

An annotated look at the nonconformance items of the New York State Education Department Fire Safety Report (Revised 2011 to include 2010 Code update)

#### PART I - GENERAL INFORMATION

6. a. Fire drills were held in accordance with section 807 of the Education Law and F405 of the Fire Code of New York State

#### Fire Code of New York State, 2010

#### SECTION 405 EMERGENCY EVACUATION DRILLS

**405.1** General. Emergency evacuation drills complying with the provisions of this section shall be conducted at least annually in the occupancies listed in Section <u>404.2</u> or when required by the code enforcement official. Drills shall be designed in cooperation with the local authorities.

**405.2** Frequency. Required emergency evacuation drills shall be held at the intervals specified in Table <u>405.2</u> or more frequently where necessary to familiarize all occupants with the drill procedure.

405.3 Leadership. Responsibility for the planning and conduct of drills shall be assigned to competent persons designated to exercise leadership.

405.4 Time. Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

405.5 Record keeping. Records shall be maintained of required emergency evacuation drills and include the following information:

- 1. Identity of the person conducting the drill.
- 2. Date and time of the drill.
- 3. Notification method used.
- 4. Staff members on duty and participating.
- 5. Number of occupants evacuated.
- 6. Special conditions simulated.
- 7. Problems encountered.
- 8. Weather conditions when occupants were evacuated.
- 9. Time required to accomplish complete evacuation.

# TABLE 405.2 FIRE AND EVACUATION DRILL FREQUENCY AND PARTICIPATION

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group E	Monthly <sup>a</sup>	All occupants

a. The frequency shall be allowed to be modified in accordance with Section  $\underline{408.3.2}$ .

**405.6** Notification. Where required by the code enforcement official, prior notification of emergency evacuation drills shall be given to the code enforcement official.

405.7 Initiation. Where a fire alarm system is provided, emergency evacuation drills shall be initiated by activating the fire alarm system.

**405.8** Accountability. As building occupants arrive at the assembly point, efforts shall be made to determine if all occupants have been successfully evacuated or have been accounted for.

**405.9** Recall and reentry. An electrically or mechanically operated signal used to recall occupants after an evacuation shall be separate and distinct from the signal used to initiate the evacuation. The recall signal initiation means shall be manually operated and under the control of the person in charge of the premises or the official in charge of the incident. No one shall reenter the premises until authorized to do so by the official in charge.

# SECTION 408 USE AND OCCUPANCY-RELATED REQUIREMENTS

- 408.1 General. In addition to the other requirements of this chapter, the provisions of this section are applicable to specific occupancies listed herein.
- 408.2 Group A occupancies. Group A occupancies shall comply with the requirements of Sections 408.2.1 and 408.2.2 and Sections 401 through 406.
- **408.2.1** Seating plan. The fire safety and evacuation plans for assembly occupancies shall include the information required by Section <u>404.3</u> and a detailed seating plan, occupant load, and occupant load limit. Deviations from the approved plans shall be allowed provided the occupant load limit for the occupancy is not exceeded and the aisles and exit accessways remain unobstructed.
- **408.2.2** Announcements. In theaters, motion picture theaters, auditoriums and similar assembly occupancies in Group A used for noncontinuous programs, an audible announcement shall be made not more than 10 minutes prior to the start of each program to notify the occupants of the location of the exits to be used in the event of a fire or other emergency.

Exception: In motion picture theaters, the announcement is allowed to be projected upon the screen in a manner approved by the code enforcement official

- **408.3** College and university buildings and Group E occupancies. Group A, B, and R-2 college and university buildings shall comply with the requirements of Sections  $\underline{408.3.1}$  and Sections  $\underline{401}$  through  $\underline{406}$ . Group E occupancies shall comply with the requirements of Section  $\underline{408.3.2}$  and Sections  $\underline{401}$  through  $\underline{406}$ .
- **408.3.2** Group E occupancies. The frequency and timing of drills shall be in accordance with the requirements of Section 807.1 of the Education Law, which requires not less than 12 drills annually, eight of which shall take place between September 1 and December 1. At least one-third of the drills shall use fire escapes, where provided. At least one drill shall be held during a lunch period, or pupils shall be instructed in procedures to be followed during a lunch period. At least four additional drills shall be held during hours after sunset or before sunrise, where students reside at the school. At least two additional drills shall be held during the first week of summer school.
- **408.3.3** Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires. In Group R-2 college and university buildings, one required drill shall be held during hours after sunset or before sunrise.
- **408.3.4** Assembly points. Outdoor assembly areas shall be designated and shall be located a safe distance from the building being evacuated so as to avoid interference with fire department operations. The assembly areas shall be arranged to keep each class separate to provide accountability of all individuals.

# Part II – Fire and Life Safety Standards

# Section II-A REGULATIONS OF THE COMMISSIONER OF EDUCATION Part 155 (8 NYCRR 155)

### Exitways (corridors, stairs)

1A-2 There are at least two means of egress from each floor and corridor.

#### 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (1) There shall be at least two means of egress remote from each other, leading from each floor occupied by pupils, including basements.
  - (i) When pupils enter into a corridor, there shall be a choice of two unobstructed means of egress in different directions.
- 1B-1 Corridor pockets and dead end corridors are less than 1.5 times the pocket or corridor width respectively.

#### 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (2) Dead-end corridor pockets shall not exceed a maximum depth of 11/2 times the width of the pocket or 11/2 times the width of the corridor, whichever is less, unless otherwise approved by the commissioner.
- 1C-1 Glazed areas in and adjacent to doors and within 48 inches of floors are protected by railings, grilles or safety glazing.

#### 155.7 Health and safety in existing educational facilities.

- (c) Accident protection.
  - (1) Glazing of panels and doors shall be with safety glazing materials as follows, unless glazed areas are protected by approved grilles or rails:
  - (i) interior exit doors, exterior exit doors and immediately adjacent sidelights, except where glazing is 48 inches or more above the floor;
  - (ii) all glazed panels where glazing is within 18 inches of the floor, or platform level of music-room type risers;
  - (iii) gymnasiums and playrooms and elsewhere where subject to physical abuse;
  - (iv) acceptable safety glazing materials shall be at least one-quarter inch thick wire glass, one-quarter inch tempered (heat treated) glass, one-quarter inch laminated safety glass, or approved plastic materials.
- 1D-1 Glazed areas in and adjacent to doors and within 18 inches of floors are marked to prevent injury to occupants.

#### 155.7 Health and safety in existing educational facilities.

(c) Accident protection.

- (2) Glazed doors and sidelights within six feet of such doors shall be marked by appropriate means in accord with the provisions of Part 47 of Title 12 of the Official Compilation of Codes, Rules and Regulations of the State of New York, except marking on door and/or sidelight is not required:
- (i) where less than 80 percent of the area of the door or sidelight above a reference line 18 inches above the floor is glazed;
- (ii) where width of sidelight is not more than 20 inches, with 1 3/4 inch minimum opaque stiles:
- (iii) where floor treatment a distance of three feet out from a sidelight will deter approach;
- (iv) where sidelights are supported on 18-inch minimum height opaque sill and wall construction:
- (v) where sidelights are protected by approved 18-inch minimum height permanent barriers such as benches, planters or quardrails, extending across at least two thirds of the sidelight.
- 1E-1 Stairways in buildings having wood structural members or roof deck, have stairways enclosed with noncombustible construction and self-closing doors to effectively obstruct the spread of smoke and fumes from floor to floor, or each classroom has direct access to an exterior exit door.

#### 155.7 Health and safety in existing educational facilities.

(b) Smoke and fire control.

As used in this subdivision, the terms Class "A", "B" or "C" refer to types of construction which are defined by subdivision 11 of section 11 of the Local Finance Law.

- (1) In Class "B" and Class "C" buildings of two stories or more, unless otherwise approved, stairs shall be enclosed at each floor level and every floor shall be separated from levels above and below by stair enclosures and/or smoke barriers constructed to obstruct effectively the passage of smoke and fumes, or every space of pupil occupancy shall be provided with direct exit to the exterior. In appropriate instances, alternate means of egress may be required and stairway enclosures in Class "A" construction may be required.
- 2A-2 Exit doors, except those serving one or two classrooms, swing in the direction of exit travel.

# Fire Code of New York State Publication Date: 2010 Means of Egress Section 1008: Doors, Gates and Turnstiles

1008.1.2 Door swing. Egress doors shall be side-hinged swinging.

Doors shall swing in the direction of egress travel where serving an occupant load of 50 or more persons or a Group H occupancy.

2B-1 Exit doors, except those serving one or two classrooms are equipped with panic hardware.

## 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (9) Hardware
  - (ii) All exterior and interior doors in exitways, and exit doors from places of assembly shall have panic hardware, except that panic hardware is not required for push/pull interior exit doors if these doors have nonlatching hardware. Panic hardware shall not be required for

exterior corridor doors serving less than three classrooms or for doors serving only service areas such as boiler room, kitchen or storerooms.

Spaces of pupil occupancy over 500 square feet have two means of egress into separate zones. The primary egress is a door to the corridor and the secondary egress is a door directly to the exterior, a door to a separate smoke zone, an emergency rescue window, which is of a size and design, including hardware, which permits emergency egress (6-square feet minimum clear opening with 24-inch minimum dimension), unless a variance is granted by the Commissioner.

#### 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (5) Every space of pupil occupancy over 500 square feet in area shall have two separate means of egress from such space. A *space of pupil occupancy* is any room or self-contained space housing pupils on a regular basis, other than a place of assembly or small rooms where no more than 10 pupils are under direct, responsible, adult supervision. Each means of egress shall be in a separate smoke zone, unless immediately adjacent to an approved exit. The primary exit is commonly the opening to the corridor. The second means of egress may be a door opening into a separate smoke zone, or a door directly to the exterior, or a window of such size and design that will facilitate egress, or a door providing egress through adjacent spaces where specifically approved.
  - (i) Any point in a space of pupil occupancy shall not exceed a maximum of 50 feet straight-line distance to an exit, unless otherwise approved by the commissioner. Any additional exit necessary to satisfy this requirement shall be remote and may be required to be directly to the exterior.
  - (ii) When spaces of pupil occupancy are defined in an open area by wardrobes, cabinetry and other furniture which does not present obstructions to egress and which allows students to circulate freely from one space to another, the total open space is considered, for exiting purposes, as a single space. Exits from such open-planned space shall meet requirements determined by the commissioner.
- 2D-1 All emergency rescue windows are identified by signs as specified on the window and /or on any window shades, blinds, or curtains.

#### 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (6) Required emergency egress windows shall be of a size and design, including hardware and, in appropriate instances, steps or ladder to high sills, that will permit and facilitate emergency egress. Such windows shall be free of obstructing screens or storm sash.
  - (i) The minimum clear opening area for such windows shall be six square feet, with a minimum dimension of 24 inches, unless otherwise approved by the commissioner. (ii) At least one such window in each space of pupil occupancy shall be marked with an appropriate sign identifying it as an emergency egress window.
- Emergency rescue windows are free of obstructing bars, screens, grilles or classroom equipment, or if so equipped, windows must be releasable or removable from the inside without the use of a key, tool, or force greater than that needed for normal operation (F101.5).

#### 155.7 Health and safety in existing educational facilities.

(a) Exits.

(6) Required emergency egress windows shall be of a size and design, including hardware and, in appropriate instances, steps or ladder to high sills, that will permit and facilitate emergency egress. Such windows shall be free of obstructing screens or storm sash.

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# MEANS OF EGRESS MAINTENANCE OF THE MEANS OF EGRESS

**1028.6** Emergency escape openings. Required emergency escape openings shall be maintained in accordance with the code in effect at the time of construction, and the following: Required emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are allowed to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with the code that was in effect at the time of construction and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening.

2F-3 Enclosed courtyards exceeding 700 square feet in area have at least two remote exits into separate smoke zones.

## 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (8) Courtyards with completely enclosed perimeters are areas of possible pupil occupancy and must be provided with exits as a space of pupil occupancy and as follows, unless otherwise approved by the commissioner:
  - (i) Enclosed courts up to a 700-square foot area shall have at least one exit equipped with hardware of a type which will always permit the door to be opened from the court side without the use of a key.
  - (ii) Enclosed courts of more than a 700-square foot area shall have at least two exits, remote from each other, equipped with hardware of a type which will always permit the door to be opened from the court side without the use of a key.
- 2G-2 Hardware on doors from courtyards is of a type that will always permit exiting from the space without the use of a key.

#### 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (8) Courtvards
  - (ii) Enclosed courts of more than a 700-square foot area shall have at least two exits, remote from each other, equipped with hardware of a type which will always permit the door to be opened from the court side without the use of a key.

#### **Boiler/Furnace Rooms**

3A-3 Gas and oil fuel-burning equipment having over 400,000 BTU per hour capacity are provided with electronic flame safeguard controls that upon flame failure normally respond in 2 to 4 seconds to cut off fuel supply.

## 155.7 Health and safety in existing educational facilities.

(d) Mechanical.

Mechanical equipment, heat-producing and cooling equipment, auxiliary apparatus and controls, and installation and use of same, shall be such as will insure safe operation in accord with applicable recognized standards, as determined by the commissioner, and be consistent with efficient energy consumption.

- (1) Gas and oil fuel-burning equipment having a capacity of over 400,000 BTU per hour shall be provided with electronic flame safeguard controls which, upon flame failure, shall normally respond in two to four seconds to cut off fuel supply through the burner and main fuel valve.
- 2) All primary controls for fuel-burning equipment shall operate on a 120-volt, single-phase grounded circuit. Such controls generally include the hold-in coil of the motor starter, the solenoid coil for the pilot valve, the solenoid coil for the main fuel valve or the actuator for the motorized fuel valve, the ignition transformer and the modulator transformer.
- 3B-1 Certificates are posted that indicate that each boiler has been inspected in compliance with Section 204 of the Labor Law.

#### The Labor Law of New York State

- § 204. Inspection of boilers;
- 1. Inspection. The commissioner shall cause to be inspected at least once every two years all boilers as defined in this section, except for high pressure power boilers, antique boilers and miniature boilers, which the commissioner shall cause to be inspected at least once each year, and except for boilers inspected and insured by a duly authorized insurance company in accordance with the provisions of subdivision eight of this section and with the rules of the commissioner.

# **Storage and Special Rooms**

- Two-hour fire-rated enclosure with 1½ hour self-closing fire doors are provided for the following spaces:
  - 1) Boiler, heater, or furnace rooms, incinerator rooms
  - 2) Refrigeration rooms and transformer vaults
  - 3) Store rooms for fuel, flammable liquids, and gas-powered equipment

## 155.7 Health and safety in existing educational facilities.

- (b) Smoke and fire control.
  - (7) Fire-resistive (hourly rated) floors, interior walls and doors, and ceilings shall be provided at the following spaces unless otherwise approved by the commissioner. Those spaces having a roof over the entire space may have roof construction and ceilings of nonrated fire- resistive materials.
  - (i) Two-hour fire-rated construction with 11/2 hour fire-rated, self-closing fire doors are required at:
  - (a) boiler, heater or furnace rooms;
  - (b) refrigeration, electrical and equipment rooms;
  - (c) incinerator rooms;
  - (d) storerooms for fuel, flammable liquids and gas powered equipment; and
  - (e) transformer vaults.

4B-2 Required fire doors are maintained in a normally closed position unless held open by approved automatic devices.

#### 155.7 Health and safety in existing educational facilities.

- (b) Smoke and fire control
  - (7) (ii) Required fire doors shall be maintained in a normally closed position and not held open by fusible links.
- 4C-1 Unused ducts and shafts are sealed off at each floor level with fire resistive materials.

#### 155.7 Health and safety in existing educational facilities.

- (d) Mechanical.
  - (4) Unused duct work shall be sealed off at each floor level with fire-resistive materials.

# **Assembly Use Areas**

5A-3 Exit doors from places of assembly are remote and have panic hardware (existing push-pull type hardware with no latching hardware is acceptable).

#### 155.7 Health and safety in existing educational facilities.

- (a) Exits
  - (7) Places of assembly. A place of assembly is any area used for the assembly of 100 or more persons, and spaces over 1800 square feet in area used for the assembling of persons. A place of assembly shall have at least two exits remote from each other.(9) Hardware (ii) All exterior and interior doors in exitways, and exit doors from places of assembly shall have panic hardware, except that panic hardware is not required for push/pull interior exit doors if these doors have nonlatching hardware.
- 5B-2 School buildings with wood structural members or roof deck do not have places of assembly above the first floor, unless approved by the Commissioner.

#### 155.7 Health and safety in existing educational facilities.

(b) Smoke and fire control.

As used in this subdivision, the terms Class "A", "B" or "C" refer to types of construction which are defined by subdivision 11 of section 11 of the Local Finance Law.

(2) Class "B" and Class "C" buildings shall not have places of assembly above the first floor, except in a Class "B" building a written exception may be granted where it is determined by the commissioner that adequate exits exist.

5C-2 Places of assembly are provided with emergency lighting to illuminate exits.

# 155.7 Health and safety in existing educational facilities.

(a) Exits.

(7) Places of assembly. A place of assembly is any area used for the assembly of 100 or more persons, and spaces over 1800 square feet in area used for the assembling of persons. A place of assembly shall have at least two exits remote from each other.

#### (g) Electrical.

Electrical equipment and auxiliary apparatus and controls, and installation and use of same, shall be such as will insure safe operation in accord with applicable recognized standards, as determined by the commissioner, and be consistent with efficient energy consumption.

(3) Emergency lighting. Automatic emergency lighting systems shall be provided for places of assembly exceeding an area of 1800 square feet, and for all exitways leading from such areas. Such areas include all-purpose rooms, auditoriums, cafeterias, group-instruction rooms, playrooms and gymnasiums, swimming pools and other combination places of assembly.

# Housekeeping, General Operation

6A-1 There are no fixed or portable control gates that create dead-end conditions.

#### 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (4) Fixed and portable security gates shall not be located or used where they will obstruct exits or create dead-end conditions for occupied spaces.
- Wherever available, new and replacement mercury vapor or metal halide lamps are of fail-safe type that will self-extinguish if shielding is broken, cracked, or removed.

#### 155.7 Health and safety in existing educational facilities.

(g) Electrical.

Electrical equipment and auxiliary apparatus and controls, and installation and use of same, shall be such as will insure safe operation in accord with applicable recognized standards, as determined by the commissioner, and be consistent with efficient energy consumption.

Where new or replacement fail-safe lamps are not available, separate ultraviolet radiation-absorbing shielding is provided.

#### 155.7 Health and safety in existing educational facilities.

(g) Electrical.

Electrical equipment and auxiliary apparatus and controls, and installation and use of same, shall be such as will insure safe operation in accord with applicable recognized standards, as determined by the commissioner, and be consistent with efficient energy consumption.

6D-2 Space under stairs and landings is not used for storage unless separated by two-hour fire rated construction.

#### 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (iii) There shall be no storage under any stairs or landings unless the enclosure is of approved fire-resistant construction.

6E-3 Attic space in buildings of combustible construction is not used for storage.

#### 155.7 Health and safety in existing educational facilities.

- (b) Smoke and fire control.
  - (7) Fire-resistive (hourly rated) floors, interior walls and doors, and ceilings shall be provided at the following spaces unless otherwise approved by the commissioner. Those spaces having a roof over the entire space may have roof construction and ceilings of nonrated fire- resistive materials.
  - (iii) Combustible attic space shall not be used for storage.

6F-1 Storage in storerooms and classroom areas is orderly and restricted to items of obvious value and usefulness.

## 155.7 Health and safety in existing educational facilities.

- (i) Facilities shall be operated and maintained to provide effectively for the accident protection and life safety of occupants, to reduce exposure to property loss by fire, and to assure efficient use of natural resources.
- (j) When, based on these regulations, it is the judgment of the commissioner that the general conditions of a school building, or any part thereof, indicate that it would be detrimental to the health and safety of occupants, the commissioner may designate an area or areas of the building as unusable for pupil occupancy or may limit the number of occupants thereof.
- Wood floors are not finished or treated with oil and floors so treated were cleaned and refinished.

## 155.7 Health and safety in existing educational facilities.

- (b) Smoke and fire control.
  - (5) Wood floors shall not be treated or finished with oil. Floors so finished previously shall be cleaned and refinished with a penetrating seal.
- 6H-2 Direct-fired fuel-burning heating units shall not be used in any space of student occupancy.

#### 155.7 Health and safety in existing educational facilities.

(d) Mechanical.

Mechanical equipment, heat-producing and cooling equipment, auxiliary apparatus and controls, and installation and use of same, shall be such as will insure safe operation in accord with applicable recognized standards, as determined by the commissioner, and be consistent with efficient energy consumption.

(3) Direct-fired fuel-burning heating units shall not be used in any space of pupil occupancy.

# Fire Alarms

School buildings of seven or more classrooms are equipped with a manually operated electric fire alarm system that will continue to sound the alarm until the tripped station has been restored to normal operation or has completed a cycle of not less than 30 seconds. School buildings of one to six classrooms are equipped with either a manual, automatic, or electric fire alarm, capable of being sounded for such period of time as to insure evacuation of the building, or with an electric fire alarm system as described in a.1 above.

#### 155.7 Health and safety in existing educational facilities.

- (g) Electrical.
  - (4) Fire alarm.
  - (i) School buildings of seven or more classroom areas shall be equipped with a manually operated electric fire-alarm system, which may include automatic smoke and/or fire detection, which will continue to sound the alarm until the tripped station has been restored to normal operation or, in an existing system, has completed a cycle of not less than 30 seconds.
  - (ii) School buildings of one to six classroom areas shall be equipped with either a manual, hand or electric, fire alarm which is capable of being sounded for such a period of time as will insure evacuation of the building, or an electric fire-alarm system as described in subparagraph (i) of this paragraph.
  - (iii) School buildings within fire districts having an electrically operated, street-located general municipal fire-alarm box system shall have, wherever practical, the school building fire-alarm system interconnected to the municipal system, so that sounding of the school building fire-alarm system automatically gives the alarm to the fire department affording protection to the school building. Wherever practical, a fire-alarm box compatible with the municipal system, which will sound the alarm of the school building system, shall be accessibly located on the site or on the school building.
- 7B-2 Fire alarm stations are located on every floor.

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**907.2** Where required-new buildings and structures. An approved manual fire alarm system, automatic fire detection system or automatic heat detection system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections <u>907.2.1</u> through <u>907.2.23</u> and provide occupant notification in accordance with Section <u>907.10</u> unless other requirements are provided by another section of this code.

#### National Fire Protection Association (NFPA) Standard Number 72

- **17.14.6** Manual fire alarm boxes shall be located within 60 in. (1.52 m) of the exit doorway opening at each exit on each floor.
- 7C-2 The building has a telephone that can be used in an emergency.

#### 155.7 Health and safety in existing educational facilities.

- (g) Electrical.
  - (5) Telephone. A telephone which can be used in the case of emergency shall be provided in all buildings having pupil occupancy.

# Part II Fire and Life Safety Standards Section II-B

#### **Electrically Operated Partitions**

Partitions are operated by two (2) key operated, tamperproof, constant pressure, switches wired in series, remotely located at opposite ends and opposite sides of, and in view of, the partition.

# §155.25 Safety requirements for electrically operated partitions.

- (c) Minimum construction, maintenance and operation standards for electrically operated partitions.
  - (1) every electrically operated partition is equipped with two (2) key-operated, tamper-proof, constant pressure control stations that are wired in series, remotely located at opposite ends and opposite sides of, and in view of, the partition, and which are designed and constructed so as to require simultaneous activation of both control stations to operate the partition;

8B-2 The partition is capable of being reversed at any point in the extend or stack travel cycle.

#### §155.25 Safety requirements for electrically operated partitions.

- (c) Minimum construction, maintenance and operation standards for electrically operated partitions.
  - (2) the electric device controlling the operation of the partition is capable of being reversed at any point in the extend or stack travel cycle
- (b) Definitions. As used in this section, "electrically operated partition" means any partition, room, room divider, curtain or other similar device which is controlled through the operation of an electrical motor.
- Device(s) are provided for all partitions that will stop the forward or backward motion of the partition and stop the stacking motion of the partition when a body or object passes between the leading panel of such partition and a wall or other termination point, or when a body or object is in the stacking area of such partition.

## §155.25 Safety requirements for electrically operated partitions.

- (c) Minimum construction, maintenance and operation standards for electrically operated partitions
  - (3) device(s) are provided for all partitions that will stop the forward or backward motion of the partition and stop the stacking motion of the partition when a body or object passes between the leading panel of such partition and a wall or other termination point, or when a body or object is in the stacking area of such partition.

Appropriate and conspicuous notice regarding the safe and proper operation of the electrically operated partition, required training, and supervision of students is posted in all partition operator locations.

#### §155.25 Safety requirements for electrically operated partitions.

- (d) Safety requirements and operation guidelines for electrically operated partitions. The board of education, trustees, principal or other person in charge of every public or private school or educational institution within the State shall ensure that:
  - (1) Appropriate and conspicuous notice regarding the safe and proper operation and supervision of the electrical device operating such partition shall be posted in the immediate vicinity of each operating mechanism, on both sides of the separation and adjacent to the operating mechanism.
  - (2) A procedure is established for the notification of all school employees and all other persons who regularly make use of the area where such device is located of the safe and proper procedure for the operation of the mechanism. Staff shall be apprised of safety features and trained in the safe operation of the partition. In addition, such training shall include discussion of past accidents and the potential and possibility of serious injury or death, and information regarding the administrative and civil penalties and accountability for non-compliance with legal requirements, including the penalties for disabling safety equipment required pursuant to Education Law section 409-f. Records shall be maintained regarding the training provided.
  - (3) Students shall not be permitted to operate such partition. Any students present while the partition is being operated shall be under the direct supervision of trained staff and shall be required to stand away from and not be allowed to cross the path of the moving partition.
  - (4) Safety features shall not be tampered with, overridden or by-passed. All equipment must be maintained in accordance with the manufacturer's instructions, including the manufacturer's recommended service interval, and records of such maintenance shall be permanently retained at the district or private school. All equipment shall be installed in a fail-safe manner such that the failure of any safety device shall render the electrically operated partition inoperable until such device is repaired.
- Records of inspection, testing, and maintenance of electrically operated partitions are available for review. Records verify that maintenance was performed in accordance with the manufacturer's instructions and recommended service interval. **Revised 9/09**

#### §155.25 Safety requirements for electrically operated partitions.

- (d) Safety requirements and operation guidelines for electrically operated partitions. The board of education, trustees, principal or other person in charge of every public or private school or educational institution within the State shall ensure that:
  - 4) Safety features shall not be tampered with, overridden or by-passed. All equipment must be maintained in accordance with the manufacturer's instructions, including the manufacturer's recommended service interval, and records of such maintenance shall be permanently retained at the district or private school. All equipment shall be installed in a fail-safe manner such that the failure of any safety device shall render the electrically operated partition inoperable until such device is repaired

# **General Precautions Against Fire**

9A-2 Combustible waste and vegetation shall not create a hazard. (F304)

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# **COMBUSTIBLE WASTE MATERIAL**

- **304.1** Waste accumulation prohibited. Combustible waste material creating a fire hazard shall not be allowed to accumulate in buildings or structures or upon premises.
- **304.1.1** Waste material. Accumulations of wastepaper, wood, hay, straw, weeds, litter or combustible or flammable waste or rubbish of any type shall not be permitted to remain on a roof or in any court, yard, vacant lot, alley, parking lot, open space, or beneath a grandstand, bleacher, pier, wharf, manufactured home, recreational vehicle or other similar structure.
- **304.1.2** Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises.
- **304.1.3** Space underneath seats. Spaces underneath grandstand and bleacher seats shall be kept free from combustible and flammable materials. Except where enclosed in not less than 1-hour fire-resistance-rated construction in accordance with the Building Code of New York State, spaces underneath grandstand and bleacher seats shall not be occupied or utilized for purposes other than means of egress.
- **304.2** Storage. Storage of combustible rubbish shall not produce conditions that will create a nuisance or a hazard to the public health, safety or welfare.
- **304.3** Containers. Combustible rubbish and waste material kept within a structure shall be stored in accordance with Sections 304.3.1 through 304.3.3.
- **304.3.1** Spontaneous ignition. Materials susceptible to spontaneous ignition, such as oily rags, shall be stored in a listed disposal container. Contents of such containers shall be removed and disposed of daily.
- **304.3.2** Capacity exceeding 5.33 cubic feet. Containers with a capacity exceeding 5.33 cubic feet (40 gallons) (0.15 m³) shall be provided with lids. Containers and lids shall be constructed of noncombustible materials or approved combustible materials.
- **304.3.3** Capacity exceeding 1.5 cubic yards. Dumpsters and containers with an individual capacity of 1.5 cubic yards [40.5 cubic feet (1.15 m<sup>3</sup>)] or more shall not be stored in buildings or placed within 5 feet (1524 mm) of combustible walls, openings or combustible roof eave lines.

# Exceptions:

- 1. Dumpsters or containers in areas protected by an approved automatic sprinkler system installed throughout in accordance with Section <u>903.3.1.1</u>, <u>903.3.1.2</u> or <u>903.3.1.3</u>.
- 2. Storage in a structure shall not be prohibited where the structure is of Type I or IIA construction, located not less than 10 feet (3048 mm) from other buildings and used exclusively for dumpster or container storage.

#### Fire Code of New York State Publication Date: 2010

#### **OPEN FLAMES**

**308.3.2** Open-flame decorative devices. Open-flame decorative devices shall comply with all of the following restrictions:

- 1. Class I and Class II liquids and LP-gas shall not be used.
- 2. Liquid- or solid-fueled lighting devices containing more than 8 ounces (237 ml) of fuel must self-extinguish and not leak fuel at a rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.
- 3. The device or holder shall be constructed to prevent the spillage of liquid fuel or wax at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) when the device or holder is not in an upright position.
- 4. The device or holder shall be designed so that it will return to the upright position after being tilted to an angle of 45 degrees from vertical.

Exception: Devices that self-extinguish if tipped over and do not spill fuel or wax at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.

- 5. The flame shall be enclosed except where openings on the side are not more than 0.375 inch (9.5 mm) diameter or where openings are on the top and the distance to the top is such that a piece of tissue paper placed on the top will not ignite in 10 seconds.
- 6. Chimneys shall be made of noncombustible materials and securely attached to the open-flame device.

Exception: A chimney is not required to be attached to any open-flame device that will self-extinguish if the device is tipped over.

- 7. Fuel canisters shall be safely sealed for storage.
- 8. Storage and handling of combustible liquids shall be in accordance with Chapter 34.
- 9. Shades, where used, shall be made of noncombustible materials and securely attached to the open-flame device holder or chimney.
- 10. Candelabras with flame-lighted candles shall be securely fastened in place to prevent overturning, and shall be located away from occupants using the area and away from possible contact with drapes, curtains or other combustibles.
- **308.3.3** Location near combustibles. Open flames such as from candles, lanterns, kerosene heaters, and gas-fired heaters shall not be located on or near decorative material or similar combustible materials.

- **308.3.4** Aisles and exits. Candles shall be prohibited in areas where occupants stand, or in an aisle or exit.
- **308.3.5** Religious ceremonies. When, in the opinion of the code enforcement official, adequate safeguards have been taken, participants in religious ceremonies are allowed to carry hand-held candles. Hand-held candles shall not be passed from one person to another while lighted.
- **308.3.6** Theatrical performances. Where approved, open-flame devices used in conjunction with theatrical performances are allowed to be used when adequate safety precautions have been taken in accordance with NFPA 160.
- 308.3.7 Group A occupancies. Open-flame devices shall not be used in a Group A occupancy.

#### Exceptions:

- 1. Open-flame devices are allowed to be used in the following situations, provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants:
- 1.1. Where necessary for ceremonial or religious purposes in accordance with Section 308.3.5.
- 1.2. On stages and platforms as a necessary part of a performance in accordance with Section 308.3.6.
- 1.3. Where candles on tables are securely supported on substantial noncombustible bases and the candle flames are protected.
- 2. Heat-producing equipment complying with Chapter  $\underline{6}$  and the Mechanical Code of New York State.
- 3. Gas lights are allowed to be used provided adequate precautions satisfactory to the code enforcement official are taken to prevent ignition of combustible materials.

9C-1 Storage in buildings is orderly. (F315)

Fire Code of New York State Publication Date: 2010

#### MISCELLANEOUS COMBUSTIBLE MATERIALS STORAGE

- **315.1** General. Storage, use and handling of miscellaneous combustible materials shall be in accordance with this section.
- **315.2** Storage in buildings. Storage of combustible materials in buildings shall be orderly. Storage shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur.
- **315.2.1** Ceiling clearance. Storage shall be maintained 2 feet (610 mm) or more below the ceiling in nonsprinklered areas of buildings or a minimum of 18 inches (457 mm) below sprinkler head deflectors in sprinklered areas of buildings.
- 315.2.2 Means of egress. Combustible materials shall not be stored in exits or exit enclosures.

- **315.2.3** Equipment rooms. Combustible material shall not be stored in boiler rooms, mechanical rooms or electrical equipment rooms.
- **315.2.4** Attic, under-floor and concealed spaces. Attic, under-floor and concealed spaces used for storage of combustible materials shall be protected on the storage side as required for 1-hour fire-resistance-rated construction. Openings shall be protected by assemblies that are self-closing and are of noncombustible construction or solid wood core not less than 1.75 inches (44.5 mm) in thickness. Storage shall not be placed on exposed joists.

#### Exceptions:

- 1. Areas protected by approved automatic sprinkler systems.
- 2. Group R-3 and Group U occupancies.
- **315.3** Outside storage. Outside storage of combustible materials shall not be located within 10 feet (3048 mm) of a property line.

#### Exceptions:

- 1. The separation distance is allowed to be reduced to 3 feet (914 mm) for storage not exceeding 6 feet (1829 mm) in height.
- 2. The separation distance is allowed to be reduced when the code enforcement official determines that no hazard to the adjoining property exists.
- **315.3.1** Storage beneath overhead projections from buildings. Combustible materials stored or displayed outside of buildings that are protected by automatic sprinklers shall not be stored or displayed under nonsprinklered eaves, canopies or other projections or overhangs.
- 315.3.2 Height. Storage in the open shall not exceed 20 feet (6096 mm) in height.
- 9D-1 Storage ceiling clearance of 24 inches is maintained in nonsprinklered areas of buildings or 18 inches below sprinkler head deflectors in sprinkled areas of the building. (F315)

Fire Code of New York State Publication Date: 2010

#### MISCELLANEOUS COMBUSTIBLE MATERIALS STORAGE

315.2.1 Ceiling clearance. Storage shall be maintained 2 feet (610 mm) or more below the ceiling in nonsprinklered areas of buildings or a minimum of 18 inches (457 mm) below sprinkler head deflectors in sprinklered areas of buildings.

9E-1 DELETED- NO LONGER IN NYS FIRE CODE

9F-2 Combustibles are not stored in boiler rooms, mechanical rooms, or electrical equipment rooms. (F315)

Fire Code of New York State Publication Date: 2010

#### MISCELLANEOUS COMBUSTIBLE MATERIALS STORAGE

**315.2.3** Equipment rooms. Combustible material shall not be stored in boiler rooms, mechanical rooms or electrical equipment rooms.

9G-2 Fueled equipment shall not be stored, operated, or repaired within a building. (F313)

Fire Code of New York State Publication Date: 2010

#### **FUELED EQUIPMENT**

**313.1** General. Fueled equipment, including but not limited to motorcycles, mopeds, lawn-care equipment and portable cooking equipment, shall not be stored, operated or repaired within a building.

#### Exceptions:

- 1. Buildings or rooms constructed for such use in accordance with the Building Code of New York State.
- 2. Where allowed by Section 314.
- 3. Storage of equipment utilized for maintenance purposes is allowed in approved locations when the aggregate fuel capacity of the stored equipment does not exceed 10 gallons (38 L) and the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

# **Emergency Planning and Preparedness**

10A-2 Fire safety and evacuation plans are in place. (F404)

Fire Code of New York State Publication Date: 2010

# FIRE SAFETY AND EVACUATION PLANS

- **404.1** General. Fire safety and evacuation plans shall comply with the requirements of this section.
- **404.2** Where required. An approved fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings.

- 1. Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an occupant load less than 2,000.
- 3. Group E.
- **404.3** Contents. Fire safety and evacuation plan contents shall be in accordance with Sections 404.3.1 and 404.3.2.
- 404.3.1 Fire evacuation plans. Fire evacuation plans shall include the following:
- 1. Emergency egress or escape routes and whether evacuation of the building is to be complete or, where approved, by selected floors or areas only.
- Procedures for employees who must remain to operate critical equipment before evacuating.
- 3. Procedures for accounting for employees and occupants after evacuation has been completed.
- 4. Identification and assignment of personnel responsible for rescue or emergency medical aid.
- 5. The preferred and any alternative means of notifying occupants of a fire or emergency.
- 6. The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.
- 7. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
- 8. A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided.
- **404.3.2** Fire safety plans. Fire safety plans shall include the following:
- 1. The procedure for reporting a fire or other emergency.
- The life safety strategy and procedures for notifying, relocating, or evacuating occupants.
- 3. Site plans indicating the following:
- 3.1. The occupancy assembly point.
- 3.2. The locations of fire hydrants.
- 3.3. The normal routes of fire department vehicle access.
- 4. Floor plans identifying the locations of the following:
- 4.1. Exits.
- 4.2. Primary evacuation routes.
- 4.3. Secondary evacuation routes.

- 4.4. Accessible egress routes.
- 4.5. Areas of refuge.
- 4.6. Manual fire alarm boxes.
- 4.7. Portable fire extinguishers.
- 4.8. Occupant-use hose stations.
- 4.9. Fire alarm annunciators and controls.
- 5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
- 6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
- 7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.
- **404.4** Maintenance. Fire safety and evacuation plans shall be reviewed or updated annually or as necessitated by changes in staff assignments, occupancy, or the physical arrangement of the building.
- **404.5** Availability. Fire safety and evacuation plans shall be available in the workplace for reference and review by employees, and copies shall be furnished to the code enforcement official for review upon request.

MSDS sheets are complete and available. (F407)

Fire Code of New York State Publication Date: 2010

#### HAZARD COMMUNICATION

- **407.1** General. The provisions of Sections <u>407.2</u> through <u>407.7</u> shall be applicable where hazardous materials are located on the premises or where required by the code enforcement official.
- **407.2** Material Safety Data Sheets. Material Safety Data Sheets (MSDS) for all hazardous materials shall be readily available on the premises.
- **407.3** Identification. Individual containers of hazardous materials, cartons or packages shall be marked or labeled in accordance with applicable federal regulations. Buildings, rooms and spaces containing hazardous materials shall be identified by hazard warning signs in accordance with Section <u>2703.5</u>.
- **407.4** Training. Persons responsible for the operation of areas in which hazardous materials are stored, dispensed, handled or used shall be familiar with the chemical nature of the materials and the appropriate mitigating actions necessary in the event of a fire, leak or spill. Responsible persons shall be designated and trained to be liaison personnel for the fire department. These

persons shall aid the fire department in preplanning emergency responses and identification of the locations where hazardous materials are located, and shall have access to Material Safety Data Sheets and be knowledgeable in the site emergency response procedures.

Hazardous material containers and rooms are properly identified. (F407)

Fire Code of New York State Publication Date: 2010

#### HAZARD COMMUNICATION

**407.3 Identification.** Individual containers of hazardous materials, cartons or packages shall be marked or labeled in accordance with applicable federal regulations. Buildings, rooms and spaces containing hazardous materials shall be identified by hazard warning signs in accordance with Section <u>2703.5</u>.

10D-1 Records of hazardous material inventory statements are provided. (F407)

Fire Code of New York State Publication Date: May 2010

#### HAZARD COMMUNICATION

**407.5** Hazardous Materials Inventory Statement. Where required by the code enforcement official, a Hazardous Materials Inventory Statement (HMIS) shall be provided to the code enforcement official.

**407.6** Hazardous Materials Management Plan. Where required by the code enforcement official, a Hazardous Materials Management Plan (HMMP) shall be provided to the code enforcement official. The code enforcement official is authorized to accept a similar plan required by other regulations.

**407.7** Facility closure plans. A facility closure plan in accordance with Section <u>2701.6.3</u> to terminate storage, dispensing, handling or use of hazardous materials shall be submitted to the code enforcement official.

#### **Fire Service Features**

11A-2	Fire apparatus access roads and sidewalks are maintained unobstructed.	(NOTE:	gates are
	permitted.) (F503)		

Fire Code of New York State Publication Date: 2010

#### FIRE APPARATUS ACCESS ROADS

**503.1** Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3.

**503.1.1** Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

#### Exceptions:

- 1. The distance is permitted to be 300 feet (91 440 mm) where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with 903.3.1.1 or 903.3.1.2, when approved by the code enforcement official.
- Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, is equipped with an automatic sprinkler system in accordance with 903.3.1.1, and an approved alternative means of fire protection is provided.
- 3. Fire apparatus access roads are not required for detached one- and two-family dwellings regulated by the Residential Code of New York State, and for not more than two Group R-3 occupancies, when provided with emergency vehicle access in accordance with Section 511.
- 4. Fire apparatus access roads are not required for Group U occupancies.
- 5. Area additions to buildings not exceeding 33 percent of the original floor area or increasing the building area beyond those permitted by Section 506 of the Building Code of New York State. This exception does not apply to the addition of stories to a building.
- **503.1.2** Additional access. The code enforcement official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.
- **503.1.3** High-piled storage. Fire department vehicle access to buildings used for high-piled combustible storage shall comply with the applicable provisions of Chapter 23.
- **503.2** Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.7 and Appendix D.
- **503.2.1** Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), except for approved security gates in accordance with Section  $\underline{503.6}$ , and an unobstructed vertical clearance of not less than 13 feet, 6 inches (4115 mm). Fire apparatus access roads shall also meet the width requirements of Sections  $\underline{D103.1}$  and  $\underline{D105}$  of Appendix  $\underline{D}$ .
- **503.2.2** Authority. The code enforcement official shall have the authority to require an increase in the minimum access widths where they are inadequate for fire or rescue operations.
- **503.2.3** Surface. Fire apparatus access roads shall be designed per Section <u>D102.1</u> of Appendix <u>D</u>, maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.
- **503.2.4** Turning radius. The required turning radius of a fire apparatus access road shall be determined by the code enforcement official.

- **503.2.5** Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus as required in Section D103.4 of Appendix D.
- **503.2.6** Bridges and elevated surfaces. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the code enforcement official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the code enforcement official.
- **503.2.7** Grade. The grade of the fire apparatus access road shall be within the limits established by the code enforcement offical or by D103.2, based on the fire department's apparatus.
- **503.3** Marking. Where required by the code enforcement official, approved signs or other approved notices shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs or notices shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.
- **503.4** Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section <u>503.2.1</u> shall be maintained at all times.
- **503.5** Required gates or barricades. The code enforcement official is authorized to require the installation and maintenance of gates or other approved barricades across fire apparatus access roads, trails or other accessways, not including public streets, alleys or highways.
- **503.5.1** Secured gates and barricades. When required, gates and barricades shall be secured in an approved manner. Roads, trails and other accessways that have been closed and obstructed in the manner prescribed by Section <u>503.5</u> shall not be trespassed on or used unless authorized by the owner and the code enforcement official.

Exception: The restriction on use shall not apply to public officers acting within the scope of duty.

**503.6** Security gates. The installation of security gates across a fire apparatus access road shall be approved by the fire chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times.

11B-1 Flat roofs are free from obstruction. F(507)

Fire Code of New York State Publication Date: 2010

#### **HAZARDS TO FIRE FIGHTERS**

**507.4** Obstructions. Installing or maintaining wires, cables, ropes, aerial antennas, or other overhead obstructions on the roofs of buildings having a roof slope of less than 30 degrees, shall be prohibited unless there is a full clearance of 7 feet (2133 mm) or more between the roof

surface and such obstruction, except that obstructions may be installed less than 7 feet (2133 mm) high, provided they are protected in a manner to prevent injury to fire fighters working on the roof during periods of reduced visibility.

Private fire service hydrants, mains, and tanks are properly maintained and tested. (F508)

Fire Code of New York State Publication Date: 2010

#### **FIRE PROTECTION WATER SUPPLIES**

- **508.5.2** Inspection, testing and maintenance. Fire hydrant systems shall be subject to periodic tests as required by the code enforcement official. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, alterations and servicing shall comply with approved standards.
- **508.5.3** Private fire service mains and water tanks. Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with NFPA 25 at the following intervals:
- 1. Private fire hydrants (all types): Inspection annually and after each operation; flow test and maintenance annually.
- 2. Fire service main piping: Inspection of exposed, annually; flow test every 5 years.
- 3. Fire service main piping strainers: Inspection and maintenance after each use.

Fire hydrants are maintained free from obstruction. F(508)

Fire Code of New York State Publication Date: 2010

#### **FIRE PROTECTION WATER SUPPLIES**

- **508.5.4** Obstruction. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.
- **508.5.5** Clear space around hydrants. A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved.
- **508.5.6** Physical protection. Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means shall comply with Section <u>312</u>.

11E-1 Fire protection equipment and locations are identified and maintained. F(510)

Fire Code of New York State Publication Date: 2010

#### **FIRE PROTECTION WATER SUPPLIES**

**508.5.7** Identification. Fire hydrants shall be maintained to be readily identifiable. Fire hydrants shall not be painted, covered or disguised in any other fashion to make them not readily visible to emergency responders

# SECTION 510 FIRE DEPARTMENT ACCESS TO EQUIPMENT

**510.1** Identification. Fire protection equipment shall be identified in an approved manner. Rooms containing controls for air-conditioning systems, sprinkler risers and valves, or other fire detection, suppression or control elements shall be identified for the use of the fire department. Approved signs required to identify fire protection equipment and equipment location, shall be constructed of durable materials, permanently installed and readily visible.

# **Building Services and Systems**

12A-1 Equipment access is maintained. (F603)

Fire Code of New York State Publication Date: 2010

#### **FUEL-FIRED APPLIANCES**

**§603.1.5 Access.** The installation shall be readily accessible for cleaning hot surfaces; removing burners; replacing motors, controls, air filters, chimney connectors, draft regulators, and other working parts; and for adjusting, cleaning and lubricating parts.

12B-3 Portable unvented heaters are prohibited. F(603)

Fire Code of New York State Publication Date: 2010

#### **FUEL-FIRED APPLIANCES**

**603.4** Portable unvented heaters. Portable unvented fuel-fired heating equipment shall be prohibited in occupancies in Groups A, B, E, I, M, R-1, R-2, R-3 and R-4.

12C-2	Above-ground gas meters are protected from damage. (F603)

Fire Code of New York State Publication Date: 2010

#### **FUEL-FIRED APPLIANCES**

**603.9** Gas meters. Above-ground gas meters, regulators and piping subject to damage shall be protected by a barrier complying with Section <u>312</u> or otherwise protected in an approved manner.

.12D-2	Records of inspection, testing, and maintenance of emergency and standby power systems are
	available. (F604)

Fire Code of New York State Publication Date: 2010

#### **EMERGENCY AND STANDBY POWER SYSTEMS**

- **604.1** Installation. Emergency and standby power systems required by this code or the Building Code of New York State shall be installed in accordance with this code, NFPA 110 and NFPA 111. Existing installations shall be maintained in accordance with the original approval.
- **604.2** Where required. Emergency and standby power systems shall be provided where required by Sections <u>604.2.1</u> through <u>604.2.19.4</u>.
- **604.2.1** Group A occupancies. Emergency power shall be provided for emergency voice/alarm communication systems in Group A occupancies in accordance with Section <u>907.2.12.2</u>.
- **604.2.2** Smoke control systems. Standby power shall be provided for smoke control systems in accordance with Section <u>909.11</u>.
- **604.2.3** Exit signs. Emergency power shall be provided for exit signs in accordance with Section 1011.5.3
- **604.2.4** Means of egress illumination. Emergency power shall be provided for means of egress illumination in accordance with Section  $\underline{1006.3}$ .
- **604.2.5** Accessible means of egress elevators. Standby power shall be provided for elevators that are part of an accessible means of egress in accordance with Section 1007.4.
- **604.3** Maintenance. Emergency and standby power systems shall be maintained in accordance with NFPA 110 and NFPA 111 such that the system is capable of supplying service within the time specified for the type and duration required.
- **604.3.1** Schedule. Inspection, testing and maintenance of emergency and standby power systems shall be in accordance with an approved schedule established upon completion and approval of the system installation.
- **604.3.2** Written record. Written records of the inspection, testing and maintenance of emergency and standby power systems shall include the date of service, name of the servicing technician, a summary of conditions noted and a detailed description of any conditions requiring correction and what corrective action was taken. Such records shall be kept on the premises served by the

emergency or standby power system and be available for inspection by the code enforcement official.

- **604.3.3** Switch maintenance. Emergency and standby power system transfer switches shall be included in the inspection, testing and maintenance schedule required by Section <u>604.3.1</u>. Transfer switches shall be maintained free from accumulated dust and dirt. Inspection shall include examination of the transfer switch contacts for evidence of deterioration. When evidence of contact deterioration is detected, the contacts shall be replaced in accordance with the transfer switch manufacturer's instructions.
- **604.4** Operational inspection and testing. Emergency power systems, including all appurtenant components shall be inspected and tested under load in accordance with NFPA 110 and NFPA 111. Emergency lighting shall be tested in accordance with this section.

Exception: Where the emergency power system is used for standby power or peak load shaving, such use shall be recorded and shall be allowed to be substituted for scheduled testing of the generator set, provided that appropriate records are maintained.

- **604.4.2** Emergency Lighting Equipment. Emergency lighting systems shall be inspected and tested in accordance with this section.
- **604.4.2.1** Activation Test. An activation test of the emergency lighting equipment shall be completed monthly. The activation test shall ensure the emergency lighting activates automatically upon normal electrical disconnect and stays sufficiently illuminated for a minimum of 30 seconds.
- **604.4.2.1.1** Activation Test Record. The owner or authorized agent of the premises shall retain a record of the activation test that is available to the code enforcement official upon request. The record shall include the location of the emergency lighting tested, whether the unit passed or failed, the date of the test, and the person completing the test. Records shall be retained for a minimum of 3 years on the premises.
- **604.4.2.2** Power Test. For battery powered emergency lighting, a power test of the emergency lighting equipment shall be completed annually. The power test shall operate the emergency lighting for a minimum of 90 minutes and shall remain sufficiently illuminated for the duration of the test.
- **604.4.2.2.1** Power Test Record. The owner or authorized agent of the premises shall submit the results of the power test to the code enforcement official upon request. The record shall be maintained on the premises. The record shall include the location of the emergency lighting tested, whether the unit passed or failed, the date of the test, and the person completing the test. Records shall be retained for a minimum of 3 years on the premises.

No electrical system hazards observed or reported. (F605)

Fire Code of New York State Publication Date: 2010

#### **ELECTRICAL EQUIPMENT, WIRING AND HAZARDS**

**605.1 Abatement of electrical hazards.** Identified electrical hazards shall be abated. Identified hazardous electrical conditions in permanent wiring shall be brought to the attention of the code official responsible for enforcement of the Chapter 27 of the *Building Code of New York State*.

Electrical wiring, devices, appliances and other equipment that is modified or damaged and constitutes an electrical shock or fire hazard shall not be used.

- **605.7 Appliances.** Electrical appliances and fixtures shall be tested and listed in published reports of inspected electrical equipment by an approved agency and installed in accordance with all instructions included as part of such listing.
- **605.8 Electrical motors.** Electrical motors shall be maintained free from excessive accumulations of oil, dirt, waste and debris.
- **605.9 Temporary wiring.** Temporary wiring for electrical power and lighting installations is allowed for a period not to exceed 90 days. Temporary wiring methods shall meet the applicable provisions of the Chapter 27 of the *Building Code of New York State*.

**Exception:** Temporary wiring for electrical power and lighting installations is allowed during periods of construction, remodeling, repair or demolition of buildings, structures, equipment or similar activities.

**605.9.1 Attachment to structures.** Temporary wiring attached to a structure shall be attached in an approved manner.

12F-1 Service equipment areas are adequately illuminated. (F605)

Fire Code of New York State Publication Date: 2010

#### **ELECTRICAL EQUIPMENT, WIRING AND HAZARDS**

**605.2 Illumination.** Illumination shall be provided for service equipment areas, motor control centers and electrical panelboards.

12G-1 Electrical service and branch equipment working space is unobstructed. (F605)

Fire Code of New York State Publication Date: 2010

#### **ELECTRICAL EQUIPMENT, WIRING AND HAZARDS**

**605.3 Working space and clearance.** A working space of not less than 30 inches (762 mm) in width, 36 inches (914 mm) in depth and 78 inches (1981 mm) in height shall be provided in front of electrical service equipment. Where the electrical service equipment is wider than 30 inches (762 mm), the working space shall not be less than the width of the equipment. No storage of any materials shall be located within the designated working space.

#### Exceptions:

- 1. Where other dimensions are required or allowed by the Chapter 27 of the *Building Code of New York State*.
- 2. Access openings into attics or under-floor areas which provide a minimum clear opening of 22 inches (559 mm) by 30 inches (762 mm).

12H-1	Electrical room doors and all disconnects are identified. (F605)

Fire Code of New York State Publication Date: 2010

#### **ELECTRICAL EQUIPMENT, WIRING AND HAZARDS**

**605.3.1 Labeling.** Doors into electrical control panel rooms shall be marked with a plainly visible and legible sign stating ELECTRICAL ROOM or similar approved wording. The disconnecting means for each service, feeder or branch circuit originating on a switchboard or panelboard shall be legibly and durably marked to indicate its purpose unless such purpose is clearly evident.

12I-1 Unapproved multi-plug adapters are not used. (F605)

Fire Code of New York State Publication Date: 2010

#### **ELECTRICAL EQUIPMENT, WIRING AND HAZARDS**

- **605.4 Multiplug adapters.** Multiplug adaptors, such as cube adaptors, unfused plug strips or any other device not complying with the Chapter 27 of the *Building Code of New York State* shall be prohibited.
- **605.4.1 Power tap design.** Relocatable power taps shall be of the polarized or grounded type, equipped with overcurrent protection, and shall be listed.
- **605.4.2 Power supply.** Relocatable power taps shall be directly connected to a permanently installed receptacle.
- **605.4.3 Installation.** Relocatable power tap cords shall not extend through walls, ceilings, floors, under doors or floor coverings, or be subject to environmental or physical damage.

Extension cords are properly used and are not a substitute for permanent wiring. (F605)

Fire Code of New York State Publication Date: 2010

#### **ELECTRICAL EQUIPMENT, WIRING AND HAZARDS**

- **605.5 Extension cords.** Extension cords and flexible cords shall not be a substitute for permanent wiring. Extension cords and flexible cords shall not be affixed to structures, extended through walls, ceilings or floors, or under doors or floor coverings, nor shall such cords be subject to environmental damage or physical impact. Extension cords shall be used only with portable appliances.
- **605.5.1 Power supply.** Extension cords shall be plugged directly into an approved receptacle, power tap or multiplug adapter and, except for approved multiplug extension cords, shall serve only one portable appliance.
- **605.5.2 Ampacity.** The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord.

**605.5.3 Maintenance.** Extension cords shall be maintained in good condition without splices, deterioration or damage.

**605.5.4 Grounding.** Extension cords shall be grounded when serving grounded portable appliances.

Outlet, switch, junction boxes, and wire splices are covered. (F605)

Fire Code of New York State Publication Date: 2010

#### **ELECTRICAL EQUIPMENT, WIRING AND HAZARDS**

**605.6 Unapproved conditions.** Open junction boxes and open-wiring splices shall be prohibited. Approved covers shall be provided for all switch and electrical outlet boxes.

Refrigeration systems are accessible, properly labeled, and records of periodic testing are available. (F606)

Fire Code of New York State Publication Date: 2010

#### **MECHANICAL REFRIGERATION**

**606.5 Access.** Refrigeration systems having a refrigerant circuit containing more than 220 pounds (100 kg) of Group A1 or 30 pounds (14 kg) of any other group refrigerant shall be accessible to the fire department at all times as required by the code enforcement official.

**606.6 Testing of equipment.** Refrigeration equipment and systems having a refrigerant circuit containing more than 220 pounds (100 kg) of Group A1 or 30 pounds (14 kg) of any other group refrigerant shall be subject to periodic testing in accordance with Section <u>606.6.1</u>. A written record of required testing shall be maintained on the premises. Tests of emergency devices or systems required by this chapter shall be conducted by persons trained and qualified in refrigeration systems.

**606.6.1 Periodic testing.** The following emergency devices or systems shall be periodically tested in accordance with the manufactureris instructions and as required by the code enforcement official.

- 1. Treatment and flaring systems.
- 2. Valves and appurtenances necessary to the operation of emergency refrigeration control boxes.
- 3. Fans and associated equipment intended to operate emergency ventilation systems.
- 4. Detection and alarm systems.

**606.7 Emergency signs.** Refrigeration units or systems having a refrigerant circuit containing more than 220 pounds (100 kg) of Group A1 or 30 pounds (14 kg) of any other group refrigerant shall be provided with approved emergency signs, charts, and labels in accordance with NFPA

704. Hazard signs shall be in accordance with the *Mechanical Code of New York State* for the classification of refrigerants listed therein.

12M-1 Approved elevator emergency signs are provided. (F607)

Fire Code of New York State Publication Date: 2010

#### **ELEVATOR RECALL AND MAINTENANCE**

**607.2 Emergency signs.** An approved pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use the exit stairways and not to use the elevators in case of fire. The sign shall read: IN FIRE EMERGENCY, DO NOT USE ELEVATOR. USE EXIT STAIRS. The emergency sign shall not be required for elevators that are part of an accessible means of egress complying with Section 1007.4.

Emergency elevator keys are properly located in an approved location for immediate use by the fire department. (F607)

Fire Code of New York State Publication Date: 2010

#### **ELEVATOR RECALL AND MAINTENANCE**

**607.3 Elevator keys.** Keys for the elevator car doors and fire-fighter service keys shall be kept in an approved location for immediate use by the fire department.

Heating equipment, chimneys and vents are maintained and are in proper working order. (F603)

Fire Code of New York State Publication Date: 2010

#### **FUEL-FIRED APPLIANCES**

- **603.6 Chimneys and appliances.** Chimneys, incinerators, smokestacks or similar devices for conveying smoke or hot gases to the outer air and the stoves, furnaces, fireboxes or boilers to which such devices are connected, shall be maintained so as not to create a fire hazard.
- **603.6.1 Masonry chimneys.** Masonry chimneys that, upon inspection, are found to be without a flue liner and that have open mortar joints which will permit smoke or gases to be discharged into the building, or which are cracked as to be dangerous, shall be repaired or relined with a listed chimney liner system installed in accordance with the manufactureris installation instructions or a flue lining system installed in accordance with the requirements of the *Building Code* and appropriate for the intended class of chimney service.
- **603.6.2 Metal chimneys.** Metal chimneys which are corroded or improperly supported shall be repaired or replaced.
- **603.6.3 Decorative shrouds.** Decorative shrouds installed at the termination of factory-built chimneys shall be removed except where such shrouds are listed and labeled for use with the

specific factory-built chimney system and are installed in accordance with the chimney manufacturer(s installation instructions.

- **603.6.4 Factory-built chimneys.** Existing factory-built chimneys that are damaged, corroded or improperly supported shall be repaired or replaced.
- **603.6.5 Connectors.** Existing chimney and vent connectors that are damaged, corroded or improperly supported shall be repaired or replaced.
- **603.7 Discontinuing operation of unsafe heating appliances.** The code enforcement official is authorized to order that measures be taken to prevent the operation of any existing stove, oven, furnace, incinerator, boiler or any other heat-producing device or appliance found to be defective shall be prohibited. The defective device shall remain withdrawn from service until all necessary repairs or alterations have been made.
- **603.7.1 Unauthorized operation.** It shall be a violation of this code for any person, user, firm or agent to continue the utilization of any device or appliance (the operation of which has been discontinued or ordered discontinued in accordance with Section <u>603.7</u>), unless written authority to resume operation is given by the code enforcement official. Removing or breaking the means by which operation of the device is prevented shall be a violation of this code.
- **603.8 Incinerators.** Commercial, industrial and residential-type incinerators and chimneys shall be constructed in accordance with the *Building Code of New York State*, the *Fuel Gas Code of New York State* and the *Mechanical Code of New York*.
- 603.8.1 Residential incinerators. Residential incinerators shall be of an approved type.
- **603.8.2 Spark arrestor.** Incinerators shall be equipped with an effective means for arresting sparks.
- **603.8.3 Restrictions.** Where the code enforcement official determines that burning in incinerators located within 500 feet (152 m) of mountainous, brush or grass-covered areas will create an undue fire hazard because of atmospheric conditions, such burning shall be prohibited.
- **603.8.4 Time of burning.** Burning shall take place only during approved hours.
- **603.8.5 Discontinuance.** The code enforcement official is authorized to require incinerator use to be discontinued immediately if the code enforcement official determines that smoke emissions are offensive to occupants of surrounding property or if the use of incinerators is determined by the code enforcement official to constitute a hazardous condition.

#### **Commercial Kitchen Hoods**

vapors or smoke. (F609)	13A-2	Kitchen hood is provided and maintained at commercial equipment capable of producing grease
		vapors or smoke. (F609)

Fire Code of New York State Publication Date: 2010

#### **COMMERCIAL KITCHEN HOODS**

[M] **609.1** General. Commercial kitchen exhaust hoods shall comply with the requirements of the Mechanical Code of New York State.

[M] **609.2** Where required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors.

Hood fire extinguishing system, where provided, is maintained and serviced in accordance with Section F904 of the Fire Code of New York State. (F609)

Fire Code of New York State Publication Date: 2010

#### **COMMERCIAL KITCHEN HOODS**

- **609.3** Fire-extinguishing system. A fire-extinguishing system in conformance with Section <u>904.11</u> shall be provided for Type 1 commercial kitchen exhaust hoods.
- **609.4** Inspection and maintenance. Commercial kitchen exhaust hoods shall be inspected and maintained in accordance with NFPA 96.

#### **Fire Resistance Rated Construction**

14A-2 Fire resistance rating of rated construction is maintained. (F703)

Fire Code of New York State Publication Date: 2010

# Section 703 FIRE-RESISTANCE-RATED CONSTRUCTION

- **703.1** Maintenance. The required fire-resistance rating of fire-resistance-rated construction (including walls, firestops, shaft enclosures, partitions, smoke barriers, floors, fire-resistive coatings and sprayed fire-resistant materials applied to structural members and fire-resistant joint systems) shall be maintained. Such elements shall be properly repaired, restored or replaced when damaged, altered, breached or penetrated. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire-resistance-rated assemblies shall be protected by self- or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly.
- **703.1.1** Fireblocking and draftstopping. Required fireblocking and draftstopping in combustible concealed spaces shall be maintained to provide continuity and integrity of the construction.
- **703.1.2** Smoke barriers. Required smoke barriers shall be maintained to prevent the passage of smoke and all openings protected with approved smoke barrier doors or smoke dampers
- **703.3** Ceilings. The hanging and displaying of salable goods and other decorative materials from acoustical ceiling systems that are part of a fire-resistance-rated floor/ceiling or roof/ceiling assembly, shall be prohibited.

Opening protectives are properly maintained and are not blocked or made inoperable. (F703)

Fire Code of New York State Publication Date: 2010

#### FIRE-RESISTANCE-RATED CONSTRUCTION

- **703.2** Opening protectives. Opening protectives shall be maintained in an operative condition in accordance with NFPA 80. Fire doors and smoke barrier doors shall not be blocked or obstructed or otherwise made inoperable. Fusible links shall be replaced promptly whenever fused or damaged. Fire door assemblies shall not be modified.
- **703.2.1** Signs. Where required by the code enforce-ment official, a sign shall be permanently displayed on or near each fire door in letters not less than 1 inch (25 mm) high to read as follows:
- 1. For doors designed to be kept normally open: FIRE DOOR—DO NOT BLOCK.
- 2. For doors designed to be kept normally closed: FIRE DOOR—KEEP CLOSED.
- Doors requiring closers are not rendered inoperable by removal of the closer or the installation of any nonautomatic hold open device. (F703)

Fire Code of New York State Publication Date: 2010

#### FIRE-RESISTANCE-RATED CONSTRUCTION

**703.2.2** Hold-open devices and closers. Hold-open devices and automatic door closers, where provided, shall be maintained. During the period that such device is out of service for repairs, the door it operates shall remain in the closed position.

Records of annual inspections of sliding and rolling fire doors are available. (F703)

Fire Code of New York State Publication Date: 2010

#### FIRE-RESISTANCE-RATED CONSTRUCTION

**703.4** Testing. Horizontal and vertical sliding and rolling fire doors shall be inspected and tested annually to confirm proper operation and full closure. A written record shall be maintained and be available to the code enforcement official.

14E-1 Fire and smoke doors close and latch automatically from any position. (F703)

Fire Code of New York State Publication Date: 2010

#### FIRE-RESISTANCE-RATED CONSTRUCTION

**703.2.3** Door operation. Swinging fire doors shall close from the full-open position and latch automatically. The door closer shall exert enough force to close and latch the door from any partially open position.

# **Decorative Material and Furnishings**

15A-2 Furnishings do not obstruct or obscure exits. (F807)

#### Fire Code of New York State Publication Date: 2010

- **807.4.1** General. All of the following requirements shall apply to all Group A and E occupancies and Group I-4 day care facilities regulated by Sections 807.4.2 through 807.4.4:
- 1. Explosive or highly flammable materials. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.
- Fire-retardant coatings. Fire-retardant coatings in existing buildings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.
- 3. Obstructions. Furnishings or other objects shall not be placed to obstruct exits, access thereto, egress therefrom or visibility thereof.

15B-1 Storage of clothing and personal belongings in corridors and lobbies is compliant. (F807)

#### Fire Code of New York State Publication Date: May 2010

**807.4.3.1** Storage in corridors and lobbies. Clothing and personal effects shall not be stored in corridors and lobbies.

#### Exceptions:

- 1. Corridors protected by an approved automatic sprinkler system installed in accordance with Section <u>903.3.1.1</u>.
- 2. Corridors protected by an approved smoke detection system installed in accordance with Section 907.
- 3. Storage in metal lockers, provided the minimum required egress width is maintained.

15C-2 Artwork and teaching materials are limited to not more than 20% of the corridor wall area. (F807)

#### Fire Code of New York State Publication Date: 2010

**807.1.2** Combustible decorative materials. The permissible amount of decorative materials meeting the flame propagation performance criteria of NFPA 701 shall not exceed 10 percent of the aggregate area of walls and ceilings.

**807.4.3.2** Artwork. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area.

15D-2 Curtains, drapes, hangings and other decorative materials suspended from walls or ceilings shall be fire resistant. (F807)

#### Fire Code of New York State Publication Date: 2010

- **807.1** General requirements. In occupancies in Groups A, E, I and R-1 and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section <u>806.2</u> or be noncombustible.
- **806.2** Artificial vegetation. Artificial decorative vegetation shall meet the flame propagation performance criteria of NFPA 701. Meeting the flame propagation performance criteria of NFPA 701 shall be documented and certified by the manufacturer in an approved manner.

# **Fire Protection Systems**

Fire detection, alarm, and extinguishing systems are operative and inspection, testing and maintenance records are maintained and available for review. (F901)

Fire Code of New York State Publication Date: 2010

#### **CHAPTER F9**

#### FIRE PROTECTION SYSTEMS

- **901.4** Installation. Fire protection systems shall be maintained in accordance with the original installation standards for that system. Required systems shall be extended, altered, or augmented as necessary to maintain and continue protection whenever the building is altered, remodeled or added to. Alterations to fire protection systems shall be done in accordance with applicable standards.
- **901.4.1** Required fire protection systems. Fire protection systems required by this code, the Building Code of New York State or the Existing Building Code of New York State shall be installed, repaired, operated, tested and maintained in accordance with this code.
- **901.4.2** Nonrequired fire protection systems. Any fire protection system or portion thereof not required by this code, the Building Code of New York State or the Existing Building Code of New York State shall be allowed to be furnished for partial or complete protection provided such installed system meets the requirements of this code, the Building Code of New York State or the Existing Building Code of New York State .

#### 901.4.3 Reserved.

- **901.4.4** Appearance of equipment. Any device that has the physical appearance of life safety or fire protection equipment but that does not perform that life safety or fire protection function, shall be prohibited.
- **901.5** Installation acceptance testing. Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service

mains and all other fire protection systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the code enforcement official. The code enforcement official shall be notified before any required acceptance testing.

- **901.5.1** Occupancy. It shall be unlawful to occupy any portion of a building or structure until the required fire detection, alarm and suppression systems have been tested and approved.
- **901.6** Inspection, testing and maintenance. Fire detection, alarm and extinguishing systems shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Nonrequired fire protection systems and equipment shall be inspected, tested and maintained or removed.
- **901.6.1** Standards. Fire protection systems shall be inspected, tested and maintained in accordance with the referenced standards listed in Table <u>901.6.1</u>.

TABLE 901.6.1
FIRE PROTECTION SYSTEM MAINTENANCE STANDARDS

SYSTEM	STANDARD			
Portable fire extinguishers	NFPA 10			
Carbon dioxide fire-extinguishing system	NFPA 12			
Halon 1301 fire-extinguishing systems	NFPA 12A			
Dry-chemical extinguishing systems	NFPA 17			
Wet-chemical extinguishing systems	NFPA 17A			
Water-based fire protection systems	NFPA 25			
Fire alarm systems	NFPA 72			
Water-mist systems	NFPA 750			
Clean-agent extinguishing systems	NFPA 2001			

- **901.6.2** Records. Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for a minimum of ten years and shall be copied to the code enforcement official upon request.
- **901.6.2.1** Records information. Initial records shall include the name of the installation contractor, type of components installed, manufacturer of the components, location and number of components installed per floor. Records shall also include the manufacturers' operation and maintenance instruction manuals. Such records shall be maintained on the premises.

**901.7** Systems out of service. Where a required fire protection system is out of service, the fire department and the code enforcement official shall be notified immediately and, where required by the code enforcement official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.

Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

Exception: The code enforcement official is permitted to waive the requirement for evacuation or a fire watch where there is not a substantial risk to life safety or where alternatives to maintain an equivalent level of safety are prescribed.

- **901.7.1** Impairment coordinator. The building owner shall assign an impairment coordinator to comply with the requirements of this section. In the absence of a specific designee, the owner shall be considered the impairment coordinator.
- **901.7.2** Tag required. A tag shall be used to indicate that a system, or portion thereof, has been removed from service.
- **901.7.3** Placement of tag. The tag shall be posted at each fire department connection, system control valve, fire alarm control unit, fire alarm annunciator and fire command center, indicating which system, or part thereof, has been removed from service. The code enforcement official shall specify where the tag is to be placed.
- **901.7.4** Preplanned impairment programs. Preplanned impairments shall be authorized by the impairment coordinator. Before authorization is given, a designated individual shall be responsible for verifying that all of the following procedures have been implemented:
- 1. The extent and expected duration of the impairment have been determined.
- 2. The areas or buildings involved have been inspected and the increased risks determined.
- 3. Recommendations have been submitted to management or building owner/manager.
- 4. The fire department has been notified.
- 5. The insurance carrier, the alarm company, building owner/manager, and other authorities having jurisdiction have been notified.
- 6. The supervisors in the areas to be affected have been notified.
- 7. A tag impairment system has been implemented.
- 8. Necessary tools and materials have been assembled on the impairment site.
- **901.7.5** Emergency impairments. When unplanned impairments occur, appropriate emergency action shall be taken to minimize potential injury and damage. The impairment coordinator shall implement the steps outlined in Section <u>901.7.4</u>.

- **901.7.6** Restoring systems to service. When impaired equipment is restored to normal working order, the impairment coordinator shall verify that all of the following procedures have been implemented:
- 1. Necessary inspections and tests have been conducted to verify that affected systems are operational.
- 2. Supervisors have been advised that protection is restored.
- 3. The fire department has been advised that protection is restored.
- 4. The building owner/manager, insurance carrier, alarm company and other involved parties have been advised that protection is restored.
- 5. The impairment tag has been removed.
- **901.8** Removal of or tampering with equipment. It shall be prohibited for any person to remove, tamper with or otherwise disturb any fire hydrant, fire detection and alarm system, fire suppression system, or other fire appliance required by this code except for the purpose of extinguishing fire, training purposes, recharging or making necessary repairs, or when approved by the code enforcement official.
- **901.8.1** Removal of or tampering with appurtenances. Locks, gates, doors, barricades, chains, enclosures, signs, tags or seals which have been installed by or at the direction of the code enforcement official shall not be removed, unlocked, destroyed, tampered with or otherwise vandalized in any manner.
- **901.9** Recall of fire protection components. Any fire protection system component regulated by this code that is the subject of a voluntary or mandatory recall under federal law shall be replaced with approved, listed components in compliance with the referenced standards of this code. The code enforcement official shall be notified in writing by the building owner when the recalled component parts have been replaced.
- Portable fire extinguishers are located in a conspicuous location, are readily accessible, are not obstructed or obscured, and are maintained in accordance with this section and NFPA. (F906)

# Fire Code of New York State Publication Date: 2010

- **904.11.5** Portable fire extinguishers for commercial cooking equipment. Portable fire extinguishers shall be provided within a 30-foot (9144 mm) travel distance of commercial-type cooking equipment. Cooking equipment involving vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher.
- **904.11.5.1** Portable fire extinguishers for solid fuel cooking appliances. All solid fuel cooking appliances, whether or not under a hood, with fireboxes 5 cubic feet (0.14 m³) or less in volume shall have a minimum 2.5 gallon (9 L) or two 1.5 gallon (6 L) Class K wet-chemical portable fire extinguishers located in accordance with Section 904.11.5.
- **904.11.5.2** Class K portable fire extinguishers for deep fat fryers. When hazard areas include deep fat fryers, listed Class K portable fire extinguishers shall be provided as follows:

- 1. For up to four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: One Class K portable fire extinguisher of a minimum 1.5 gallon (6 L) capacity.
- 2. For every additional group of four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: One additional Class K portable fire extinguisher of a minimum 1.5 gallon (6 L) capacity shall be provided.
- 3. For individual fryers exceeding 6 square feet (0.55 m²) in surface area: Class K portable fire extinguishers shall be installed in accordance with the extinguisher manufacturer's recommendations.
- **906.1** Where required. Portable fire extinguishers shall be installed in the following locations.
- 1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.
- 2. Within 30 feet (9144 mm) of commercial cooking equipment.
- 3. In areas where flammable or combustible liquids are stored, used or dispensed.
- 4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 1415.1.
- 5. Where required by the sections indicated in Table 906.1.
- 6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the code enforcement official.

TABLE 906.1
ADDITIONAL REQUIRED PORTABLE FIRE EXTINGUISHERS

SECTION	SUBJECT						
303.5	Asphalt kettles						
307.5	Open burning						
308.4	Open flames—torches						
309.4	Powered industrial trucks						
1105.2	Aircraft towing vehicles						
1105.3	Aircraft welding apparatus						
1105.4	Aircraft fuel-servicing tank vehicles						
1105.5	Aircraft hydrant fuel-servicing vehicles						
1105.6	Aircraft fuel-dispensing stations						

1107.7	Heliports and helistops
1208.4	Dry cleaning plants
1415.1	Buildings under construction or demolition
1417.3	Roofing operations
1504.4.1	Spray-finishing operations
1505.4.2	Dip-tank operations
1506.4.2	Powder-coating areas
1904.2	Lumberyards/woodworking facilities
1908.8	Recycling facilities
1909.5	Exterior lumber storage
2003.5	Organic-coating areas
2106.3	Industrial ovens
2205.5	Motor fuel-dispensing facilities
2210.6.4	Marine motor fuel-dispensing facilities
2211.6	Repair garages
2306.10	Rack storage
2404.12	Tents, canopies and membrane structures
2508.2	Tire rebuilding/storage
2604.2.6	Welding and other hot work
2903.6	Combustible fibers
3403.2.1	Flammable and combustible liquids, general
3404.3.3.1	Indoor storage of flammable and combustible liquids
3404.3.7.5.2	Liquid storage rooms for flammable and combustible liquids

3405.4.9	Solvent distillation units					
3406.2.7	Farms and construction sites—flammable and combustible liquids storage					
3406.4.10.1	Bulk plants and terminals for flammable and combustible liquids					
3406.5.4.5	Commercial, industrial, governmental or manufacturing establishments—fuel dispensing					
3406.6.4	Tank vehicles for flammable and combustible liquids					
3606.5.7	Flammable solids					
3808.2	LP-gas					

**906.2** General requirements. Portable fire extinguishers shall be selected, installed and maintained in accordance with this section and NFPA 10.

## Exceptions:

- 1. The travel distance to reach an extinguisher shall not apply to the spectator seating portions of Group A-5 occupancies.
- 2. 30-day inspections shall not be required and maintenance shall be allowed to be once every three years for dry-chemical or halogenated agent portable fire extinguishers that are supervised by a listed and approved electronic monitoring device, provided that all of the following conditions are met:
- 2.1. Electronic monitoring shall confirm that extinguishers are properly positioned, properly charged and unobstructed.
- 2.2. Loss of power or circuit continuity to the electronic monitoring device shall initiate a trouble signal.
- 2.3. The extinguishers shall be installed inside of a building or cabinet in a noncorrosive environment.
- 2.4. Electronic monitoring devices and supervisory circuits shall be tested every three years when extinguisher maintenance is performed.
- 2.5. A written log of required hydrostatic test dates for extinguishers shall be maintained by the owner to ensure that hydrostatic tests are conducted at the frequency required by NFPA 10.
- **906.3** Size and distribution. For occupancies that involve primarily Class A fire hazards, the minimum sizes and distribution shall comply with Table <u>906.3(1)</u>. Fire extinguishers for occupancies involving flammable or combustible liquids with depths of less than or equal to 0.25-inch (6.35 mm) shall be selected and placed in accordance with Table <u>906.3(2)</u>. Fire extinguishers for occupancies involving flammable or combustible liquids with a depth of greater than 0.25-inch (6.35 mm) or involving combustible metals shall be selected and placed in

accordance with NFPA 10. Extinguishers for Class C fire hazards shall be selected and placed on the basis of the anticipated Class A or Class B hazard.

TABLE 906.3(1)
FIRE EXTINGUISHERS FOR CLASS A FIRE HAZARDS

	LIGHT (Low) HAZARD OCCUPANCY	ORDINARY (Moderate) HAZARD OCCUPANCY	EXTRA (High) HAZARD OCCUPANCY			
Minimum Rated Single Extinguisher	2-A°	2-A	4-A <sup>a</sup>			
Maximum Floor Area Per Unit of A	3,000 square feet	1,500 square feet	1,000 square feet			
Maximum Floor Area For Extinguisher <sup>b</sup>	11,250 square feet	11,250 square feet	11,250 square feet			
Maximum Travel Distance to 75 feet Extinguisher		75 feet	75 feet			

For SI: 1 foot = 304.8 mm, 1 square foot =  $0.0929 \text{ m}^2$ , 1 gallon = 3.785 L.

- a. Two 2.5-gallon water-type extinguishers shall be deemed the equivalent of one 4-A rated extinguisher.
- b. Annex E.3.3 of NFPA 10 provides more details concerning application of the maximum floor area criteria.
- c. Two water-type extinguishers each with a 1-A rating shall be deemed the equivalent of one 2-A rated extinguisher for Light (Low) Hazard Occupancies.

TABLE 906.3(2)
FLAMMABLE OR COMBUSTIBLE LIQUIDS WITH DEPTHS OF LESS THAN OR EQUAL TO 0.25-INCH

TYPE OF HAZARD	BASIC MINIMUM EXTINGUISHER RATING	MAXIMUM TRAVEL DISTANCE TO EXTINGUISHERS (feet)					
Light (Low)	5-B	30					
Light (Low)	10-B	50					
Ordinary (Moderate)	10-B	30					

	20-B	50
Extra (High)	40-B	30
	80-B	50

For SI: 1 inch = 25.4 mm. 1 foot = 304.8 mm.

NOTE. For requirements on water-soluble flammable liquids and alternative sizing criteria, see Section 4.3 of NFPA 10

- **906.4** Cooking grease fires. Fire extinguishers provided for the protection of cooking grease fires shall be of an approved type compatible with the automatic fire-extinguishing system agent and in accordance with Section 904.11.5.
- **906.5** Conspicuous location. Portable fire extinguishers shall be located in conspicuous locations where they will be readily accessible and immediately available for use. These locations shall be along normal paths of travel, unless the code enforcement official determines that the hazard posed indicates the need for placement away from normal paths of travel.
- **906.6** Unobstructed and unobscured. Portable fire extinguishers shall not be obstructed or obscured from view. In rooms or areas in which visual obstruction cannot be completely avoided, means shall be provided to indicate the locations of extinguishers.
- **906.7** Hangers and brackets. Hand-held portable fire extinguishers, not housed in cabinets, shall be installed on the hangers or brackets supplied. Hangers or brackets shall be securely anchored to the mounting surface in accordance with the manufacturer's installation instructions.
- 906.8 Cabinets. Cabinets used to house portable fire extinguishers shall not be locked.

# Exceptions:

- 1. Where portable fire extinguishers subject to malicious use or damage are provided with a means of ready access.
- 2. In Group I-3 occupancies and in mental health areas in Group I-2 occupancies, access to portable fire extinguishers shall be permitted to be locked or to be located in staff locations provided the staff has keys.
- **906.9** Height above floor. Portable fire extinguishers having a gross weight not exceeding 40 pounds (18 kg) shall be installed so that its top is not more than 5 feet (1524 mm) above the floor. Hand-held portable fire extinguishers having a gross weight exceeding 40 pounds (18 kg) shall be installed so that its top is not more than 3.5 feet (1067 mm) above the floor. The clearance between the floor and the bottom of installed hand-held extinguishers shall not be less than 4 inches (102 mm).
- **906.10** Wheeled units. Wheeled fire extinguishers shall be conspicuously located in a designated location.
- **904.11.5** Portable fire extinguishers for commercial cooking equipment. Portable fire extinguishers shall be provided within a 30-foot (9144 mm) travel distance of commercial-type

cooking equipment. Cooking equipment involving vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher.

- **904.11.5.1** Portable fire extinguishers for solid fuel cooking appliances. All solid fuel cooking appliances, whether or not under a hood, with fireboxes 5 cubic feet (0.14 m³) or less in volume shall have a minimum 2.5 gallon (9 L) or two 1.5 gallon (6 L) Class K wet-chemical portable fire extinguishers located in accordance with Section <u>904.11.5</u>.
- **904.11.5.2** Class K portable fire extinguishers for deep fat fryers. When hazard areas include deep fat fryers, listed Class K portable fire extinguishers shall be provided as follows:
- 1. For up to four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: One Class K portable fire extinguisher of a minimum 1.5 gallon (6 L) capacity.
- 2. For every additional group of four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: One additional Class K portable fire extinguisher of a minimum 1.5 gallon (6 L) capacity shall be provided.
- 3. For individual fryers exceeding 6 square feet (0.55 m²) in surface area: Class K portable fire extinguishers shall be installed in accordance with the extinguisher manufacturer's recommendations.

#### REGULATIONS OF THE COMMISSIONER OF EDUCATION

Part 155 (8 NYCRR 155)

# § 155.7 Health and safety in existing educational facilities.

- (b) Smoke and fire control.
- (6) Fire extinguishers shall be located so that no point in a corridor, lobby or stair is more than 120 feet from an extinguisher. Fire extinguishers shall also be placed readily accessible to auditorium stages, shops, cafeterias and kitchens, boiler rooms, science labs and accessible from other places which are possible sources of fire. Fire extinguishers shall bear the Underwriter's label and be of a type most suitable for the kind of fire most likely to occur in a given area.

Fire pumps are inspected, tested, maintained, and records are available for review. (F913)

# Fire Code of New York State Publication Date: 2010

# **FIRE PUMPS**

- **913.5** Testing and maintenance. Fire pumps shall be inspected, tested and maintained in accordance with the requirements of this section and NFPA 25.
- **913.5.1** Acceptance test. Acceptance testing shall be done in accordance with the requirements of NFPA 20.
- **913.5.2** Generator sets. Engine generator sets supplying emergency or standby power to fire pump assemblies shall be periodically tested in accordance with NFPA 110.

**913.5.3** Transfer switches. Automatic transfer switches shall be periodically tested in accordance with NFPA 110.

**913.5.4** Pump room environmental conditions. Tests of pump room environmental conditions, including heating, ventilation and illumination shall be made to ensure proper manual or automatic operation of the associated equipment.

# **Means of Egress**

The required capacity of means of egress is free of obstructions. (F1028)

Fire Code of New York State Publication Date: 2010

#### MAINTENANCE OF THE MEANS OF EGRESS

**1028.1** General. The means of egress for buildings or portions thereof shall be maintained in accordance with this section.

**1028.2** Reliability. Required exit accesses, exits or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency when the areas served by such exits are occupied. Security devices affecting means of egress shall be subject to approval of the code enforcement official

#### §1028

#### MEANS OF EGRESS FOR EXISTING BUILDINGS

§ 1028.10 Exit or exit access arrangement. Exits shall be unobstructed at all times.

Exterior exits are free from obstruction, including ice and snow. (F1028)

Fire Code of New York State Publication Date: 2010

## MAINTENANCE OF THE MEANS OF EGRESS

**1028.3** Obstructions. A means of egress shall be free from obstructions that would prevent its use, including the accumulation of snow and ice.

17C-2 Curtains, drapes, or decorations shall not be placed to obstruct exits or visibility thereof. (F1028)

Fire Code of New York State Publication Date: 2010

#### MAINTENANCE OF THE MEANS OF EGRESS

**1028.5** Furnishings and decorations. Furnishings, decorations or other objects shall not be placed so as to obstruct exits, access thereto, egress therefrom, or visibility thereof. Hangings and draperies shall not be placed over exit doors or otherwise be located to conceal or obstruct an exit. Mirrors shall not be placed on exit doors. Mirrors shall not be placed in or adjacent to any exit in such a manner as to confuse the direction of exit.

## Fire Code of New York State Publication Date: May 2010

- **1028.4** Exit signs. Exit signs shall be installed and maintained in accordance with Section <u>1011</u>. Decorations, furnishings, equipment or adjacent signage that impairs the visibility of exit signs, creates confusion or prevents identification of the exit shall not be allowed.
- **1011.1** Where required. Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel. Access to exits shall be marked by readily visible exit signs in cases where the exit or the path of egress travel is not immediately visible to the occupants. Exit sign placement shall be such that no point in a corridor is more than 100 feet (30 480 mm) or the listed viewing distance for the sign, whichever is less, from the nearest visible exit sign.

# Exceptions:

- 1. Exit signs are not required in rooms or areas that require only one exit or exit access.
- 2. Main exterior exit doors or gates that are obviously and clearly identifiable as exits need not have exit signs where approved by the code enforcement official.
- 3. Exit signs are not required in occupancies in Group U and individual sleeping units or dwelling units in Group R-1, R-2 or R-3.
- 4. Exit signs are not required in sleeping areas in occupancies in Group I-3.
- 5. In occupancies in Groups A-4 and A-5, exit signs are not required on the seating side of vomitories or openings into seating areas where exit signs are provided in the concourse that are readily apparent from the vomitories. Egress lighting is provided to identify each vomitory or opening within the seating area in an emergency.
- **1011.2** Illumination. Exit signs shall be internally or externally illuminated.

Exception: Tactile signs required by Section 1011.3 need not be provided with illumination.

- **1011.3** Tactile exit signs. A tactile sign stating EXIT and complying with ICC A117.1 shall be provided adjacent to each door to an egress stairway, an exit passageway and the exit discharge.
- **1011.4** Internally illuminated exit signs. Internally illuminated exit signs shall be listed and labeled and shall be installed in accordance with the manufacturer's instructions and Section <u>2702</u> of the Building Code of New York State. Exit signs shall be illuminated at all times.
- **1011.5** Externally illuminated exit signs. Externally illuminated exit signs shall comply with Sections 1011.5.1 through 1011.5.3.
- **1011.5.1** Graphics. Every exit sign and directional exit sign shall have plainly legible letters not less than 6 inches (152 mm) high with the principal strokes of the letters not less than 0.75 inch (19.1 mm) wide. The word EXIT shall have letters having a width not less than 2 inches (51 mm) wide, except the letter "I," and the minimum spacing between letters shall not be less than 0.375

inch (9.5 mm). Signs larger than the minimum established in this section shall have letter widths, strokes and spacing in proportion to their height.

The word EXIT shall be in high contrast with the background and shall be clearly discernible when the means of exit sign illumination is or is not energized. If a chevron directional indicator is provided as part of the exit sign, the construction shall be such that the direction of the chevron directional indicator cannot be readily changed.

- **1011.5.2** Exit sign illumination. The face of an exit sign illuminated from an external source shall have an intensity of not less than 5 foot-candles (54 lux).
- **1011.5.3** Power source. Exit signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section <u>2702</u> of the Building Code of New York State.

Exception: Approved exit sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.

Exit sign placement shall be such that no point in an exit access corridor is more than 100 feet from the nearest visible exit sign. (F1028)

#### Fire Code of New York State Publication Date: 2010

**1011.1** Where required. Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel. Access to exits shall be marked by readily visible exit signs in cases where the exit or the path of egress travel is not immediately visible to the occupants. Exit sign placement shall be such that no point in a corridor is more than 100 feet (30 480 mm) or the listed viewing distance for the sign, whichever is less, from the nearest visible exit sign.

#### Exceptions:

- 1. Exit signs are not required in rooms or areas that require only one exit or exit access.
- 2. Main exterior exit doors or gates that are obviously and clearly identifiable as exits need not have exit signs where approved by the code enforcement official.
- 3. Exit signs are not required in occupancies in Group U and individual sleeping units or dwelling units in Group R-1, R-2 or R-3.
- 4. Exit signs are not required in sleeping areas in occupancies in Group I-3.
- 5. In occupancies in Groups A-4 and A-5, exit signs are not required on the seating side of vomitories or openings into seating areas where exit signs are provided in the concourse that are readily apparent from the vomitories. Egress lighting is provided to identify each vomitory or opening within the seating area in an emergency.

Doors shall be readily operable from the egress side without the use of a key or special knowledge or effort. **Electromagnetic locking devices are not allowed. Rev 4/2/07** (F1029)

#### Fire Code of New York State Publication Date: 2010

**1029.2** Locks and latches. Egress doors shall be readily operable from the egress side without the use of a key or special knowledge or effort, except as permitted by Section 1008.1.8.3.

# REGULATIONS OF THE COMMISSIONER OF EDUCATION Part 155 (8 NYCRR 155)

## § 155.7 Health and safety in existing educational facilities.

- (a) Exits.
  - (9) Hardware.
  - (i) All door hardware from spaces of pupil occupancy shall be of a type that will always permit the door to be opened from within the space without the use of a key.
  - (iii) Exit doors shall not be locked or chained or otherwise rendered inoperable from the inside at any time.

Occupant load is conspicuously posted in all assembly spaces where occupant load exceeds 50 persons. (F1029)

#### Fire Code of New York State Publication Date: 2010

**1029.4** Posting of occupant load. Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved, legible, permanent design and shall be maintained by the owner or authorized agent.

# REGULATIONS OF THE COMMISSIONER OF EDUCATION Part 155 (8 NYCRR 155)

- (7) Places of assembly. A place of assembly is any area used for the assembly of 100 or more persons, and spaces over 1800 square feet in area used for the assembling of persons. A place of assembly shall have at least two exits remote from each other.
- (i) Maximum occupancy for places of assembly shall be based on the number and size of existing approved exits on the basis of 50 persons for each one-half exit unit of 11 inches. Where existing exits are inadequate for the occupancy capacity of a place of assembly, or when directed by the commissioner, signs restricting the number of occupants shall be conspicuously posted at each exit location. Signs shall read in red letters on white background:

"MAXIMUM OCCUPANCY - 3inch. high, 3/4inch. stroke

NOT TO EXCEED - 2inch. high, 1/2inch. stroke

XXX PERSONS" - 3inch. high, 3/4inch. stroke

17H-2 Means of egress are provided with emergency lighting. (F1029)

Fire Code of New York State Publication Date: 2010

# **MEANS OF EGRESS FOR EXISTING BUILDINGS**

**1029.8** Means of egress illumination. The means of egress, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied.

**1029.8.1** Illumination level. The means of egress illumination level shall not be less than 1 footcandle (11 lux) at the floor level.

Exception: For auditoriums, theaters, concert or opera halls and similar assembly occupancies, the illumination at the floor level is permitted to be reduced during performances to not less than 0.2 foot-candle (2.15 lux), provided that the required illumination is automatically restored upon activation of a premise's fire alarm system where such system is provided.

**1029.9** Illumination emergency power. The power supply for means of egress illumination shall normally be provided by the premises' electrical supply. In the event of power supply failure, illumination shall automatically be provided from an emergency system for the following occupancies where such occupancies require two or more means of egress:

1. Group A having more than 50 occupants.

Exception: Assembly occupancies used exclusively as places of worship and having an occupant load of less than 300.

3. Group E in interior stairs, corridors, windowless areas with student occupancy, shops and laboratories.

17I-2	Tactile signs stating EXIT and complying with ICC/ANSI, A117.1 are provided adjacent to each
	door to an egress stairway. (F1029)

Fire Code of New York State Publication Date: 2010

# **MEANS OF EGRESS FOR EXISTING BUILDINGS**

**1029.7.3** Stairway exit signs. A tactile sign stating EXIT and complying with ICC/ANSI A117.1 shall be provided adjacent to each door to an egress stairway.

17J-1	Aisles are provided in all occupied spaces containing seats, tables, furnishings, displays, and
	similar fixtures or equipment and are unobstructed at all times. (F1029)

Fire Code of New York State Publication Date: 2010

#### MEANS OF EGRESS FOR EXISTING BUILDINGS

**1029.11** Aisles. Aisles serving as a portion of the exit access in the means of egress system shall comply with the requirements of this section. Aisles shall be provided from all occupied portions of the exit access that contain seats, tables, furnishings, displays, and similar fixtures or equipment. The required width of aisles shall be unobstructed.

Exception: Doors, when fully opened, and handrails shall not reduce the required width by more than 7 inches (178 mm). Doors in any position shall not reduce the required width by more than one-half. Other nonstructural projections such as trim and similar decorative features are permitted to project into the required width 1.5 inches (38 mm) from each side.

**1029.11.1** Public areas in Groups B and M. In public areas of Group B and M occupancies, the minimum clear aisle width shall be 36 inches (914 mm) where seats, tables, furnishings, displays and similar fixtures or equipment are placed on only one side of the aisle and 44 inches (1118 mm) where such fixtures or equipment are placed on both sides of the aisle.

**1029.11.2** Nonpublic areas. In nonpublic areas, aisle widths shall be a minimum of 36 inches (914 mm).

Exception: Nonpublic aisles serving less than 50 people and not required to be accessible by Chapter 11 of the Building Code of New York State need not exceed 28 inches (71 mm) in width.

**1029.11.3** Seating at tables. Where seating is located at a nonfixed table and is adjacent to an aisle or aisle accessway, the measurement of required clear width of the aisle or aisle accessway shall be made to a line 19 inches (483 mm) away from and parallel to the edge of the table. The 19-inch (483 mm) distance shall be measured perpendicular to the side of the table. In case of other side boundaries for aisles or aisle accessways, the clear width shall be measured to walls, edges of seating and tread edges, except that handrail projections are permitted.

**1029.11.3.1** Aisle accessways for tables and seating. Aisle accessways serving arrangements of seating at nonfixed tables shall have sufficient clear width to conform to the capacity requirements of Section <u>1029.3</u>, but shall not have less than the appropriate minimum clear width specified in Section <u>1014.4.3</u>.

**1029.11.3.2** Table and seating accessway width. Aisle accessways shall provide a minimum of 12 inches (305 mm) of width plus 0.5 inch (12.7 mm) of width for each additional 1 foot (305 mm), or fraction thereof, beyond 12 feet (3660 mm) of aisle accessway length measured from the center of the seat farthest from an aisle.

Exception: Portions of an aisle accessway having a length not exceeding 6 feet (1830 mm) and used by a total of not more than four persons.

**1029.11.3.3** Table and seating aisle accessway length. The length of travel along the aisle accessway shall not exceed 30 feet (9144 mm) from any seat to the point where a person has a choice of two or more paths of egress travel to separate exits.

17K-l Stairways that travel below the level of exit discharge are clearly defined. (F1029)

Fire Code of New York State Publication Date: 2010

#### MEANS OF EGRESS FOR EXISTING BUILDINGS

**1029.13** Stairway discharge identification. A stairway in an exit enclosure that continues below the level of exit discharge shall be arranged and marked to make the direction of egress to a public way readily identifiable.

Exception: Stairs that continue not more than one-half story beyond the level of exit discharge need not be provided with barriers where the exit discharge is obvious.

17L-1 Required exit signs are provided with emergency illumination. (F1029)

Fire Code of New York State Publication Date: 2010

#### MEANS OF EGRESS FOR EXISTING BUILDINGS

**1029.7.5** Power source. Exit signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the exit signs shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section <u>604</u>.

Exception: Approved exit signs that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes in case of primary power loss are not required to be connected to an emergency electrical system.

## Flammable Finishes

18A-2 Electrical wiring and equipment in spray areas shall be explosion proof. (F1503)

Fire Code of New York State Publication Date: 2010

- **1503.2.1** Electrical wiring and equipment. Electrical wiring and equipment shall comply with this chapter and Chapter 27 of the Building Code of New York State.
- **1503.2.1.1** Flammable vapor areas. Electrical wiring and equipment in flammable vapor areas shall be of an explosion proof type approved for use in such hazardous locations. Such areas shall be considered to be Class I, Division 1 or Class II, Division 1 hazardous locations in accordance with Chapter <u>27</u> of the Building Code of New York State.
- **1503.2.1.2** Areas subject to deposits of residues. Electrical equipment, flammable vapor areas or drying operations that are subject to splashing or dripping of liquids shall be specifically approved for locations containing deposits of readily ignitable residue and explosive vapors.

# Exceptions:

- 1. This provision shall not apply to wiring in rigid conduit, threaded boxes or fittings not containing taps, splices or terminal connections.
- This provision shall not apply to electrostatic equipment allowed by Section <u>1507</u>.

In resin application areas, electrical wiring and equipment that is subject to deposits of combustible residues shall be listed for such exposure and shall be installed as required for hazardous (classified) locations. Electrical wiring and equipment not subject to deposits of combustible residues shall be installed as required for ordinary hazard locations.

**1503.2.1.3** Areas adjacent to spray booths. Electrical wiring and equipment located outside of, but within 5 feet (1524 mm) horizontally and 3 feet (914 mm) vertically of openings in a spray

booth or a spray room, shall be approved for Class I, Division 2 or Class II, Division 2 hazardous locations, whichever is applicable.

**1503.2.1.4** Areas subject to overspray deposits. Electrical equipment in flammable vapor areas located such that deposits of combustible residues could readily accumulate thereon shall be specifically approved for locations containing deposits of readily ignitable residue and explosive vapors in accordance with Chapter <u>27</u> of the Building Code of New York State.

# Exceptions:

- 1. Wiring in rigid conduit.
- 2. Boxes or fittings not containing taps, splices or terminal connections.
- 3. Equipment allowed by Sections <u>1504</u> and <u>1507</u> and Chapter <u>21</u>.
- 18B-2 "No Welding" signs shall be posted in the vicinity of the paint spraying areas and paint storage rooms. (F1503)

Fire Code of New York State Publication Date: 2010

**1503.2.7** Welding warning signs. Welding, cutting and similar spark-producing operations shall not be conducted in or adjacent to flammable vapor areas or dipping or coating operations unless precautions have been taken to provide safety. Conspicuous signs with the following warning shall be posted in the vicinity of flammable vapor areas, dipping operations and paint storage rooms:

NO WELDING
THE USE OF WELDING OR CUTTING
EQUIPMENT IN OR NEAR THIS AREA
IS DANGEROUS BECAUSE OF FIRE
AND EXPLOSION HAZARDS. WELDING
AND CUTTING SHALL BE DONE ONLY
UNDER THE SUPERVISION OF THE
PERSON IN CHARGE.

Portable fire extinguishers rated for high hazard shall be provided in paint spraying areas. (F1504)

Fire Code of New York State Publication Date: 2010

# **SPRAY FINISHING**

**1504.4.1** Fire extinguishers. Portable fire extinguishers complying with Section <u>906</u> shall be provided for spraying areas in accordance with the requirements for an extra (high) hazard occupancy.

Spraying areas, exhaust fan blades and exhaust ducts shall be kept free from the accumulation of deposits of combustible residues. (F1503)

#### Fire Code of New York State Publication Date: 2010

#### PROTECTION OF OPERATIONS

- **1503.4** Operations and maintenance. Flammable vapor areas, exhaust fan blades and exhaust ducts shall be kept free from the accumulation of deposits of combustible residues. Where excessive residue accumulates in such areas, spraying operations shall be discontinued until conditions are corrected.
- **1503.4.1** Tools. Scrapers, spuds and other tools used for cleaning purposes shall be constructed of nonsparking materials.
- **1503.4.2** Residue. Residues removed during cleaning and debris contaminated with residue shall be immediately removed from the premises and properly disposed.
- **1503.4.3** Waste cans. Approved metal waste cans equipped with self-closing lids shall be provided wherever rags or waste are impregnated with finishing material. Such rags and waste shall be deposited therein immediately after being utilized. The contents of waste cans shall be properly disposed of at least once daily and at the end of each shift.

# **Service Station and Repair Garages**

An approved, clearly identified and readily accessible emergency disconnect switch shall be provided for fuel dispensers. (F2203)

Fire Code of New York State Publication Date: 2010

#### SERVICE STATIONS AND REPAIR GARAGES

# LOCATION OF DISPENSING DEVICES

**2203.2** Emergency disconnect switches. An approved, clearly identified and readily accessible emergency disconnect switch shall be provided at an approved location, to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. An emergency disconnect switch for exterior fuel dispensers shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from, the fuel dispensers. For interior fuel-dispensing operations, the emergency disconnect switch shall be installed at an approved location. Such devices shall be distinctly labeled as: EMERGENCY FUEL SHUTOFF. Signs shall be provided in approved locations.

19B-2	Approved	fire	extinguishers	shall	be	located	within	75	feet	of	pumps,	dispensers,	and	storage
	tanks. F(2	2205)												

Fire Code of New York State Publication Date: 2010

SERVICE STATIONS AND REPAIR GARAGES
OPERATIONAL REQUIREMENTS

**2205.5** Fire extinguishers. Approved portable fire extinguishers complying with Section <u>906</u> with a minimum rating of 2-A:20-B:C shall be provided and located such that an extinguisher is not more than 75 feet (22 860 mm) from pumps, dispensers or storage tank fill-pipe openings.

19C-1 Approved warning signs shall be posted in the fuel dispensing area. (F2205)

Fire Code of New York State Publication Date: 2010

# SERVICE STATIONS AND REPAIR GARAGES OPERATIONAL REQUIREMENTS

**2205.6** Warning signs. Warning signs shall be conspicuously posted within sight of each dispenser in the fuel-dispensing area and shall state the following:

- 1. No smoking.
- 2. Shut off motor.
- 3. Discharge your static electricity before fueling by touching a metal surface away from the nozzle.
- 4. To prevent static charge, do not reenter your vehicle while gasoline is pumping.
- 5. If a fire starts, do not remove nozzle-back away immediately.
- 6. It is unlawful and dangerous to dispense gasoline into unapproved containers.
- 7. No filling of portable containers in or on a motor vehicle. Place container on ground before filling.

Daily inventory records are maintained for underground fuel storage tanks. (F2206)

Fire Code of New York State Publication Date: 2010

#### FLAMMABLE AND COMBUSTIBLE LIQUID MOTOR FUEL-DISPENSING FACILITIES

**2206.2.1.1** Inventory control for underground tanks. Accurate daily inventory records shall be maintained and reconciled on underground fuel storage tanks for indication of possible leakage from tanks and piping. The records shall be kept at the premises or made available for inspection by the code enforcement official within 24 hours of a written or verbal request and shall include records for each product showing daily reconciliation between sales, use, receipts and inventory on hand. Where there is more than one system consisting of tanks serving separate pumps or dispensers for a product, the reconciliation shall be ascertained separately for each tank system. A consistent or accidental loss of product shall be immediately reported to the code enforcement official.

Above-ground tanks are protected from impact by motor vehicles. (F2206)

Fire Code of New York State Publication Date: 2010

#### FLAMMABLE AND COMBUSTIBLE LIQUID MOTOR FUEL-DISPENSING FACILITIES

**2206.4** Physical protection. Guard posts complying with Section <u>312</u> or other approved means shall be provided to protect above-ground tanks against impact by a motor vehicle unless the tank is listed as a protected above-ground tank with vehicle impact protection.

#### VEHICLE IMPACT PROTECTION

- **312.1** General. Vehicle impact protection required by this code shall be provided by posts that comply with Section 312.2 or by other approved physical barriers that comply with Section 312.3.
- **312.2** Posts. Guard posts shall comply with all of the following requirements:
- 1. Constructed of steel not less than 4 inches (102 mm) in diameter and concrete filled.
- 2. Spaced not more than 4 feet (1219 mm) between posts on center.
- 3. Set not less than 3 feet (914 mm) deep in a concrete footing of not less than a 15-inch (381 mm) diameter.
- 4. Set with the top of the posts not less than 3 feet (914 mm) above ground.
- 5. Located not less than 3 feet (914 mm) from the protected object.
- **312.3** Other barriers. Physical barriers shall be a minimum of 36 inches (914 mm) in height and shall resist a force of 12,000 pounds (53 375 N) applied 36 inches (914 mm) above the adjacent ground surface.

9F-1 Sources of ignition shall not be located within 18 inches of the floor in repair garages. (F2211)

Fire Code of New York State Publication Date: 2010

#### **REPAIR GARAGES**

**2211.3** Sources of ignition. Sources of ignition shall not be located within 18 inches (457 mm) of the floor and shall comply with Chapters 3 and 26.

19G-1 Appropriately rated fire extinguishers are provided in repair garages. (F2211)

Fire Code of New York State Publication Date: 2010

# **REPAIR GARAGES**

2211.6 Fire extinguishers. Fire extinguishers shall be provided in accordance with Section 906.

A non-coin operated telephone or other means to notify the fire department is provided on-site. (F2204)

Fire Code of New York State Publication Date: 2010

#### MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES

#### **DISPENSING OPERATIONS**

**2204.3.6** Communications. A telephone not requiring a coin to operate or other approved, clearly identified means to notify the fire department shall be provided on the site in a location approved by the code enforcement official.

# Welding and Other Hot Work

Hot work is conducted in areas designed or authorized for that work. (F2601)

Fire Code of New York State Publication Date: 2010

# WELDING AND OTHER HOT WORK GENERAL

**2601.3** Restricted areas. Hot work shall only be conducted in areas designed or authorized for that purpose by the personnel responsible for a Hot Work Program. Hot work shall not be conducted in the following areas unless approval has been obtained from the code enforcement official:

- 1. Areas where the sprinkler system is impaired.
- 2. Areas where there exists the potential of an explosive atmosphere, such as locations where flammable gases, liquids or vapors are present.
- 3. Areas with readily ignitable materials, such as storage of large quantities of bulk sulfur, baled paper, cotton, lint, dust or loose combustible materials.
- 4. On board ships at dock or ships under construction or repair.
- 5. At other locations as specified by the code enforcement official.

20B-1 Combustible materials are protected to prevent ignition. (F2604)

Fire Code of New York State Publication Date: 2010

# WELDING AND OTHER HOT WORK FIRE SAFETY REQUIREMENTS

**2604.1** Protection of combustibles. Protection of combustibles shall be in accordance with Sections 2604.1.1 through 2604.1.9.

- **2604.1.1** Combustibles. Hot work areas shall not contain combustibles or shall be provided with appropriate shielding to prevent sparks, slag or heat from igniting exposed combustibles.
- **2604.1.2** Openings. Openings or cracks in walls, floors, ducts or shafts within the hot work area shall be tightly covered to prevent the passage of sparks to adjacent combustible areas, or shielded by metal fire-resistant guards, or curtains shall be provided to prevent passage of sparks or slag.
- **2604.1.3** Housekeeping. Floors shall be kept clean within the hot work area.
- **2604.1.4** Conveyor systems. Conveyor systems that are capable of carrying sparks to distant combustibles shall be shielded or shut down.
- **2604.1.5** Partitions. Partitions segregating hot work areas from other areas of the building shall be noncombustible. In fixed hot work areas, the partitions shall be securely connected to the floor such that no gap exists between the floor and the partition. Partitions shall prevent the passage of sparks, slag, and heat from the hot work area.
- 2604.1.6 Floors. Fixed hot work areas shall have floors with noncombustible surfaces.
- **2604.1.7** Precautions in hot work. Hot work shall not be performed on containers or equipment that contains or has contained flammable liquids, gases or solids until the containers and equipment have been thoroughly cleaned, inerted or purged; except that "hot tapping" shall be allowed on tanks and pipe lines when such work is to be conducted by approved personnel.
- **2604.1.8** Sprinkler protection. Automatic sprinkler protection shall not be shut off while hot work is performed. Where hot work is performed close to automatic sprinklers, noncombustible barriers or damp cloth guards shall shield the individual sprinkler heads and shall be removed when the work is completed. If the work extends over several days, the shields shall be removed at the end of each workday. The code enforcement official shall approve hot work where sprinkler protection is impaired.
- **2604.1.9** Fire detection systems. Approved special precautions shall be taken to avoid accidental operation of automatic fire detection systems.

20C-1	Fire extinguishers with a minimum 2-A:20-B:C ratings are located within 30 feet of hot work area.
	(F2604)

Fire Code of New York State Publication Date: 2010

# WELDING AND OTHER HOT WORK FIRE SAFETY REQUIREMENTS

**2604.2.6** Fire extinguisher. A minimum of one portable fire extinguisher complying with Section 906 and with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet (9144 mm) of the location where hot work is performed.

## **Hazardous Materials**

The storage, use, and handling of all hazardous materials are in accordance with Fire Code section 2703. (F2703)

Fire Code of New York State Publication Date: 2010

#### **HAZARDOUS MATERIALS - GENERAL PROVISIONS**

**2701.1** Scope. Prevention, control and mitigation of dangerous conditions related to storage, dispensing, use and handling of hazardous materials shall be in accordance with this chapter.

This chapter shall apply to all hazardous materials, including those materials regulated elsewhere in this code, except that when specific requirements are provided in other chapters, those specific requirements shall apply in accordance with the applicable chapter. Where a material has multiple hazards, all hazards shall be addressed.

# Exceptions:

- 1. The quantities of alcoholic beverages, medicines, foodstuffs, cosmetics and consumer or industrial products containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solutions not being flammable, in retail or wholesale sales occupancies, are unlimited when packaged in individual containers not exceeding 1.3 gallons (5 L).
- 2. Application and release of pesticide and agricultural products and materials intended for use in weed abatement, erosion control, soil amendment or similar applications when applied in accordance with the manufacturers' instructions and label directions.
- 3. The off-site transportation of hazardous materials when in accordance with Department of Transportation (DOTn) regulations.
- 4. Building materials not otherwise regulated by this code.
- 5. Refrigeration systems (see Section 606).
- 6. Stationary storage battery systems regulated by Section 608.
- 7. The display, storage, sale or use of fireworks and explosives in accordance with Chapter 33.
- 8. Corrosives utilized in personal and household products in the manufacturers' original consumer packaging in Group M occupancies.
- 9. The storage of distilled spirits and wines in wooden barrels and casks.
- 10. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids when in accordance with Section 3405.5.

See the Building Code of New York State for State laws and other regulations.

- **2701.2** Material classification. Hazardous materials are those chemicals or substances defined as such in this code. Definitions of hazardous materials shall apply to all hazardous materials, including those materials regulated elsewhere in this code.
- **2701.2.1** Mixtures. Mixtures shall be classified in accordance with hazards of the mixture as a whole. Mixtures of hazardous materials shall be classified in accordance with nationally recognized reference standards; by an approved qualified organization, individual, or Material Safety Data Sheet (MSDS); or by other approved methods.
- **2701.2.2** Hazard categories. Hazardous materials shall be classified according to hazard categories. The categories include materials regulated by this chapter and materials regulated elsewhere in this code.
- **2701.2.2.1** Physical hazards. The material categories listed in this section are classified as physical hazards. A material with a primary classification as a physical hazard can also pose a health hazard.
- 1. Explosives and blasting agents.
- 2. Flammable and combustible liquids.
- 3. Flammable solids and gases.
- 4. Organic peroxide materials.
- Oxidizer materials.
- 6. Pyrophoric materials.
- 7. Unstable (reactive) materials.
- 8. Water-reactive solids and liquids.
- 9. Cryogenic fluids.
- **2701.2.2.2** Health hazards. The material categories listed in this section are classified as health hazards. A material with a primary classification as a health hazard can also pose a physical hazard.
- 1. Highly toxic and toxic materials.
- 2. Corrosive materials.
- **2703.5** Hazard identification signs. Unless otherwise exempted by the code enforcement official, visible hazard identification signs as specified in NFPA 704 for the specific material contained shall be placed on stationary containers and above ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used or handled in quantities exceeding Tables <u>2703.1.1(1)</u>, 2073.1.1(2), 2703.1.1(3), or 2703.1.1(4) and at specific entrances and locations designated by the code enforcement official.

- **2703.5.1** Markings. Individual containers, cartons or packages shall be conspicuously marked or labeled in an approved manner. Rooms or cabinets containing compressed gases shall be conspicuously labeled: COMPRESSED GAS.
- **2703.6** Signs. Signs and markings required by Sections <u>2703.5</u> and <u>2703.5.1</u> shall not be obscured or removed, shall be in English as a primary language or in symbols allowed by this code, shall be durable, and the size, color and lettering shall be approved.
- **2703.7** Sources of ignition. Sources of ignition shall comply with Sections <u>2703.7.1</u> through <u>2703.7.3</u>.
- 2703.7.1 Smoking. Smoking shall be prohibited and "No Smoking" signs provided as follows:
- 1. In rooms or areas where hazardous materials are stored or dispensed or used in open systems in amounts requiring a permit in accordance with Section 2701.5.
- 2. Within 25 feet (7620 mm) of outdoor storage, dispensing or open use areas.
- 3. Facilities or areas within facilities that have been designated as totally "no smoking" shall have "No Smoking" signs placed at all entrances to the facility or area. Designated areas within such facilities where smoking is permitted either permanently or temporarily, shall be identified with signs designating that smoking is permitted in these areas only.
- In rooms or areas where flammable or combustible hazardous materials are stored, dispensed or used.

Signs required by this section shall be in English as a primary language or in symbols allowed by this code and shall comply with Section 310.

- **2703.7.2** Open flames. Open flames and high-temperature devices shall not be used in a manner which creates a hazardous condition and shall be listed for use with the hazardous materials stored or used.
- **2703.7.3** Industrial trucks. Powered industrial trucks used in areas designated as hazardous (classified) locations in accordance with Chapter <u>27</u> of the Building Code of New York State shall be listed and labeled for use in the environment intended in accordance with NFPA 505.
- **2703.9** General safety precautions. General precautions for the safe storage, handling or care of hazardous materials shall be in accordance with Sections 2703.9.1 through 2703.9.9.
- **2703.9.1** Personnel training and written procedures. Persons responsible for the operation of areas in which hazardous materials are stored, dispensed, handled or used shall be familiar with the chemical nature of the materials and the appropriate mitigating actions necessary in the event of fire, leak or spill.
- **2703.9.1.1** Fire department liaison. Responsible persons shall be designated and trained to be liaison personnel to the fire department. These persons shall aid the fire department in preplanning emergency responses and identifying the locations where hazardous materials are located, and shall have access to Material Safety Data Sheets (MSDS) and be knowledgeable in the site's emergency response procedures.
- **2703.9.2** Security. Storage, dispensing, use and handling areas shall be secured against unauthorized entry and safeguarded in a manner approved by the code enforcement official.

- **2703.9.3** Protection from vehicles. Guard posts or other approved means shall be provided to protect storage tanks and connected piping, valves and fittings; dispensing areas; and use areas subject to vehicular damage in accordance with Section 312.
- **2703.9.4** Electrical wiring and equipment. Electrical wiring and equipment shall be installed and maintained in accordance with Chapter <u>27</u> of the Building Code of New York State.
- **2703.9.5** Static accumulation. When processes or conditions exist where a flammable mixture could be ignited by static electricity, means shall be provided to prevent the accumulation of a static charge.
- **2703.9.6** Protection from light. Materials that are sensitive to light shall be stored in containers designed to protect them from such exposure.
- **2703.9.7** Shock padding. Materials that are shock sensitive shall be padded, suspended or otherwise protected against accidental dislodgement and dislodgement during seismic activity.
- **2703.9.8** Separation of incompatible materials. Incompatible materials in storage and storage of materials that are incompatible with materials in use shall be separated when the stored materials are in containers having a capacity of more than 5 pounds (2 kg) or 0.5 gallon (2 L). Separation shall be accomplished by:
- 1. Segregating incompatible materials in storage by a distance of not less than 20 feet (6096 mm).
- 2. Isolating incompatible materials in storage by a noncombustible partition extending not less than 18 inches (457 mm) above and to the sides of the stored material.
- 3. Storing liquid and solid materials in hazardous material storage cabinets.
- 4. Storing compressed gases in gas cabinets or exhausted enclosures in accordance with Sections <u>2703.8.5</u> and <u>2703.8.6</u>. Materials that are incompatible shall not be stored within the same cabinet or exhausted enclosure.
- **2703.9.9** Shelf storage. Shelving shall be of substantial construction, and shall be braced and anchored in accordance with the seismic design requirements of the Building Code of New York State for the seismic zone in which the material is located. Shelving shall be treated, coated or constructed of materials that are compatible with the hazardous materials stored. Shelves shall be provided with a lip or guard when used for the storage of individual containers.

# Exceptions:

- 1. Storage in hazardous material storage cabinets or laboratory furniture specifically designed for such use.
- 2. Storage of hazardous materials in amounts not requiring a permit in accordance with Section <u>2701.5</u>.

Shelf storage of hazardous materials shall be maintained in an orderly manner.

# **Compressed Gasses**

22A-3 Compressed gas containers are marked in accordance with CGA C-7. (F3003)

Fire Code of New York State Publication Date: 2010

# COMPRESSED GASES GENERAL REQUIREMENTS

- **3003.4** Marking. Stationary and portable compressed gas containers, cylinders, tanks and systems shall be marked in accordance with Sections <u>3003.4.1</u> through <u>3003.4.3</u>.
- **3003.4.1** Stationary compressed gas containers, cylinders and tanks. Stationary compressed gas containers, cylinders and tanks shall be marked with the name of the gas and in accordance with Sections 2703.5 and 2703.6. Markings shall be visible from any direction of approach.
- **3003.4.2** Portable containers, cylinders and tanks. Portable compressed gas containers, cylinders and tanks shall be marked in accordance with CGA C-7.

22B-3 Compressed gas containers are secured and protected. (F3003)

Fire Code of New York State Publication Date: 2010

#### COMPRESSED GASES

#### **GENERAL REQUIREMENTS**

- **3003.5** Security. Compressed gas containers, cylinders, tanks and systems shall be secured against accidental dislodgement and against access by unauthorized personnel in accordance with Sections 3003.5.1 through 3003.5.3.
- **3003.5.1** Security of areas. Areas used for the storage, use and handling of compressed gas containers, cylinders, tanks and systems shall be secured against unauthorized entry and safeguarded in an approved manner.
- **3003.5.2** Physical protection. Compressed gas containers, cylinders, tanks and systems which could be exposed to physical damage shall be protected. Guard posts or other approved means shall be provided to protect compressed gas containers, cylinders, tanks and systems indoors and outdoors from vehicular damage and shall comply with Section 312.
- **3003.5.3** Securing compressed gas containers, cylinders and tanks. Compressed gas containers, cylinders and tanks shall be secured to prevent falling caused by contact, vibration or seismic activity. Securing of compressed gas containers, cylinders and tanks shall be by one of the following methods:
- 1. Securing containers, cylinders and tanks to a fixed object with one or more restraints.
- 2. Securing containers, cylinders and tanks on a cart or other mobile device designed for the movement of compressed gas containers, cylinders or tanks.

- 3. Nesting of compressed gas containers, cylinders and tanks at container filling or servicing facilities or in seller's warehouses not accessible to the public. Nesting shall be allowed provided the nested containers, cylinders or tanks, if dislodged, do not obstruct the required means of egress.
- 4. Securing of compressed gas containers, cylinders and tanks to or within a rack, framework, cabinet or similar assembly designed for such use.

Exception: Compressed gas containers, cylinders and tanks in the process of examination, filling, transport or servicing.

22C-3 Protective caps are in place. (F3003)

Fire Code of New York State Publication Date: 2010

# COMPRESSED GASES GENERAL REQUIREMENTS

**3003.6** Valve protection. Compressed gas container, cylinder and tank valves shall be protected from physical damage by means of protective caps, collars or similar devices in accordance with Sections 3003.6.1 and 3003.6.2.

**3003.6.1** Compressed gas container, cylinder or tank protective caps or collars. Compressed gas containers, cylinders and tanks designed for protective caps, collars or other protective devices shall have the caps or devices in place except when the containers, cylinders or tanks are in use or are being serviced or filled.

**3003.6.2** Caps and plugs. Compressed gas containers, cylinders and tanks designed for valve protection caps or other protective devices shall have the caps or devices attached. When outlet caps or plugs are installed, they shall be in place.

Exception: Compressed gas containers, cylinders or tanks in use, being serviced or being filled.

# **Property Maintenance Code of NYS**

Required equipment, systems, devices, and safeguards are maintained in good working order. (PM106)

Property Maintenance Code of New York State Publication Date: 2010

**101.2 Scope.** The provisions of this code shall apply to all existing residential and nonresidential structures and all existing premises and constitute minimum requirements and standards for premises, structures, equipment and facilities for light, ventilation, space, heating, sanitation, protection from the elements, life safety, safety from fire and other hazards, and for safe and sanitary maintenance; the responsibility of owners, operators and occupants; the occupancy of existing structures and premises.

**106.1 Maintenance.** Equipment, systems, devices and safeguards required by this code or a previous regulation or code under which the structure or premises was constructed, altered or repaired shall be maintained in good working order. The requirements of this code are not intended to provide the basis for removal or abrogation of fire protection and safety systems and

devices in existing structures. Except as otherwise specified herein, the owner or the owner's designated agent shall be responsible for the maintenance of buildings, structures and premises.

Non-required equipment, devices, and systems are maintained in good working order or removed. (PM106)

Property Maintenance Code of New York State Publication Date: 2010

**106.2 Existing nonrequired equipment and systems.** Whenever or wherever any nonrequired device, equipment, system, condition, arrangement, level of protection or any other feature is provided, such device, equipment, system, condition, arrangement, level of protection or other feature shall thereafter be continuously maintained in accordance with this code and applicable referenced standards.

Exception: Nonrequired devices, equipment and systems are permitted to be removed or disabled as provided herein.

- 1. Nonrequired devices, equipment and systems are permitted to be removed in entirety;
- 2. Nonrequired devices, equipment and systems are permitted to be disabled, provided that all visible elements are removed;
- 3. Electrically charged devices, equipment and systems are permitted to be disabled, provided that they are disconnected from power sources and all visible elements are labeled as not being energized; and
- 4. Nonrequired fire protection systems are permitted to be disabled, provided that sprinkler heads, exposed valves, fire department connections, initiating and notification devices and similar equipment are removed, and any remaining visible components are labeled as not being in service.
- All exterior property and premises shall be maintained in a clean, safe, and sanitary condition. (PM302)

Property Maintenance Code of New York State Publication Date: 2010

# **EXTERIOR PROPERTY AREAS**

**302.1** Sanitation. All exterior property and premises shall be maintained in a clean, safe and sanitary condition. The occupant shall keep that part of the exterior property which such occupant occupies or controls in a clean and sanitary condition.

23D-2 Certificate of elevator inspection is available for review. (PM606)

Property Maintenance Code of New York State Publication Date: 2010

#### **ELEVATORS, ESCALATORS AND DUMBWAITERS**

- **606.1** General. Elevators, dumbwaiters and escalators shall be maintained in compliance with ASME A17.1. The most current certificate of inspection shall be on display at all times within the elevator or attached to the escalator or dumbwaiter, or the certificate shall be available for public inspection in the office of the building operator. The inspection and tests shall be performed at not less than the periodical intervals listed in ASME A17.1, Appendix N, except where otherwise specified by the authority having jurisdiction.
- **606.1.1** Maintenance and inspection. Elevators, dumbwaiters, escalators and platform lifts shall be maintained and meet schedule of inspections in accord with Building Code of New York State, Section 3001, and Appendix N, Table-1 of ASME A17.1 and ASME A18.1.
- **606.2** Elevators. In buildings equipped with passenger elevators, at least one elevator shall be maintained in operation at all times when the building is occupied.

Exception: Buildings equipped with only one elevator shall be permitted to have the elevator temporarily out of service for testing or servicing.

# **Unsafe Structures and Equipment**

If the inspector determines that the building or equipment is unsafe as described above and requires condemnation, he/she shall check this item on the nonconformance sheet, provide a written explanation of the hazard, and contact the Office of Facilities Planning Fire Safety Unit at (518) 474-3906 immediately.

An **unsafe structure** is one that is found to be dangerous to the life, health, property, or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains unsafe equipment or is so damaged, decayed, dilapidated, structurally unsafe, or of such faulty construction or unstable foundation, that partial or complete collapse is possible.

**Unsafe equipment** includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the premises or within the structure which is in such disrepair or condition that such equipment is a hazard to life, health, property, or safety of the public or occupants of the premises or structure.

Property Maintenance Code of New York State Publication Date: 2010

#### **UNSAFE STRUCTURES AND EQUIPMENT**

- **107.1 General.** When a structure or equipment is found to be unsafe, or when a structure is found unfit for human occupancy, or is found unlawful, such structure shall be condemned pursuant to the provisions of this code.
- **107.1.1** Unsafe structures. An unsafe structure is one that is found to be dangerous to the life, health, property or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains unsafe equipment or is so damaged, decayed, dilapidated, structurally unsafe, or of such faulty construction or unstable foundation, that partial or complete collapse is possible.
- **107.1.2** Unsafe equipment. Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on

the premises or within the structure which is in such disrepair or condition that such equipment is a hazard to life, health, property or safety of the public or occupants of the premises or structure.

- **107.1.3** Structure unfit for human occupancy. A structure is unfit for human occupancy whenever such structure is unsafe, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is insanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.
- **107.1.4** Unlawful structure. An unlawful structure is one found in whole or in part to be occupied by more persons than permitted under this code, or was erected, altered or occupied contrary to law.
- **107.2 Vacant structures.** Vacant structures shall comply with Sections F311.1 through F311.5 of the Fire Code of New York State.
- **107.3 Notice.** Whenever a structure or equipment has been condemned under the provisions of this section, a notice shall be posted in a conspicuous place in or about the structure affected by such notice. If the notice pertains to equipment, it shall also be placed on the condemned equipment.
- **107.4 Prohibited occupancy.** No person shall occupy a placarded premises or shall operate placarded equipment.
- **107.5 Placard removal.** The placard shall be removed whenever the defect or defects upon which the condemnation and placarding action were based have been eliminated.

#### **EMERGENCY MEASURES**

**108.1 Imminent danger.** When there is imminent danger of failure or collapse of a building or structure which endangers life, or when any structure or part of a structure has fallen and life is endangered by the occupation of the structure, or when there is actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes or vapors or the presence of toxic fumes, gases or materials, or operation of defective or dangerous equipment, the occupants shall vacate the premises forthwith. There shall be posted at each entrance to such structure a notice reading as follows: "This Structure Is Unsafe and Its Occupancy Has Been Prohibited by the Code Enforcement Official." It shall be unlawful for any person to enter such structure except for the purpose of securing the structure, making the required repairs, removing the hazardous condition or of demolishing the same.

# **Other Requirements**

Document violations of any provisions of the Fire Code of New York State not specifically addressed elsewhere in this form. List the section number of each code requirement detailing the specifics of the violation.

# § 155.7 Health and safety in existing educational facilities.

Facilities in school districts, other than city school districts in cities having 125,000 inhabitants or more, shall meet the following requirements and, in particular instances, such other requirements as may be deemed necessary by the commissioner to insure the health and safety and accident protection of occupants.

- (a) Exits
- ( (ii) Handrails shall be provided on at least one side of stairways, and on both sides of stairways 88 inches or more in width.
- (iv) Provision of fire escapes of approved design may be required where other exits are determined to be inadequate for fire safety.
- (3) Corridors and exitways shall be kept clear and free of obstructions at all times.
- ( (3) In appropriate instances, doors, walls and ceilings of places of assembly and exitways (corridors, stairs, vestibules, etc.) may be required to be finished with fire retardant materials or coatings.
- (4) Stairway enclosures required by paragraph (1) of this subdivision and smoke barriers required by paragraph (5) of subdivision (a) of this section shall be constructed of noncombustible materials of such design and detail to obstruct effectively the passage of smoke and fumes.
- (i) Doors in stair enclosures and smoke barriers shall be metal, metal covered, approved treated wood construction, or solid bonded core wood doors not less than 13/4 inches thick.
- (ii) Glazing in doors, sidelights and frames shall be one-quarter inch wire glass.
- (iii) Such doors shall swing in the direction of egress, with no latching or locking devices unless operated by panic hardware. Double-acting hinged doors are not permitted and corridor pockets opposing swing of doors shall conform to the provisions of paragraph (2) of subdivision (a) of this section.
- (iv) Such doors shall be self-closing and maintained in a normally closed position unless approved automatic release devices are provided, whereby upon interruption of an electrical circuit, the door is released and becomes self-closing. The electrical circuit shall be positively interrupted by operation of an approved smoke detection system and/or activation of the building fire alarm system. Fusible links shall not be used to hold open such doors.
- (c) Accident protection.
- (3) Window cleaning. Safety provisions shall be made for persons engaged in window cleaning. Windows shall be cleaned from approved safe surfaces, windowsills or ledges, boatswain's chairs or scaffolds, all as defined in Part 21 of Title 12 of the Official Compilation of Codes, Rules and Regulations of the State of New York.
- (i) A safe surface is a place where the cleaner is working not over six feet off the floor or grade and not over three feet above a stair run. Ladders may be used generally when the top of the window is not over 35 feet above grade or floor. Windowsills and ledges may be used when the window openings are provided with approved anchors for use with safety belts. Approved boatswain's chairs and scaffolds also may be used.
- (d) Mechanical. Mechanical equipment, heat-producing and cooling equipment, auxiliary apparatus and controls, and installation and use of same, shall be such as will insure safe operation in accord with applicable recognized standards, as determined by the commissioner, and be consistent with efficient energy consumption.
- (5) Ventilation with fresh air shall be available in all occupied spaces.
- (e) Water and sanitation.
- (1) An adequate supply of safe, potable water for drinking shall be dispensed from approved sanitary drinking fountains.
- (2) Toilet rooms for boys and girls, with flush toilets and wash sinks which are connected to an adequate water supply under pressure, and connected to an approved individual or public sewage disposal system, shall be provided.

- (3) No source of water supply, nor sewage disposal system, shall be used which has not been approved by the appropriate agency of the State Department of Health or Department of Environmental Conservation.
- (f) Gas.
- (1) Gas entering a school building shall be low-pressure gas.
- (2) Gas transmission and distribution piping shall meet the requirements of the Public Service Commission.
- (7) Places of assembly. A place of assembly is any area used for the assembly of 100 or more persons, and spaces over 1800 square feet in area used for the assembling of persons. A place of assembly shall have at least two exits remote from each other.
- (g) Electrical. Electrical equipment and auxiliary apparatus and controls, and installation and use of same, shall be such as will insure safe operation in accord with applicable recognized standards, as determined by the commissioner, and be consistent with efficient energy consumption.
- (1) Suitable and sufficient artificial light shall be provided for the visual tasks being performed.
- (2) Exit lights. School buildings shall be provided with exit lights to identify building exits, stairs, corridors, and exits from places of assembly, and to designate the path of travel to the exterior, except school buildings having six or less classroom areas may have exit signs in place of exit lights.
- (i) The word "EXIT" shall be in letters not less than 4 1/2 inches high and strokes not less than 3/4 inches wide.
- (ii) Exit lights shall be circuited and wired to minimize the possibility of interruption.
- (h) Additions and alterations. In the case of additions to or alterations of an existing facility, the requirements of this section must be continuously maintained during the construction period, or provisions made to provide equivalent safety to the school-district-occupied portions of the facility.
- (i) Facilities shall be operated and maintained to provide effectively for the accident protection and life safety of occupants, to reduce exposure to property loss by fire, and to assure efficient use of natural resources.
- (j) When, based on these regulations, it is the judgment of the commissioner that the general conditions of a school building, or any part thereof, indicate that it would be detrimental to the health and safety of occupants, the commissioner may designate an area or areas of the building as unusable for pupil occupancy or may limit the number of occupants thereof.