installed (in whole or in part) and all required approvals have been obtained.

As explained in the Frequently Asked Questions addressing impairment coordinator requirements at construction sites (NYC Fire Code Guide, Chapter 9, Frequently Asked Questions #7-11), removal of building fire protection systems must be authorized by the Department of Buildings (DOB) by issuance of a work permit (which is only issued with the concurrence of the Fire Department and/or in accordance with Fire Code requirements). On demolition projects, the Building Code requires that fire protection systems be maintained in an operational condition until demolition commences on the floor (except for “wrecking ball” and other mechanical demolitions that do not proceed floor-by-floor). When fire protection systems must be removed in connection with alteration work, DOB typically requires the installation of temporary sprinkler systems and retention of certain fire alarm system components, including sprinkler flow alarms and manual pull stations.

Accordingly, whether a fire watch is required for an “out of service” fire protection system at a construction site depends on whether the fire protection system is operational; whether temporary fire protection systems have been authorized during construction work in lieu of the fire protection systems that are being removed in whole or in part; whether the building is occupied or vacant; and whether the Fire Department has determined that there are unusually hazardous circumstances at the construction site requiring a fire watch.

The following table sets forth fire watch requirements for out of service fire protection systems at three types of construction sites: (1) new buildings under construction, which are occupied only by construction personnel; (2) existing buildings undergoing alteration, and new buildings partially occupied pursuant to a temporary certificate of occupancy; and (3) buildings under demolition. The table also addresses impairment coordinator requirements at construction sites and hot work restrictions when construction site fire protection systems are out of service.

Fire Department recommends that, to ensure timely reporting of any fire, construction sites be monitored at all times, even when vacant and no formal fire watch is required. The "watchperson" required by the New York City Building Code, security personnel and other persons who are present at a construction site when work is not being conducted should be trained to watch for signs of fire and provided with a means to call 911.

NYC FIRE CODE GUIDE – CHAPTER 9
FREQUENTLY ASKED QUESTION AND RESPONSE (#12)

**IMPAIRMENT COORDINATOR AND FIRE WATCH REQUIREMENTS AND HOT WORK RESTRICTIONS
FOR OUT OF SERVICE FIRE PROTECTION SYSTEMS AT CONSTRUCTION SITES**

NEW BUILDINGS UNDER CONSTRUCTION (OCCUPIED BY CONSTRUCTION PERSONNEL ONLY)

	Fire Protection System	Status of Installation¹	Impairment Coordinator Required?²	Fire Watch Required When Fire Protection System Out of Service?^{3,4}	Hot Work Allowed When Fire Protection System Out of Service?⁵
1	Standpipe system	Installed and approved	Yes	Yes. Fire watch required at all times (regardless of whether building vacant or occupied by construction personnel). Comply with FC901.7.7.	No hot work allowed.
2A	Sprinkler system	Not yet installed and/or approved	No	No fire watch required, except where special circumstances require. ⁶	Hot work allowed.
2B		Installed and approved	Yes	Yes, as required by FC901.7. No fire watch required when entire building vacant/evacuated of construction personnel, except where special circumstances require. ⁶	No hot work allowed.
3A	Fire alarm system	Not yet installed and/or approved	No	No fire watch required, except where special circumstances require. ⁶	Hot work allowed.
3B		Installed and approved	Yes	Yes, as required by FC901.7. No fire watch required when entire building vacant/evacuated of construction personnel, except where special circumstances require. ⁶	Hot work allowed, except no hot work allowed when fire alarm system sprinkler water flow alarm is out of service.

For purposes of this table:

¹ A fire protection system is “installed and approved” when all required approvals for a full or partial installation have been obtained, including all signoffs required by the NYC Building Code.

² The obligation to provide an impairment coordinator arises as soon as the fire protection system is installed and approved. If no impairment coordinator is designated, the building owner is deemed to be the impairment coordinator in accordance with FC901.7.1. See Footnote 9 for additional information about impairment coordinators.

³ A “fire watch” means the patrolling of the areas affected by an out-of-service fire protection system for fire by a Fire Department-certified fire guard (F-01 Certificate of Fitness) in accordance with FC901.7.2. The presence of a “watchperson” (holding a Fire Department F-60 Certificate of Fitness) at the construction site, as required by Building Code 3303.3, does not constitute compliance with the fire watch requirement of FC901.7.2.

⁴ “Out of service” means the fire protection system is not in good working order and/or has been temporarily removed from service for repair, maintenance or construction.

⁵ Hot work restrictions apply in areas affected by the out-of-service fire protection system. In accordance with FC901.7.7(4.3), hot work is not allowed anywhere on the construction site if the standpipe system is out of service. Hot work restrictions do not preclude hot work required to restore a fire protection system to service.

⁶ “Special circumstances” means a construction site determined by the Fire Department (pursuant to FC1404.5) to be unusually hazardous, which may include the following conditions: (1) no working fire hydrant within 250 feet of entrance to building or 100 feet of fire department connection (BC3303.7); (2) impediments to fire apparatus access to building; (3) no fire apparatus access to within 100 feet of temporary or permanent fire department connection (FC1410); (4) anticipated delays in Fire Department response due to location of construction site; (5) sensitive occupancies in close proximity to construction site, including schools, hospitals and nursing homes; hazardous materials storage; public utility substations; bridges or other major infrastructure; (6) one or more fires, pattern of violations or other history of noncompliance at construction site(s); and (7) other special circumstances as determined by the Chief of Fire Prevention or Chief of Operations.

**BUILDINGS OR FLOORS UNDERGOING ALTERATION and
NEW BUILDINGS PARTIALLY OCCUPIED PURSUANT TO A TEMPORARY CERTIFICATE OF OCCUPANCY**

	Fire Protection System	Status of System ¹	Impairment Coordinator Required? ²	Fire Watch Required When Fire Protection System Out of Service? ^{3,4, 7}	Hot Work Allowed When Fire Protection System Out of Service? ⁵
4	Standpipe system	Installed and approved	Yes	Yes. Fire watch required at all times (regardless of whether building vacant or occupied). Comply with FC901.7.7.	No hot work allowed.
5A	Sprinkler system	Installed and approved (not removed)	Yes	Yes, as required by FC901.7. No fire watch required when entire building vacant/evacuated, except where special circumstances require. ⁶	No hot work allowed.
5B		Removed pursuant to DOB permit. ⁸ No core loop system required.	No	No fire watch required, except where special circumstances require. ⁶	Hot work allowed.
5C		Removed pursuant to DOB permit. ⁸ Core loop system installed and approved.	Yes ⁹	Fire watch required when core loop system out of service and building occupied. No fire watch required when entire building vacant/evacuated, except where special circumstances require. ⁶	Hot work allowed when core loop in service. No hot work allowed when core loop system out of service.
6	Fire alarm system	Installed and approved (not removed) ¹⁰	Yes	Yes, as required by FC901.7. No fire watch required when entire building vacant/evacuated, except where special circumstances require. ⁶	Hot work allowed, except no hot work allowed when fire alarm system sprinkler water flow alarm is out of service.

⁷ The removal of building compartmentation that served as passive fire protection in lieu of a sprinkler system (in pre-2008 buildings) constitutes an out of service sprinkler system.

⁸ Fire Department approval must be obtained in accordance with Building Code Sections 3303.7.4.3 and 3303.9 before DOB will authorize removal of a fire protection system.

⁹ An impairment coordinator is required for the core loop system and any portions of the building sprinkler system that remain installed and in good working order. In a partially occupied building, the building owner can make the building's impairment coordinator responsible for out-of-service fire protection systems in the areas of the building undergoing alteration or may designate a separate impairment coordinator. If separate impairment coordinators are designated, they must coordinate their respective responsibilities. See NYC Fire Code Guide, Chapter 9, Frequently Asked Question #10.

¹⁰ DOB allows removal or covering of smoke detectors during construction work provided that the other fire alarm system components remain operational. See DOB Buildings Bulletin 2012-009. A modified fire alarm system complying with the terms of the DOB permit is considered installed and approved for purposes of this analysis.

BUILDINGS UNDER DEMOLITION

	Fire Protection System	Status of Installation¹	Impairment Coordinator Required?²	Fire Watch Required When Fire Protection System Out of Service?^{3,4}	Hot Work Allowed When Fire Protection System Out of Service?⁵
7	Standpipe system	Installed and approved	Yes	Yes. Fire watch required at all times (regardless of whether building vacant/evacuated or occupied by construction personnel). Comply with FC901.7.7.	No hot work allowed.
8A	Sprinkler system	Installed and approved, except removed on floor(s) under active demolition.	Yes	Yes, as required by FC901.7. No fire watch required on floors under active demolition, or when entire building vacant/evacuated, except where special circumstances require. ⁶	No hot work allowed, except on floors under active demolition.
8B		Removed pursuant to DOB permit ⁸	No	Yes, in lieu of an operational sprinkler system, except in buildings undergoing mechanical demolition. No fire watch required on floors under active demolition, or when entire building vacant/evacuated, except where special circumstances require. ⁶	Hot work allowed.
9A	Fire alarm system	Installed and approved, except removed on floor(s) under active demolition ¹⁰	Yes	Yes, as required by FC901.7. No fire watch required on floors under active demolition, or when entire building vacant/evacuated, except where special circumstances require. ⁶	Hot work allowed.
9B		Removed pursuant to DOB permit ⁸	No	No fire watch required, except where special circumstances require. ⁶	Hot work allowed.

FC CHAPTER 10 - MEANS OF EGRESS

1. **I just moved into an apartment and would like to install security gates over the window that leads to my fire escape. How do I know which type of gates are approved by the Fire Department?**

FC1025.5 requires that bars placed over windows and other openings onto fire escapes be of a type for which a certificate of approval has been issued by the Fire Department. A list of currently approved gates can be obtained by contacting the Bureau of Fire Prevention's Technology Management Unit at (718) 999-2391.

2. **I am advised that the Fire Code prohibits storage of "combustible materials" in "corridors." Does this mean that the draperies, console table, bench and mirror, umbrella stand, framed prints, coat racks and doormats in the hallway of my apartment building are not allowed and must be removed?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC1027.4** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

This Frequently Asked Question is intended to provide interim guidance for this commonly asked question pending an anticipated future rulemaking.

FC1027.4.1 prohibits storage of combustible materials or combustible waste in corridors except as authorized by the Fire Code or Fire Department rule. This requirement is intended to minimize the potential fire load and eliminate tripping hazards and other impediments to access that might hinder or prevent egress from the building.

However, the Fire Department recognizes that it is common to decorate apartment building hallways with incidental furnishings, such as a console table, bench and/or mirror, umbrella stand, draperies, framed prints and doormats. The Fire Department appreciates the importance of such items in enhancing the appearance and comfort of such building spaces, and is considering how to best accommodate such items consistent with the interest of fire safety.

Accordingly, the Fire Department establishes the following interim guidelines for the storage of combustible materials in apartment building "corridors," which, for purposes of this Frequently Asked Question and response, is limited to hallways outside of dwelling units and does not include building lobbies.

The Fire Department retains discretion to prohibit and direct removal of any combustible hallway furnishing allowed by these interim guidelines that, by virtue of its size, materials or location, presents an undue fire safety hazard.

Interim guidelines for the storage of combustible materials in apartment building hallways:

1. **Incidental furnishings.** An apartment building hallway may be furnished with a console table, console bench, mirror, and umbrella stand. All such items must be "incidental" to hallway use, i.e., furnishings whose purpose is primarily decorative in nature and provided for the convenience of persons passing through the hallways. Such incidental use would not include furniture designed primarily to hold or store clothing or other items (such as chests of drawers, armoires, wall systems and coat racks), or storage in the hallway of furniture (such as beds, upholstered furniture and dining room tables) whose primary purpose is not decorative or for the temporary accommodation of passersby. No furnishing

may narrow the apartment building hallway beyond the minimum width required by the New York City Multiple Dwelling Law and New York City Building Code.

2. **Draperies, area rugs and decorative greens.** Draperies, area rugs and decorative greens must be installed and maintained in compliance with the requirements of **FC Chapter 8**. Draperies, area rugs and decorative greens must be noncombustible, or flameproofed by an approved method. Christmas trees and other conifers, and wreathes made of conifers, are prohibited in apartment building hallways.
3. **Artwork.** The walls of an apartment building hallway may be decorated with combustible artwork (including artworks made of paper, canvas, wood or fabric), provided that the artwork does not exceed more than twenty percent (20%) of the wall area. Such percentage is to be calculated separately for each wall. Artwork shall be affixed to the walls in a manner that prevents it from moving freely and intruding further into the hallway space.
4. **Carpeting.** Carpeting and other interior finishes are not regulated by the Fire Code but by Chapter 8 of the New York City Building Code. Please consult the New York City Department of Buildings' website, www.nyc.gov/buildings.
5. **Doormats.** The Fire Department discourages the use of doormats in apartment building hallways, and encourages their placement inside dwelling units. Doormats are commonly manufactured of combustible or highly combustible material and typically are not flameproofed. Doormats also present potential tripping hazards in a location meant to serve as a means of egress. However, in the exercise of its enforcement discretion, the Fire Department will issue violations and direct removal of doormats only where their size, materials or location present an undue fire safety or tripping hazard. Oversize doormats may be deemed to be area rugs, which, as set forth above, must be noncombustible, or flameproofed by an approved method.
6. **Personal property.** Personal property (such as bicycles, baby carriages and clothing) may not be stored in apartment building hallways. All such items must be stored in lawful closets or other storage areas, or in dwelling units.
7. **Household garbage.** Household garbage, including trash cans and recycling containers, may not be stored in apartment building hallways. All such items must be stored in compactor rooms and other lawful storage areas.

3. **I live in an apartment building and I would like to place a bookcase in the hallway outside my apartment. Would this be a violation of the Fire Code?**

It would be a violation of the code, unless the bookcase is primarily decorative in nature, constructed of noncombustible material and displays only noncombustible items.

FC1027.3.6 prohibits the storage of combustible materials and combustible waste in building corridors, except as authorized by the Fire Code or rule. This requirement is intended to minimize the potential fire load and eliminate tripping hazards and other impediments to access that might hinder or prevent egress from the building.

The Fire Department has posted interim guidelines for apartment building hallway furnishings (see immediately preceding Frequently Asked Question and response). Such furnishings must be "incidental" to hallway use, i.e., furnishings whose purpose is primarily decorative in nature and provided for the convenience of persons passing through the hallways. Furnishings designed primarily for storage would not be incidental furnishings.

Accordingly, a decorative, metal bookcase, designed for display, and used to display metal, glass, ceramic or other noncombustible items, would not be prohibited if it did not violate Multiple Dwelling Law and Building Code requirements for minimum corridor width.

4. **I would like to operate a sidewalk café outside of my restaurant. There is a fire escape on the side of the building. I understand that the Fire Code and Fire Department rules prohibit obstructing any means of egress. Could you clarify what clearances should be maintained?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code. The basic requirement that fire escape ladders not be obstructed has since been incorporated into **FC1027.6.4** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements, and additional guidance. Be sure to check the 2014 Fire Code for all applicable requirements.

FC1027.2 prohibits obstructing any means of egress. This includes any building fire escape. Fire Department rule 3 RCNY §404-03(d) specifically provides that awnings, canopies, decorations and umbrellas shall not obstruct or otherwise impede use of a fire escape ladder.

Sidewalk cafes that are located in areas where building fire escapes provide egress to the street level must be designed and maintained in a manner that does not impede the operation of the fire escape ladder or obstruct egress from the ladder.

Most fire escapes are equipped with a drop ladder that is lowered vertically to the sidewalk. Some fire escapes are equipped with a counterbalanced stair ladder, in which a large section of fire escape containing stairs swings to the ground.

The following guidelines are intended to provide general guidance with respect to clearances. These guidelines do not preclude the Fire Department from imposing additional or different requirements depending on specific site conditions.

Guidelines for Sidewalk Cafes:

1. An awning is prohibited underneath any fire escape ladder, unless the awning has a minimum 3-foot by 3-foot opening that allows for passage down the fire escape ladder through the awning, or is equipped with a hatch that is readily openable by operation of the fire escape ladder.
2. Fixed furniture, table umbrellas or other fixtures are prohibited underneath any fire escape drop ladder. Readily movable tables, chairs and other furnishings are acceptable underneath a fire escape drop ladder.
3. Cafe heaters are prohibited underneath any fire escape drop ladder. A minimum distance of 4 feet is acceptable. Cafe heaters shall be installed in accordance with the provisions of the Fire Code and New York City Department of Buildings Technical Policy and Procedure Notice 2-2007.
4. All sidewalk cafe fences or planters on the sidewalk alongside any part of a fire escape must be readily movable. Any fixed or heavy fences or planters must be approved by the Fire Department. This is to ensure that portable ladders can be used to access the fire escape. Requests for such approval shall be directed to the Bureau of Operations, New York City Fire Department, 9 MetroTech Center, Brooklyn, NY 11201.
5. The entire area underneath a counterbalanced stair fire escape ladder must be kept clear of awnings, canopies, furniture, cafe heaters and other furnishings and fixtures. The presence of furniture and fixtures could impede the proper functioning of the fire escape and/or injure any persons sitting or standing underneath the fire escape.

FIRE CODE CHAPTER 14 - FIRE SAFETY DURING CONSTRUCTION, ALTERATION AND DEMOLITION

1. **I understand that the Fire Code prohibits smoking at construction sites, and requires that "no smoking" signs be posted in approved locations. Can you please clarify what areas would be considered part of the "construction site" and what locations are "approved" for posting of such signs?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC1401.1.1** and **FC1404.1.2** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

FC1404.1 prohibits smoking at construction sites. **FC1402.1** defines a construction site as any location at which a building, structure, premises or facility is undergoing construction, alteration or demolition.

All buildings in the course of being constructed, and those undergoing demolition, are required by New York City Building Code Section BC3307.3.2 to be enclosed with a fence. Smoking is prohibited within the area enclosed by such fence, including in construction trailers and other indoor or outdoor areas.

"No Smoking" signs should be posted at all sliding and swinging gate openings, and any other openings allowing for access to the site by persons or vehicles. Within the fenced enclosure, signs should be posted at appropriate locations throughout the construction site sufficient to provide notice to persons entering or working on the site of the prohibition against smoking, including at the entrances to buildings, one or more locations on each floor of such buildings, and any indoor or outdoor areas on the construction site at which persons congregate.

In buildings undergoing alteration, where no fenced enclosure is required pursuant to BC3307.3.2, smoking is prohibited in all areas of the building in which alteration work is or will be conducted under the application filed with the Department of Buildings. "No Smoking" signs should be posted at all entrances to areas of the building undergoing alteration, and any place within those areas where persons would congregate.

In addition, as set forth in **FC310.2(3)**, smoking is prohibited at all locations, and at all times, where hazardous operations are conducted, or flammable or combustible materials or explosives are stored, handled or used. "No Smoking" signs must be posted in the immediate area of such operations and materials.

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2. **Does the Fire Code allow storage of flammable and combustible liquids in aboveground tanks at construction sites, and, if so, what restrictions apply?**

Yes. The Fire Code allows aboveground storage of flammable and combustible liquids at construction sites.

FC 1405 and **3406** regulate the storage, handling and use of flammable and combustible liquids at construction sites, including portable tanks temporarily installed at such sites. There is a 660 gallon limit on the capacity of such tanks. In addition, **FC3406.2.8** authorizes the filling of construction equipment directly from cargo tank trucks under certain conditions.

3. **Do the Fire Code requirements for the indoor storage of acetylene set forth in FC Table 2703.1.1(1) apply to buildings undergoing construction?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC2703.1.14** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

No. **FC Chapter 14**, which regulates construction sites, makes reference (in **FC1406.1**) to **FC Chapter 35**, which in turn references **FC2703**. The accompanying table, **FC Table 2703.1.1(1)**, sets forth Maximum Allowable Quantities per Control Area of Hazardous Materials ("MAQ") for indoor and outdoor spaces, and limits the number of control areas allowed per floor.

The Fire Department interprets the MAQs and control area limitations set forth in **FC Table 2703.1.1(1)** as design requirements for permanent installations. Provided that the building undergoing construction is not occupied, these requirements do not apply to the temporary storage of hazardous materials for use at construction sites, and the temporary storage facilities in which they are kept. In a building that is being newly constructed, the MAQs and control area limitations would apply upon issuance of a certificate of occupancy or temporary certificate of occupancy for the building.

The MAQs and control area limitations set forth in **FC Table 2703.1.1(1)** are applicable to a construction site if the construction work is being conducted in a building that is occupied or partially occupied. In such circumstances, temporary storage of hazardous materials in the portion of the building undergoing construction cannot exceed the MAQs and control area limitations without the prior written authorization of the Fire Department.

Even where the MAQs and control area limitations are not applicable, various Fire Code provisions and Fire Department rules separately restrict the quantity and location of hazardous materials storage (including flammable gas storage) even in buildings that are unoccupied. For example, **FC3504** regulates the storage of acetylene in any building, including unoccupied buildings, and, among other things, restricts such storage to a maximum of 15,000 SCF. **FC3809** and Fire Department rule **3 RCNY 3809-01** separately regulates the storage of LPG.

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4. **Does the interpretation applicable to the indoor storage of acetylene at construction sites (as discussed in the preceding question) also apply to the indoor storage of oxygen?**

Yes. Oxygen is an oxidizer, not a flammable gas, and therefore is subject to **FC1406.2** and **4003.1**, but the same reasoning applies to the MAQs and control area limitations.

Note, however, that **FC1406.2.1** has separate, and detailed, requirements for the storage and use of *liquid* oxygen at construction sites.

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5. **Fire Department personnel have advised me that when torch operations are "discontinued" the oxygen and acetylene containers must be moved to an approved storage area or removed from the premises. Can you clarify under what circumstances torch operations are deemed to be "discontinued"?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC1406.3** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

Oxygen and acetylene containers that are no longer in use must be removed from the work area. In general, this means that oxygen and acetylene containers must be removed from the work area when torch operations are discontinued for the workday. The containers need not be removed from the work area for brief interruptions in work – for example, during a lunch break or coffee break – but do need to be removed if it is expected that work will not promptly resume thereafter.

6. **Can oxygen and acetylene containers used in torch operations be stored overnight on the floors on which the torch work is being conducted? If so, where can they be stored and what storage requirements apply?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC1406.3** and **FC1406.4** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

Oxygen and acetylene containers used for torch operations may be stored overnight on the floors on which the torch work is being conducted only in an unoccupied building and only in an approved storage area.

No reserve oxygen or acetylene containers can be stored on the floors. (Any containers that are not necessary for the day's torch operations are considered reserve storage). Reserve storage of the containers must be in approved reserve storage areas (see Frequently Asked Question #7).

The requirements for storage of acetylene and oxygen containers on floors under construction are set forth in **FC3504.1.3**. That section requires that indoor storage areas for acetylene and oxygen comply with distance to exposure requirements (including the requirement that acetylene containers be stored at least 20 feet from oxygen containers) and be limited to a day's supply, but in no event more than 3,500 SCF of acetylene per floor. Additionally, the storage area must comply with the applicable requirements of **FC2703**, including **FC2703.9.2** (requiring that containers be safeguarded against unauthorized entry, such as by placing them in a storage cabinet) and **FC2703.5** (requiring hazard identification signs).

7. **Inasmuch as reserve storage of oxygen and acetylene containers is not allowed on the floors on which torch work is being conducted, where can such containers be stored and what storage requirements apply?**

The reserve storage of oxygen and acetylene containers at construction sites is subject to the detailed requirements of FC Chapters 40 and 35, respectively.

All indoor and outdoor storage of reserve oxygen and acetylene containers must comply with the safeguarding and signage requirements of **FC2703.9.2** and **FC2703.5** (see Frequently Asked Question #6).

Requirements for indoor reserve storage of oxygen are set forth in **FC4003**, **FC4004** and **FC3504.1.3**. Requirements for outdoor reserve storage of oxygen are set forth in **FC4003**, **FC4004** and **FC Table 4004.2.2**.

Requirements for indoor and outdoor reserve storage of acetylene are set forth in **FC3504**. That section requires reserve storage of acetylene outdoors if outdoor storage is available on the premises; otherwise, indoor reserve storage is allowed on the ground level of the building.

FC3504 also limits the total quantity of acetylene stored at a construction site. **FC3504.2** limits storage in an outdoor storage area to not more than 3500 SCF. **FC3504.1.2** limits indoor acetylene storage for the entire building (including floor storage and ground floor reserve storage) to not more than 15,000 SCF. **FC3504.1.3** limits the quantity of acetylene in an individual indoor storage area (which must be on the ground level) to not more than 3500 SCF.

8. **Can you clarify when the separate fire safety manager referenced in FC1408.1 is required on a construction site?**

FC1408.1 requires that a fire safety manager responsible for ensuring compliance with Fire Code requirements be provided at a construction site whenever a site safety manager or site safety coordinator is required by the Building Code.

FC1408.1 specifically provides that the fire safety manager at a construction site can be the same person as the site safety manager or coordinator required by the Building Code. However, experience since the enactment of the Fire Code in 2008 indicated that, on large building construction projects, one person is not sufficient to adequately oversee Building Code and Fire Code compliance.

FC1408.1 was amended in the 2014 Fire Code to require that a separate fire safety manager be designated for a "building under construction" when the building "reaches" a height of 20 stories or more than 250 feet, or has a lot coverage of 200,000 square feet or greater, "or as otherwise prescribed by rule."

Accordingly, any building under construction (that is, one issued a New Building Permit by the New York City Department of Buildings) must provide a separate fire safety manager once the building "reaches" a height of 20 stories or more than 250 feet.

For any building under construction that has a lot coverage of 200,000 square feet (that is, the area of the building lot encompassed by the construction fence required by the Building Code), a separate fire safety manager must be provided upon construction reaching street level.

The requirement of a separate fire safety manager takes effect on March 30, 2014, the effective date of the 2014 Fire Code. The Fire Department intends to enforce this requirement upon its taking effect but will allow a reasonable time for compliance.

The requirement of a separate fire safety manager is an operational requirement. As such, it applies to all buildings under construction, regardless of whether construction was commenced before or after the effective date of the section. However, as indicated above, the obligation to provide a separate fire safety manager does not arise until the building has reached the required height.

The requirement of a separate fire safety manager does not preclude the construction site staff holding the required fire safety manager certificate of fitness from engaging in other work. The fire safety manager can perform other work provided that such work does not interfere with the performance of his or her fire safety manager duties.

The Fire Department has not yet considered whether construction site safety requires a separate fire safety manager in buildings undergoing alteration or demolition (which are included in the definition of "construction site" pursuant to **FC1402.1**). Until such time as the Fire Department determines that a separate fire safety manager is necessary on such projects and promulgates a rule to that effect, a separate fire safety manager is not required for buildings undergoing alteration or demolition.

9. **When is an impairment coordinator required at a construction site, given that fire protection systems are not operational when construction work commences?**

FC1408.6 states that the construction site fire safety manager or impairment coordinator must comply with the out-of-service fire protection system requirements of **FC901**. The impairment coordinator requirements for construction sites (including a new building under construction; an existing building being altered, with or without occupants in the building; and a building being demolished) are addressed in Frequently Asked Questions #7-11 in Chapter 9.

10. **Fire protection systems are frequently removed, covered or otherwise temporarily rendered inoperable, in whole or in part, at construction sites during alteration and demolition work. Newly-installed fire protection systems in both new construction and altered buildings may not be fully operational until the completion of work. Do the Fire Code's out of service provisions in FC901.7 apply to fire protection systems at construction sites, and if so, when?**

Yes. **FC1408.6** requires that the fire safety manager or impairment coordinator comply with the requirements of **FC901** in the event of the impairment of any fire protection system.

The issue of when a fire protection system is operational and when it is out of service at a construction site is fully addressed in Chapter 9 of the Fire Code Guide. See Frequently Asked Questions #7-12, including the table attached to FAQ #12.

FC Chapter 9, FAQ #12 addresses the fire watch requirements and hot work restrictions for out-of-service fire protection systems at construction sites (including a new building under construction; an existing building being altered, with or without occupants in the building; and a building being demolished).

FC CHAPTER 15 - FLAMMABLE FINISHES

1. **Are paint spray booths permitted to be installed in basements or other below grade areas?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC1504.2.1** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

No. **FC1504.1.2** requires that paint spray booths be designed and constructed in accordance with National Fire Protection Association (NFPA) Standard 33 of 2000. Section A.2.1(f) of this NFPA Standard does not recommend any spray application operation, including spray booths, in basements.

2. **I understand that the Fire Code requires a Certificate of Approval for pre-manufactured paint spray booths. Previously, the Department of Buildings and the Board of Standards and Appeals (“BSA”) only required approval of pre-manufactured paint spray booths equipped with mechanical ventilation systems that circulated heated air in the booth. Does the Fire Code require that other types of pre-manufactured paint spray booths obtain a Certificate of Approval?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC1501.5** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

No. As indicated by the text of the applicable Fire Code section, **FC1504.1.2.7** (and as the Fire Department stated in connection with the enactment of Local Law 26 of 2008, which adopted the new Fire Code), the Certificate of Approval requirement for pre-manufactured paint spray booths was intended to continue the prior regulation of that equipment. The Department of Buildings issued Materials and Equipment approvals only for pre-manufactured paint spray booths that circulated heated air in the booth, to ensure that there are safeguards to prevent the lower explosive limit of the flammable vapor present in the booth from being reached by the heating of the air.

Accordingly, the pre-manufactured paint spray booths that **FC1504.1.2.7** requires to be of a type for which a Certificate of Approval has been issued are limited to the type of paint spray booths that are designed to circulate heated air in the booth. Design and installation documents must be submitted for all pre-manufactured paint spray booths, and will be reviewed by the Department for compliance with FC Chapter 15 requirements, including NFPA Standard 33.

FC CHAPTER 22 - MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES

1. **The 2008 Fire Code eliminated the requirement that aboveground and underground motor fuel storage tanks and other system components be of a type for which a Certificate of Approval has been issued. Is there a phase-in period for this change or will all tanks and other system components installed after July 1, 2008 no longer require these Certificates of Approval?**

Effective July 1, 2008, newly installed motor fuel storage systems are required to be inspected and tested in accordance with the new Fire Code, including **FC2206.9**. The Fire Code no longer requires certificates of approval for motor fuel tanks and system components.

2. **I operate several motor fuel-dispensing facilities throughout the city. What Fire Code and Rule requirements will I be expected to comply with?**

All motor-fuel dispensing facilities, both new and pre-existing (systems lawfully installed before March 30, 2014), are required to comply with the operational and maintenance requires of the 2014 Fire Code, including requirements relating to signage, supervision, and periodic testing of leak detection and fire extinguishing systems.

Pre-existing installations, which can comply with the design and installation provisions of the Fire Code shall comply with those requirements. Pre-existing installations which cannot comply with the design and installation provisions of the Fire Code shall comply with the 2008 Fire Code or Fire Prevention Code, rules, permit conditions, and other applicable law, rule and regulation, under which the installation was approved.

3. **I am an engineer that designs gas stations and renovates existing stations. FC2206.7.9 requires that motor fuel storage and dispensing systems be provided with vapor-recovery systems in accordance with the requirements of the New York State Department of Environmental Conservation (DEC). On May 25, 2011, DEC issued a Stage II Vapor Collection System Enforcement Discretion Directive, in which they eliminated the requirement of a Stage II vapor recovery system for a gas station's motor fuel storage and dispensing system. Can I design or renovate my client's gas stations without a Stage II vapor recovery system given the provisions of FC2206.7.9?**

The interpretation provided in this response was offered in connection with the 2008 Fire Code and has since been incorporated, with certain changes, into **FC2206.7.9** of the 2014 Fire Code. This response is intended to provide an understanding of reasoning underlying the Fire Code requirements. Be sure to check the 2014 Fire Code for all applicable requirements.

Yes. The Fire Department has determined that **FC2206.7.9** was intended to reflect the obligation of gas station owners to incorporate the vapor recovery system required by DEC for environmental reasons, not to establish an independent fire safety requirement. Stage II vapor recovery systems do not serve any critical fire safety function. In light of DEC's directive, no purpose would be served by continuing to require Stage II vapor recovery systems.

Accordingly, newly-constructed liquid motor fuel service stations may be designed without Stage II vapor recovery systems. Reference should be made on the appropriate design and installation documents submitted to the Department pursuant to **FC2201.3** that a Stage II vapor recovery

system is not being provided in accordance with DEC's Stage II Vapor Collection System Enforcement Discretion Directive ("DEC Directive").

However, *removal* of existing Stage II vapor recovery systems in liquid motor fuel service stations does implicate fire safety concerns. Improper removal of the system could jeopardize the integrity of the tank and piping. Accordingly, the Fire Department will monitor the decommissioning process.

To that end, the Fire Department establishes the following procedures and interim guidelines for the decommissioning of Stage II vapor recovery systems from a liquid motor fuel service station:

1. Application shall be made to the Bureau of Fire Prevention for a modification pursuant to **FC104.8** for each service station from which a Stage II vapor recovery system is to be decommissioned. The application form for a modification is available on the Fire Department's website at:
http://www.nyc.gov/html/fdny/pdf/fire_prevention/modification_variances.pdf.
2. The modification application shall include a legible sketch prepared by a Fire Department Certificate of License holder (see **FC2201.8**) of the proposed decommissioning work and a written narrative describing the work.
3. Decommissioning of Stage II vapor recovery systems shall be conducted in accordance with the Stage II Vapor Collection System Decommissioning Procedures as set forth in Appendix A of the DEC Directive.
4. All work performed in connection with the decommissioning of Stage II vapor recovery systems shall be conducted by a Fire Department Certificate of License holder.
5. Upon completion of the decommissioning work, the motor fuel storage and dispensing system shall be subjected to, and pass, the CARB Vapor Recovery Test Procedure TP-201.3 (Determination of 2-inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities), as set forth in the DEC Directive, to ensure the vapor tightness of the system. Such testing shall be conducted by a Fire Department Certificate of License holder.
6. Within thirty (30) days of completion of the decommissioning work, the Fire Department Certificate of License holder that conducted the decommissioning work shall submit an affidavit to the Bulk Fuel Safety Unit of the Bureau of Fire Prevention attesting to the decommissioning of the Stage II vapor recovery system in compliance with the DEC Directive and the modification application, and the successful CARB testing of the motor fuel storage and dispensing system. A copy of the CARB test results filed with DEC shall be submitted with the affidavit.

Questions regarding the decommissioning of existing Stage II vapor recovery systems may be directed to the Bulk Fuel Safety Unit at (718) 999-2516.

Failure to comply with these procedures and guidelines will subject the owner and/or Certificate of License holder to enforcement action.

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- 4 **I operate an existing repair garage and plan to begin repairing hydrogen and compressed natural gas (CNG)-fueled vehicles. Do I have to make any modifications to the design of my facility?**

That depends. Repair garages constructed in accordance with the requirements of the 1968 Building Code are designed for the repair of liquid motor fueled vehicles, not vehicles fueled by lighter-than-air fuels. **FC2211.7** provides that repair garages used for the repair and/or conversion of vehicles fueled by lighter-than-air fuels must comply with the requirements of the Mechanical Code and Building Code, including ventilation requirements (see MC502.16) and the flammable gas detection system requirements (see BC406.6.6). Unless you have documentation showing that the Department of Buildings had previously authorized your repair garage to be used for the repair

and/or conversion of vehicles fueled by lighter-than-air fuels, you are required to comply with the provisions of **FC2211.7** and Fire Department rule 3 RCNY 2211-01.

FC CHAPTER 24 - TENTS AND OTHER MEMBRANE STRUCTURES

1. **Can “sternos” be used in tents to keep food warm?**

FC2404.7 allows use of sternos when an open flame permit has been issued for such use by the Fire Department.

2. **Can tables or other items be stored or placed against the tent walls?**

No. **FC2404.11** requires that there be at least 3 feet clearance between the tent walls and any tent contents.

3. **Can electric table-top burners and electric induction burners be used in tents for food warming?**

Yes. The Fire Code does not directly regulate the use of electric food warmers in tents, only devices utilizing an open flame. However, any temporary wiring must comply with the requirements of the Electrical Code, and the use of any extension cord is subject to compliance with the requirements of **FC605.5**.

4. **FC2401.2 states that permits shall be required as set forth in FC105.6. Is a permit required for a tent?**

No. A tent does not require a Fire Department permit. However, a Fire Department permit is required if certain activities or operations are conducted inside the tent, such as use of commercial cooking equipment, open flames, and the conduct of special effects.

FC CHAPTER 26 - WELDING AND OTHER HOT WORK

1. I understand that FC2609.8 requires a combination flashback arrestor and backflow check valve be provided when piped natural gas is used with oxygen in any hot work operation, both in existing and new installations. The section also provides that the installation shall additionally comply with the rules. Can you direct me to the rule that applies?

The standards, requirements and procedures implementing the provisions of **FC2609.8** are set forth in Fire Department rule 3 RCNY 2609-01.

FC CHAPTER 27 - HAZARDOUS MATERIALS-GENERAL PROVISIONS

1. **If an entire building with non-production chemical laboratories is a non-smoking facility and no smoking signs are posted at the entrances to the building, do “No Smoking” signs need to be posted on the doors to each laboratory unit?**

Yes. “No Smoking” signs must be posted at the entrance to each non-production laboratory, but not necessarily on the door.

FC2703.7.1 requires the posting of no-smoking signs in rooms or areas where various types of hazardous materials are used. This requirement is consistent with longstanding former Fire Department rule 3 RCNY 10-01, which required posting of No Smoking signs at the exterior entrance to laboratory areas and within laboratory areas.

This requirement is intended for fire safety purposes, and is not rendered unnecessary by New York City Health Code regulations prohibiting smoking in buildings for health reasons.

FC CHAPTER 30 - COMPRESSED GASES

1. **Does the Fire Code have any regulations for the storage, handling and use of helium containers?**

Yes. Helium is regulated as a compressed gas, as that term is defined in **FC3002.1**. A permit is required for the storage, handling and use of helium gas pursuant to **FC Table 105.6(1)** and the storage, handling and use of helium in permitted amounts requires supervision by the holder of a certificate of fitness pursuant to **FC3001.4**. You should refer to the requirements of **FC Chapter 30** for other storage, handling and use requirements.

2. **I own a restaurant that has soft drink dispensers supplied from a large carbon dioxide installation in the basement. I also own a bar that uses small carbon dioxide containers behind the counter for soft drinks and beer. I understand that the Fire Department has adopted a new rule regulating use of carbon dioxide for beverage dispensing systems but I am not sure how it applies to my existing carbon dioxide installations. Could you explain what I need to do to make sure my businesses are in compliance with the new requirements?**

New York City Fire Code **FC Chapter 30** regulates the storage, handling and use of compressed gases. The Fire Department recently updated one of its rules, 3 RCNY Section 3004-01, now entitled "Use of Carbon Dioxide in Beverage Dispensing Systems," to ensure that such systems are being installed and maintained in accordance with modern safety standards.

Section 3004-01 applies to low pressure carbon dioxide installations – the type of system that is filled by a commercial beverage carbonation supplier from a cargo truck through a fill connection in an outside wall.

If you have a modern, professionally-installed and serviced carbon dioxide beverage dispensing system, chances are you will not need to make any major changes. Section 3004-01 was drafted with the understanding that it is consistent with industry standards and practices with which your installer/supplier should already be complying.

All business owners who have beverage dispensing systems should contact their supplier and ask the supplier to confirm that the system is in compliance with Section 3004-01. The rule is posted on the Fire Department's website at: <http://www1.nyc.gov/assets/fdny/downloads/pdf/about/fdny-rules.pdf>.

Please note that Section 3004-01 does not apply to high-pressure carbon dioxide containers and systems. These are small containers of carbon dioxide connected by hand to soft drink or beer dispensers (typically containing 20 to 50 pounds of carbon dioxide, as compared to the 250 to 750 pound containers filled by cargo truck). A future Fire Department rule will address the use of this type of carbon dioxide containers and systems. In the interim, ask your supplier about installing a carbon dioxide alarm (see below) if you don't have one.

Life Safety Concerns

The most important thing for you to know is that carbon dioxide – a clear, odorless gas – is a potential asphyxiant (suffocation hazard). If you have a carbon dioxide beverage dispensing system, the installation should include a carbon dioxide detection and alarm system ("carbon dioxide alarm"). If there is a leak, the carbon dioxide alarm sounds both in the room in which the storage tanks are installed and outside the room to alert occupants of the hazard. Most carbon dioxide detection systems have different types of alerts, so it is important to know (and to train your staff to know) how the carbon dioxide alarm works. When the carbon dioxide alarm sounds an alert indicating that the carbon dioxide in the room or areas exceeds the short-term exposure limit (STEL) or the permissible exposure limit (PEL), all persons should evacuate the area and immediately call New York City 911.

Section 3004-01 requires the posting of a warning sign at the entrance to the room or area containing the storage containers that reads:

**WARNING – CARBON DIOXIDE GAS INSTALLATION –
ASPHYXIATION DANGER**

A high carbon dioxide (CO₂) gas concentration
in this area can cause suffocation.

DO NOT ENTER ROOM/EVACUATE THE AREA:

- **if the CO₂ alarm indicates an immediate threat to life or safety. or**
- **if there is reason to believe there is a CO₂ leak and there is no functioning CO₂ alarm.**

CALL NEW YORK CITY 911 IMMEDIATELY.

The supplier is required to provide training to the business owner (and/or designated staff at the premises) at time of installation and annually thereafter in the design and operation of the carbon dioxide beverage dispensing system, including the carbon dioxide alarm. The training should address the hazards associated with the system, and emphasize the importance of immediately reporting to the installer/supplier any damage to, or malfunction of, the system; ensuring that system is promptly inspected and repaired; and calling 911 if the carbon dioxide alarm indicates an emergency.

Carbon Dioxide vs. Carbon Monoxide

The carbon *dioxide* alarm that monitors your beverage dispensing system is different from the carbon *monoxide* alarm that you have in your place of business. A carbon *monoxide* alarm detects excessive amounts of carbon monoxide – a clear, odorless gas generated by fuel-burning equipment – that is released when your cooking, heating or hot water system is malfunctioning.

Summary of New Section 3004-01

Be sure to read the new rule for the details. Section 3004-01 is available on the Fire Department's website. Here are some of the key requirements:

- Section 3004-01 applies to carbon dioxide beverage dispensing systems storing more than 100 pounds of *low-pressure*, liquefied carbon dioxide (that is all but the smallest low-pressure carbon dioxide containers in commercial use).
- A Fire Department permit is required if the system stores more than 4,500 standard cubic feet, or about 515 pounds, of carbon dioxide. (This is not a new requirement. It is from New York City Fire Code Section **FC105.6**.)
- A Fire Department certificate of fitness for carbon dioxide systems is required for installation, repair and filling of carbon dioxide beverage dispensing systems. If you are having a new system installed (or an existing system repaired), ask your supplier for proof that its installer holds the required Fire Department certificate.
- Your installer/supplier must notify the Fire Department of any new carbon dioxide beverage dispensing system with more than 400 pounds of carbon dioxide, and any alterations or repairs to such a system. The installer/supplier must also report to the Fire Department any release of carbon dioxide or activation of the carbon dioxide alarm. (The reporting form is posted on the Fire Department's website.) Ask your installer/supplier for a copy of reports and keep them on the premises.
- "Quick checks" of the system must be conducted at the time carbon dioxide is delivered, if feasible, but at least once every three months, and a full inspection must be conducted on an annual basis. It is the Fire Department's understanding that these inspections are typically conducted by the supplier's delivery personnel, but the business owner could conduct these inspections with their own staff if they have the necessary training from the supplier and obtain the required Fire Department certificate of fitness. Ask your installer/supplier for a copy of each inspection checklist and keep them on the premises.

- Existing warning signs should be replaced with the approved sign (see above), unless the installer/supplier obtains Fire Department review and approval of alternative sign(s) containing the same information as the required sign.
3. **The low-pressure, 500-pound carbon dioxide beverage dispensing system in my business is old, but so far as I am aware it is operating properly. Do I have to replace my existing system and install a carbon dioxide alarm?**

If your system was lawfully installed, is safe to operate and parts and supplies are available to maintain it, you do not have to replace it. Ask your carbon dioxide installer/supplier if it is functioning properly and whether it is time to update it.

However, if your carbon dioxide beverage dispensing system does not have a carbon dioxide alarm, ask your installer/supplier to provide one as soon as possible. You should not think twice about installing a carbon dioxide alarm in any premises in which carbon dioxide is being stored or used. A carbon dioxide alarm does not require electrical wiring; it is plugged into a standard electrical outlet. The cost of installation is low (in the hundreds of dollars) and you are protecting your business and the safety of your customers and employees from an invisible and odorless gas that can asphyxiate you.

You and your installer/supplier must also operate and maintain your existing system in compliance with Section 3004-01, including the signage, training, inspection, reporting and recordkeeping requirements of that section.

FC CHAPTER 33 – EXPLOSIVES, FIREWORKS AND SPECIAL EFFECTS

1. **Our organization conducts ceremonies honoring military veterans and fires off blank rifle and cannon salutes using blank black powder cartridges and bags. We understand that the New York City Fire Code requires a permit for the storage, handling and use of explosives for any “special effect.” What requirements would apply to the use of blank cartridges for outdoor rifle or cannon salutes?**

The storage, handling and use of explosives, including black powder and small arms ammunition, is strictly regulated by the Fire Code because of the life and fire safety hazards it presents. Detailed requirements for explosives are set forth in **FC Chapter 33**, and **FC105.6** requires that a permit be obtained for the storage, handling and use of explosives. **FC Chapter 33** also regulates “special effects” that utilize explosives, pyrotechnic materials or other hazardous materials.

However, **FC Chapter 33** primarily focuses on blasting operations and fireworks displays, and on special effects conducted indoors, in close proximity to performers or the audience. The Fire Department has concluded that these requirements do not adequately address the use of blank cartridges for outdoor rifle or cannon salutes or similar activities uses, such as the use of starter pistols or cannon at athletic or boating events.

Accordingly, the Fire Department has determined, pursuant to its authority under **FC105.3.8**, to adopt the following interim guidelines, pending amendment of the Fire Code and/or adoption of a Fire Department rule:

Firing of Blank Pistol and Rifle Cartridges and Blank Shotgun Shells

The Fire Department will issue a citywide permit authorizing the firing of blank pistol or rifle cartridges or blank shotgun shells (“firing”) at any lawful location in New York City.

Application for such citywide permit shall be made by letter or on such other form specified by the Department, demonstrating compliance with the following requirements and subject to the following terms and conditions:

1. **Event description.** The application must specify the date(s), time(s), location(s) and event(s) at which the firing will be conducted. If not known at time of application, the Department may require notification of the Fire Department’s Explosives Unit two business days prior to each firing.
2. **Lawful activities only.** The firing must be in conjunction with a lawful event or activity.
3. **Limit on blanks discharged.** The firing is limited at each event to no more than a combined total of *fifty (50)* blank pistol and rifle cartridges and blank shotgun shells. (A site-specific Fire Department permit shall be obtained for any event in which more than this amount of blank cartridges or shells is to be fired.)
4. **Outdoor firing only.** The firing must be conducted outdoors. (A site-specific Fire Department special effects permit shall be obtained for any event involving indoor firing of blank cartridges or shells.)
5. **Storage of blanks.** Except for temporary storage of blanks incidental to a firing (see below), blanks and other explosives must be stored in New York City in accordance with **FC Chapter 33**, and a separate, site-specific Fire Department permit obtained for storage of amounts requiring a permit.

6. **Conduct of firing**

- (a) **No live ammunition or other projectiles.** No live ammunition or other projectiles, or other matter, shall be fired from the barrel of the pistol, rifle or shotgun. (A site-specific Fire Department special effects permit shall be obtained for any event involving the firing of projectiles or other matter.)
 - (b) **Temporary storage of blanks.** The temporary storage of blanks at the event or activity shall be under the continuous supervision of a trained and knowledgeable person who shall ensure that the blanks are constantly monitored. At all times when not in use, blanks shall be kept in a metal ammunition box.
 - (c) **Supervision of firing.** Each firing shall be conducted under the continuous supervision of a trained and knowledgeable person who shall be personally present during the firing.
 - (d) **Safety zone.** A safety zone of *not less than 15 feet* (or such other distance as may be specified by the Fire Department) shall be maintained around the temporary storage area and the firing area. There shall be no smoking in the safety zone, and only authorized personnel shall be allowed to enter the safety zone. The safety zone shall be searched at the conclusion of the firing to be sure no blanks have been left behind.
 - (e) **Fire extinguishers.** At least one portable fire extinguisher, which shall be readily available for use, shall be provided within the safety zone when firing blank pistol or rifle cartridges.
7. **Fire Department inspections.** The Fire Department reserves the right to inspect the storage and firing areas and monitor the firing. Fire Department representatives shall be granted access to such areas.
8. **Permit fee.** Payment of an annual citywide permit fee of \$52.50 must be received at time of application.
9. **Compliance with other requirements.** The citywide permit shall not relieve the applicant of complying with any and all other Fire Code and Fire Department rule requirements applicable to the event or activity.

Firing of Blank Cannon Black Powder Cartridges and Bags

The Fire Department will issue a site-specific permit authorizing the firing of blank cannon black powder cartridges and bags ("cannon firing") at any lawful location in New York City.

Application for such site-specific permit shall be made by letter or on such other form specified by the Department, demonstrating compliance with the following requirements and subject to the following terms and conditions:

- 1. **Event description.** The application must specify the date, time, location and event at which the cannon firing will be conducted.
- 2. **Lawful activities only.** The cannon firing must be in conjunction with a lawful event or activity.
- 3. **Size of cannon.** Cannon size is limited to standard salute cannon with a barrel not exceeding *five (5)* inches in diameter. No larger cannon and no other type of firing device shall be used except as may be approved by the Fire Department for good cause shown.
- 4. **Limit on blanks discharged.** The cannon firing is limited at each event to no more than a total of *fifty (50)* blank cannon black powder cartridges and bags except as may be approved by the Fire Department based on the size and duration of the event or other good cause shown.

5. **Outdoor firing only.** The cannon firing must be conducted outdoors. (A Fire Department special effects permit shall be obtained for any event involving any indoor cannon firing.)
 6. **Storage of blanks.** Except for temporary storage of blanks incidental to a firing (see below), blank black powder cartridges and bags and other explosives must be stored in New York City in accordance with **FC Chapter 33**, and a separate, site-specific Fire Department permit obtained for storage of amounts requiring a permit.
 7. **Conduct of cannon firing**
 - (a) **No live ammunition or other projectiles.** No live ammunition or other projectiles, or other matter, shall be fired from the barrel of the cannon.
 - (b) **Temporary storage of blanks.** The temporary storage of blanks at the event or activity shall be under the continuous supervision of a trained and knowledgeable person who shall ensure that the blanks are constantly monitored. At all times when not in use, blanks shall be kept in a metal ammunition box.
 - (c) **Supervision of firing.** Each cannon firing shall be conducted under the continuous supervision of a trained and knowledgeable person who shall be personally present during the firing.
 - (d) **Safety zone.** A safety zone of *not less than 100 feet* (or such other distance as may be specified by the Fire Department) shall be maintained around the temporary storage area and the cannon firing area. There shall be no smoking in the safety zone, and only authorized personnel shall be allowed to enter the safety zone. The safety zone shall be searched at the conclusion of the cannon firing to be sure no blanks have been left behind.
 - (e) **Fire extinguishers.** At least two portable fire extinguishers, which shall be readily available for use, shall be provided within the safety zone when firing blank cannon cartridges or bags.
 8. **Fire Department inspections.** The Fire Department reserves the right to inspect the storage and cannon firing areas and monitor the cannon firing. Fire Department representatives shall be granted access to such areas.
 9. **Permit fee.** Payment of an annual site-specific permit fee of \$105 must be received at time of application.
 10. **Compliance with other requirements.** The site-specific permit shall not relieve the applicant of complying with any and all other Fire Code and Fire Department rule requirements applicable to the event or activity.
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FC CHAPTER 34 - FLAMMABLE AND COMBUSTIBLE LIQUIDS

1. **FC3401.8 requires persons that install, alter, test or repair flammable or combustible liquid storage systems hold a certificate of license. Is this requirement applicable to tanks installed at bulk plants or terminals?**

No. The definition of flammable and combustible liquid storage systems set forth in **FC3402** excludes bulk plant and terminal storage systems.

2. **I am planning to replace my fuel oil tanks. What section of the Fire Code regulates the installation of these tanks?**

The New York City Mechanical Code, not the Fire Code, regulates the installation of fuel oil tanks. However, when removing a fuel oil tank from service, the owner must comply with the "out-of-service" requirements for flammable and combustible liquid storage tanks set forth in **FC3404.2.13** and Fire Department rule 3 RCNY 3404-01. The removal of the old tank must be performed by a licensed person, as set forth in that rule.

3. **I have an existing permit for the storage of gasoline and diesel fuel in 5 gallon metal containers. FC2204.1.7.2 requires that portable containers storing gasoline and diesel fuel not be greater than 2½ gallons in capacity. Am I correct that because I have existing flammable and combustible liquid storage permits that I can continue to comply with the requirements of the old Fire Prevention Code, which allowed 5 gallon metal containers?**

You are not correct. The provisions of **FC2204.1.7.2** limiting the capacity of portable gasoline and diesel fuel containers is an operational requirement. Pursuant to **FC102.2**, the operational requirements of the Fire Code are applicable to both new and existing facilities.

4. **I recently learned of a new type of "one-time use emergency gas can": a disposable, collapsible container, constructed of cardboard with a plastic liner, intended for storing and dispensing flammable liquids, including motor fuels. The container nozzle is sealed by a stopper. Is use of such a container allowed under the Fire Code?**

No. **FC2204.1.7.1** prohibits the dispensing of liquid motor fuels into containers that do not have a tight closure with a screw-type or spring loaded cover. A portable container using a stopper on the end of the nozzle to prevent spillage would not comply with this code requirement.

5. **Does the Fire Code regulate the storage and use of alcohol-based hand rubs?**

Yes. **FC3405.5** sets forth requirements for the storage and use of alcohol-based hand rubs, including a maximum container capacity of 68 ounces. Please refer to the section for complete requirements.

6. **FC3406.2.8 authorizes the transfer of fuels from cargo tanks directly into the fuel tanks of construction equipment at a construction site. Does the Fire Code also authorize the**

transfer of fuels from cargo tanks directly into the fuel tanks of motor vehicles in other circumstances and other locations?

No. Such direct fueling is only allowed at construction sites under the circumstances set forth in **FC3406.2.8**.

7. **My business provides trailers to supply temporary power to buildings when their normal electrical power is interrupted. An 1100-gallon fuel oil storage tank is mounted on these trailers. Is a permit required for these systems?**

Yes. A Fire Department permit is required for the 1100-gallon diesel fuel storage tank, but not the electrical generator itself. The permit requirement for the fuel storage tank is set forth in **FC105.6** under "transportation of hazardous materials." Such trailers are required to comply with the requirements of the Fire Department rule 3 RCNY 3405-01.

FC CHAPTER 45 - REFERENCED STANDARDS

1. **What are the Referenced Standards listed in Chapter 45 of the Fire Code and how do they relate to the Fire Code?**

The Fire Code incorporates by reference numerous nationally-recognized fire safety standards, and certain Federal regulations. These standards and regulations are listed in **FC Chapter 45**. The Referenced Standards supplement the requirements of the Fire Code. The provisions of the Fire Code chapters and Fire Department rules govern where there is a conflict between those provisions of law and the provisions of the Referenced Standards.

FC Chapter 45 identifies the edition of the Referenced Standard that has been adopted. It is important that you use the correct edition of the Referenced Standard to ensure that you are complying with the applicable legal requirements.

2. **How can I obtain copies of the Referenced Standards?**

FC Chapter 45 identifies the name and contact information of the organization that promulgates each Referenced Standard. You should contact these organizations for information as to how to obtain copies of their standards.

The Fire Department suggests that you check the web sites of these organizations, as they may make their standards and regulations available at no cost on the web site.

3. **Has the Fire Department adopted any modifications to the Referenced Standards?**

Yes. **Appendix B** of the Fire Code and Chapter 47 of the Fire Department's rules include the amendments made to the Referenced Standards adopted in Fire Code Chapter 45.

FC APPENDIX A - FEES

1. **Where can I find the fees for Fire Department permits, certificates, and other approvals and services?**

All fees can now be found in Appendix A to the Fire Code, and Chapter 46 of the Fire Department's rules.

Fire Code Guide (2/28/18)

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405.4	401.7.3
405.5	401.8
405.7	401.7.5
405.8.1	410.6
405.8.2	404.2.2
406.1	401.4.5.2, 401.5.5.2
406.2	401.4.5.2.1, 401.4.5.2.2, 401.4.5.2.3, 401.5.5.2.1, 401.5.5.2.2
406.2.1	413.5
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Table 406.2(2)	Table 401.4.5.2.3
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408.3	404.2, 102.6.3
408.4	412.3
408.4.1	412.3.1

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408.4.3	412.3.3
408.4.4	412.3.4
408.5.1	401.5.3
408.5.3	408.4(2)
408.5.5	408.4(1)
408.6.1	413.4.2
408.6.2	413.4.1
408.7.1	409.2.2
408.7.2	409.2.1
408.7.3	409.2.3
408.7.4	409.2.1
408.8.1	405.5
408.8.3	405.5
408.9	406.1
408.9 Exception	405.3.1
408.9.1	406.2.1
408.9.1.1	401.6.1(1)
408.9.1.2	401.6.1(2)
408.9.2	401.3.5
408.9.3	401.6.4
408.9.3.1	406.3
408.9.4	406.2.2
408.10	410.4.1
408.11.1	401.3.4
408.11.2	505.5
408.11.3	311.5
408.12	401.3.7
408.13	401.3.7
408.14	401.2.2
408.14 Exception	401.2.2
408.14.1	401.2.2
501.3	105.4
501.4	501.4.1
503.1	503.2
503.1.1	503.1, 503.2.1, 503.2.2 and 503.2.2.2
503.1.2	503.2.6
503.1.3	2306.6
503.2	503.2.2
503.2.1	503.2.3, 503.2.3.1 and 503.2.3.2
503.2.2	503.2.3.4
503.2.3	503.2.2, 503.2.2.1 and 503.2.2.2
503.2.4	503.2.2.4

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503.2.5	503.2.9
Table 503.2.5	Table 503.2.9
Figure 503.2.5	Figure 503.2.9
503.2.6	503.2.2.5
503.2.7	503.2.2.3
503.3	503.2.7.2
503.4	503.2.5
503.5	503.2.8.2
503.5.1	503.2.8.2
503.6	503.2.8.1
503.7	503.2.7.2.1
Figure 503.7	Figure 503.2.7.2.1
503.8	503.3
503.8.1	503.3.1
503.8.2	503.3.2
504.1	504.1.3 and 504.2
504.1.1	504.1.4
504.4.1(2) & (3)	504.4.6
504.4.2(2)	504.4.7
504.4.3	504.4.8
504.4.4	504.4.7 and 504.4.8
504.5	503.5
506.1	506.2.2
506.1.1	506.2.3
506.2	506.2.2
507.1	316.1
507.2	316.2
507.2.1	316.2.1
507.2.2	316.2.2
507.3	316.3
509.1	907.3, 907.3.1, 907.3.2 and 907.3.3
607.3	506.2.1 and 506.2.2
608.1	608.1
608.2	608.2.1
608.3	608.4
608.4	608.5 and 608.5.1
608.5	608.6.1
608.6	608.7.1
608.7	608.8
608.8	608.9
609.1	608.1
609.2	608.2.2
609.3	608.3
609.4	608.4, 608.4.1 and 608.4.2

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609.5	608.5 and 608.5.2
609.6	608.6.1
609.7	608.6.2
609.8	608.4.2, 608.7.1 and 608.7.2
609.9	608.8
609.10	608.9
803.2.1	805.1 Exception 1
803.2.2	805.1.4
803.3	1027.5
803.3.1	1027.5
803.3.2	805.1 Exception 4
803.4	1027.5
803.4.1	1027.5
803.4.2	805.1 Exception 4
803.5	803.1
803.5.1	803.1.1
803.5.2	803.1.2
803.5.3	803.2.2
803.5.4	803.2.3
803.6	803.1
803.6.1	803.2.1
803.6.2	803.2.2
803.7	803.1
803.7.1	803.1.1
803.7.2	803.1.2
803.7.3	803.2.1
803.7.4	803.2.2
803.7.5	304.3.4
803.7.6	304.3.4
805.2.1	805.1 Exception 1
901.7	901.7, 901.7.2.1, 901.7.2.2, 901.7.5.1 and 901.7.5.2
901.7.1	901.7.1
901.7.2	901.7.3(9)
901.7.3	901.7.3(9)
901.7.4	901.7.3 and 901.7.5.3
901.7.5	901.7.4 and 901.7.5.3
904.11.4(1)	Mechanical Code Section 507.16.
904.11.5	609.3 and 609.3.2
904.11.5.1	609.3.1
904.11.5.2	609.6 and 609.6.1
904.11.5.3	609.2.3.1
904.11.5.3.1	609.2.3.2, 609.4.4 and

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	609.7(2)
904.11.5.4	609.3.3
904.11.5.5	609.3.6 and 904.11.5
904.11.6	609.3 and 609.4
904.11.6.1	609.3.4.1 and 609.3.4.3
904.11.6.2	609.3.4.2
904.11.6.3	609.4.1 and 609.4.2
904.11.6.3 Exception	609.4.1 Exception 2
904.11.6.3.1	609.3.1(4) and 609.4.3
904.11.6.3.2	609.4.1 Exception 1
904.11.6.3.3	609.4.2
904.11.6.4	904.11.6
904.11.6.5	904.11.6.1
904.11.6.6	609.7 and 904.11.6.2
904.11.6.6(1) & (2)	609.7(1)
904.11.6.6(3)	904.11.6.2
904.11.6.6(4)	906.2.1
904.11.6.6(5)	609.7(2)
904.11.6.7	609.3.5 and 904.11.6.3
904.11.7	609.5.1
904.11.7.1	609.2.4.2 and 609.5.2
904.11.7.2	609.2.4.1
904.11.7.3	609.5.3
904.11.7.4	609.5.4
905.12.2	905.12
906.3.1	906.3.1.1
Table 906.3(1)	Table 906.3.1
Table 906.3(2)	Table 906.3.2
912.3 clearance	912.3.2
1027.4	1027.3.5
1027.4.1	1027.3.6
1027.5	1025.4 and 1027.6
1027.6	1025.4 and 1027.6.2
1408.1	1408.1 and 1408.1.1
1503.2.1.2	1503.2.1
1503.2.1.3	1503.2.1.2
1503.2.1.3.1	1503.2.1.2.1
1503.2.1.4	1503.2.1.3
1503.2.1.5	1503.2.1.4
1503.2.1.6	1503.2.1
1504.1	1504.2
1504.1.1	1504.3.1
1504.1.1.1	1504.4.4
1504.1.1.2	1501.5
1504.1.2	1504.3.2
1504.1.2.1	1504.3.2.1

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1504.1.2.2	1504.3.2.1
1504.1.2.3	1504.4.4
1504.1.2.4	1504.3.2.5
1504.1.2.5	1504.3.3.2 and 1504.4.9
1504.1.2.6	1504.3.2.3
1504.1.2.7	1501.5
1504.1.3	1504.3
1504.1.3.1	1504.4.4
1504.1.4	1504.5
1504.1.4.1	1504.5.1
1504.1.4.2	1504.5.2
1504.1.4.3	1504.5.3
1504.1.4.4	1504.5.4
1504.2	1504.3.7
1504.2.1	1504.3.5(5) and 1504.4.7
1504.2.4	1504.4.8
1504.3	1504.3.7.3
1504.3.1	1504.3.7.3.1
1504.3.2	1504.3.7.3.2
1504.3.3	1504.3.7.3.3
1504.3.4	1504.3.5(6)
1504.3.5	1504.4.2
1504.3.6	1504.4.1
1504.3.7	1504.3.2.4
1504.4	1504.4.1
1504.5	1504.3.6
1504.5.1	1504.3.6.1
1504.5.2	1504.3.6.2
1504.5.3	1504.3.6.3
1504.5.4	1504.4.5
1504.6	1504.3.3, 1504.3.3.1 and 1504.3.3.2
1504.6.1	1504.4.3
1504.6.2	1504.3.3.3 and 1504.3.5(7)
1504.6.2.1	1504.3.3.3
1504.6.3	1504.3.7.2
1504.6.4	1504.4.10
1504.7	1504.3.4
1504.7.1	1504.3.4.1
1504.7.2	1504.3.4.2
1504.7.2.1	1504.3.5
1504.7.2.2	1504.4.6
1504.7.2.3	1503.2
1505.1	1505.2

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1505.2	1505.3.6
1505.3	1505.3.1
1505.3.1	1505.3.1.1
1505.3.2	1505.3.1.2
1505.3.3	1505.3.2
1505.4	1505.3.5
1505.5	1505.5.3
1505.6	1505.3.4.1
1505.6.1	1505.3.4.2
1505.7	1505.3.3
1505.7.1	1505.3.3.1
1505.7.2	1505.3.3.2
1505.7.3	1505.3.3
1505.8	1505.4
1505.8.1	1505.4.2
1505.8.2	1505.4.3
1505.8.3	1505.4.5
1505.8.4	1505.4.4
1505.8.5	1505.5.2
1505.9	1505.6
1505.9.1	1505.6
1505.10	1505.7
1506	1507
1506.1	1507.1
1506.2	1507.4.3
1506.3	1507.3.1
1506.4	1507.2
1506.5	1507.3.3.1
1506.6	1507.3.3.2
1506.7	1507.3.2.2
1506.8	1507.3.1.1
1506.9	1507.4.2
1506.10	1507.3.4
1506.11	1507.4.1
1506.12	1507.3.2.1
1507	1506
1507.1	1506.1
1507.2	1506.2, 1506.3.1 and 1506.3.2
1507.3	1506.4.5
1507.4	1506.3.5
1507.5	1506.3.4
1507.6	1506.4.1
1507.6.1	1506.4.2
1507.6.2	1506.4.3
1507.7	1506.1

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1507.8	1506.3.3.1
1507.9	1506.3.3.2
1507.10	1506.4.6
1508.1	1504.2 Exception 1
1509	1508
1509.1	1508.3.1
1509.2	1508.2.3
1509.3	1508.2.4
1509.4	1508.3.3
1509.5	1508.3.2
1509.6	1508.2, 1508.2.1 and 1508.2.2
1509.7	1508.3.7
1509.8	1508.3.4
1509.9	1508.3.5
1509.10	1508.3.8
1510.1	1510.1
1510.1.1	1510.1.1
1510.1.2	1510.1.2
1510.2	1510.2
1510.3	1510.5
1510.5	1510.3
1510.6	1510.6
1511	1509
1511.1	1509.1
1511.2	1509.1
1511.3	1509.2.1
1511.4	1509.2.3
1511.5	1509.2.2
1511.5.1	1509.2.2.1
1511.6	1509.3.3
1511.7	1509.3.1
1511.8	1509.3.2
1511.8.1	1509.3.2
1703.4	1701.6(1)
1703.5	1703.4
1703.6	1703.5
1703.7	1701.6(2)
1803.1	1803.1, 1803.1.1, 1803.1.2 and 1803.1.3
1803.8	1804.4 and 1805.2.4
1803.9	1805.2.5
1804.2	1804.2 and 1804.2.1
1804.2.1	1804.2.2
Table 1804.2.1	Table 1804.2.2.1
1804.2.2	1804.2.2.1

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1804.3	1804.3.1 and 1804.3.2
1804.3.1	1804.3.3
1805.2	1805.2 and 1805.2.1
1805.2.1	1805.2.2
Table 1805.2.1	Table 1805.2.2
1805.2.2	1805.2.3 and 1805.2.3.1
1805.2.2.1	1805.2.3.2
1805.2.2.2	1805.2.3.3
1805.2.2.3	1803.7
2201.8	2201.9
2201.9	2201.10
2203.2	2204.1.2
2204.1	2201.7
2204.2.1	2204.2.2
2204.2.2	2204.1.2
2204.2.3	2204.1.4.1
2204.2.4	2204.2.3
2204.2.5	2204.2.4
2204.3.1	2204.1
2204.3.1.1	2201.7
2204.3.3	2204.1.2
2204.3.4	2204.1.4.1
2204.3.5	2204.1.4.4
2204.3.6	2204.1.5
2204.3.7	2204.3.3
2204.4	2204.1.7
2204.4.1	2204.1.7.1
2204.4.1.1	2204.1.7.2
2204.4.2	2204.1.7.3
2204.4.3	2204.1.7.4
2204.4.4	2204.1.7.5
2204.5	2204.1.8
2204.6	2204.1
2204.6.1	2201.7
2204.6.2	2204.1.2
2204.6.3	2204.1.4.1
2204.6.4	2204.1.4.4
2204.6.5	2204.1.5
2204.7	2204.1.1
2204.8	2204.1.6
2205.7	2204.1.9 and 2204.1.10
2206.12	2204.1.4.2
2208.1.4	2208.1.5.1
2208.1.5	2208.1.6
2208.1.6	2208.1.7
2208.1.7	2208.1.8

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2208.1.8	2208.1.5.2
2208.1.9	2208.1.11
2208.1.9.1	2208.1.11.2
2208.1.9.2	2208.1.11.3
2208.1.9.3	2208.1.11.4
2208.1.9.4	2208.1.5.3 and 2208.1.11.5
2208.1.9.5	2208.1.4
2208.1.10	2208.1.12
2208.1.10.1	2208.1.12
2208.1.10.2	2208.1.5.3
2208.1.10.3	2208.1.12.3
2208.1.11	2208.1.13
2208.1.11.1	2208.1.5.3
2208.7.4.1	2208.7.4.2
2208.7.5	2208.1.9
2208.7.6	2208.1.10
2402.2.1	2404.2.1
2604.2.4	2603.4.2 and 901.7.2.1(4)
2701.2.2.1(6)	2701.2.2.1(7)
2701.2.2.1(7)	2701.2.2.1(8)
2701.2.2.1(8)	2701.2.2.1(9)
2701.2.2.1(9)	2701.2.2.1(10)
2701.5.1(2)	2701.5(7)
2701.5.1(3)	2701.5(6)
2701.5.1(4)	2701.5.1(2)
2701.5.1(5)	2701.5(6)
2701.5.1(7)	2701.5(6), (7), (8) & (9)
2701.5.1(8)	2701.5.1(2)
2701.5.1(9)	2701.5.1(10)
2703.7.1(3)	310.3.1
2703.7.1(4)	2703.7.1(3)
2703.8.3.2	2703.8.3.3
2703.8.3.3	2703.8.3.4
2703.8.3.4	2703.8.3.5
2703.10.4	2705.4.4
2704.3.1(7)	2704.3.1(1)
2704.7(1)	2704.7(2)
2704.7(2)	2704.7(3)
2704.7(3)	2704.7(4)
2704.7(4)	2704.7(5)
2806.2	2806.2.1
2806.3	2806.4
Table 2806.3	Table 2806.4
2806.4	2806.2.2

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2806.5	2806.2.3
2806.6	2804.5.4
2806.7	2806.2.4
2806.8	2806.2.2
3003.1.1	3003.1
3201.5	3201.3
3203.6	3204.3.1
3203.6.1	3204.3.1.1
Table 3203.6.1	Table 3204.3.1.1
3203.6.1.1	3204.3.1.1.1
3203.6.1.2	3204.3.1.1.2
3203.6.1.3	3204.3.1.1.3.1
3203.6.2	3204.3.1.2.1
Table 3203.6.2	Table 3204.3.1.2.1
3203.6.2.1	3204.3.1.2.2
3203.6.2.2	3204.3.1.2.5
3203.7	3203.6
3203.7.1	3203.6.1
3203.7.2	3203.6.2
3203.8	3203.7
3203.8.1	3203.7.1
3203.8.2	3203.7.2
3203.9	3203.8
3203.10	3203.9
3203.11	3203.10
3204.3.1	3204.3
3204.3.1.1	3204.3.1
3204.3.1.2	3204.3.1.1.4
3204.3.1.3	3204.3.1.1.5
3204.3.2	3204.3.1.2
3204.3.2.1	3204.3.1.2
3204.3.2.2	3204.3.1.2.3
3204.3.2.3	3204.3.1.2.4
3301.1(6)	No equivalent exception
3301.1(7)	3301.1(6)
3304.5.3.1.1	3304.5.2.2
3304.5.3.1.2	3304.5.2.2
3404.2.13.1.3(3)	3404.2.13.1.3(4)
3404.2.13.1.3(4)	3404.2.13.1.3(3)
3404.2.13.2.3(3)	3404.2.13.2.3(4)
3404.2.13.2.3(4)	3404.2.13.2.3(6)
3404.2.13.2.3(5)	3404.2.13.2.3(7)
3404.2.14	3404.2.13
3404.2.14.1	3404.2.13
3404.2.14.2	3404.2.13
3404.3.4.5	105.1.2

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3405.3.5.2.1	105.1.2
3405.5(3)	3405.5(4)
3405.5(4)	3405.5(5)
3405.5(5)	3405.5(6)
3405.5(6)	3405.5(7)
3405.5(7)	3405.5(8)
3405.5(8)	3405.5(9)
3405.5.1(1)	3405.5.1(2)
3405.5.1(2)	3405.5.1(3)
3405.5.1(3)	3405.5.1(4)
3405.5.1(4)	3405.5.1(5)
3406.5.1	3406.5
3406.5.1.1	3406.5.1
3406.5.1.2	3406.5.2
3406.5.1.3	3406.5.3
3406.5.1.4	3406.5.4
3406.5.1.5	3406.5.5
3406.5.1.6	3406.5.6
3406.5.1.7	3406.5.7
3406.5.1.7.1	3406.5.7.1
3406.5.1.8	3406.5.8
3406.5.1.9	3406.5.9
3406.5.1.10	3406.5.10
3406.5.1.10.1	3406.5.10.1
3406.5.1.10.2	3406.5.10.2
3406.5.1.10.3	3406.5.10.3
3406.5.1.10.4	3406.5.10.4
3406.5.1.11	3406.5.11
3406.5.1.12	3406.5.12
3406.5.1.13	3406.5.13
3406.5.1.14	3406.5.14
3406.5.1.15	3406.5.15.1
3406.5.1.15.1	3406.5.15.2
3406.5.1.16	3406.5.16
3406.5.1.16.1	3406.5.16
3406.5.1.16.2	3406.5.16
3406.5.1.16.3	3406.5.16
3406.5.2	3406.5
3406.5.2.1	3406.5.17
3406.5.3	3406.5
3406.5.3.1	3406.5.18
3406.5.3.1.1	3406.5.18.1
3406.5.3.1.2	3406.5.18.2
3406.5.3.1.3	3406.5.18.3
3406.5.3.2	3406.2.4.2
3406.5.3.3	3406.5.17

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3406.5.4	3406.2.8
3406.5.4.3	1106.11.1
3406.5.4.4	3406.2.8
3501.1(5)	3501.1(6)
3501.3.1	3501.3
3503.1.4(1)	3503.1.4.1
3503.1.4(2)	3503.1.4.2
3503.1.5	3503.1.6
3503.3	3501.5
3507	3508
3507.1	3508.1
3507.2	3508.2
3507.3	3508.3
3508	3509
3508.1	3509.1
3809.14	3809.4 and 3809.12
3809.15	3809.14
4006	4007
4006.1	4007.1
4006.1.1	4007.1.1
4006.1.2	4007.1.2
4106	4105.3
4107	4106
4107.1	4106.1
4107.1.1	4106.1.1
4107.1.2	4106.1.2
4304.2.2	4304.2.4
4304.2.3	4304.2.5

2014 fire code cross-reference table (2/5/14)