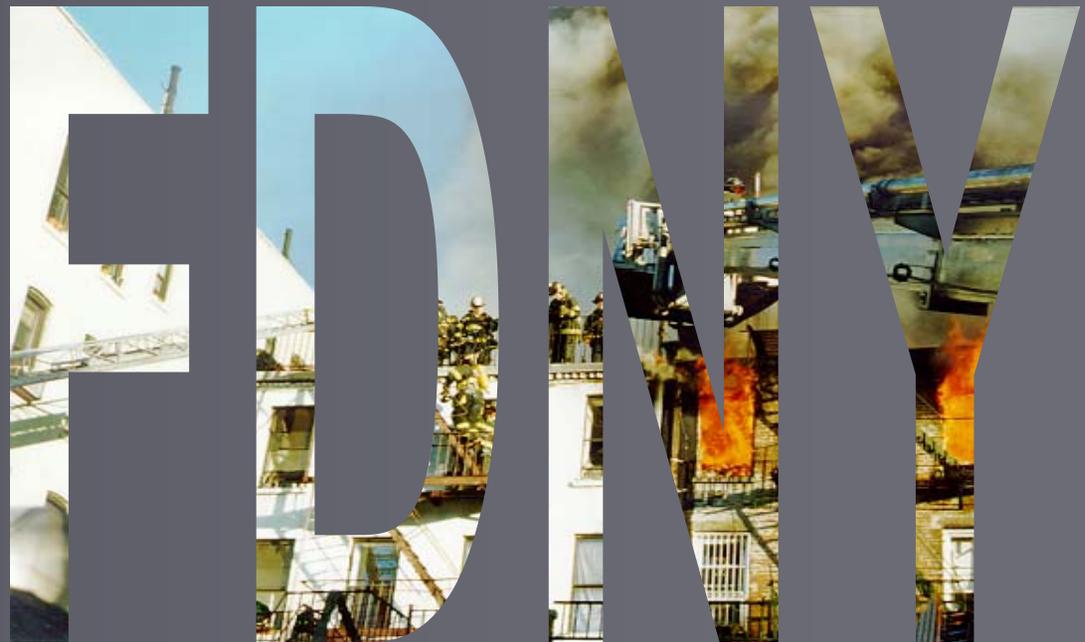


NEW YORK CITY FIRE DEPARTMENT

2014 FIRE CODE HIGHLIGHTS

AIA STATEN ISLAND

APRIL 9, 2014



INTRODUCTION TO NEW YORK CITY FIRE CODE

■ NYC Fire Code

- 2008 Fire Code enacted by Local Law 26 of 2008, effective July 1, 2008, based on 2003 edition of model International Fire Code (IFC), with New York City amendments.
- First comprehensive revision of Fire Code in almost 100 years.
- Codified as Chapter 2 of Title 29 of NYC Administrative Code.

- ## ■ Standards and rules.
- Fire Code supplemented by:
- Fire Department rules (Title 3 of Rules of City of New York)
 - Referenced Standards (NFPA, UL and other national standards, and USDOT and other federal regulations)



INTRODUCTION TO NEW YORK CITY FIRE CODE (cont'd)

- **Periodic review and revision of code.** Local Law 26 (NYC Administrative Code 29-104) requires that FDNY review new editions of IFC and submit to City Council every 3 years proposed amendments to the Fire Code.
- **2011-2013 Fire Code revision process.** Current code revision cycle commenced in 2011, utilizing code revision process used to develop 2008 Fire Code. Fire Department Technical Committees reviewed 2006 and 2009 editions of IFC and internal proposed amendments. Proposals reviewed by Advisory Committee of real estate, professional, industry and trade organizations and Department of Buildings, with City Council participation. Public forum was held on August 14, 2013.



2014 FIRE CODE

- **Source of amendments**
 - 2006 and 2009 editions of IFC
 - Selected 2012 IFC provisions
 - FDNY initiatives
 - Advisory Committee proposals
- **Local Law No. 148 of 2013.** Enacted amendments to Fire Code effective March 30, 2014.



FDNY WEBSITE

- Fire Department Internet Website:
 - www.nyc.gov/fdny
 - Use quick links to “Fire Code” and “FDNY Rules”
- Complete text of 2014 and 2008 Fire Codes
- Complete text of FDNY Rules and FDNY Public Comment form
- Frequently Asked Questions
 - Official interpretations of Fire Code and rules
 - Interim guidelines
- Fire Code public inquiry form



SCOPE OF FIRE CODE

- Manufacturing, storage, handling, use, sale and transportation of **hazardous materials and combustible materials**.
- Design, installation, operation and maintenance of **devices, equipment and systems to prevent, mitigate, control and extinguish fire** and other life safety hazards.
- **Emergency preparedness and planning** for fire, explosion, biological, chemical or hazardous material incident or release, natural disaster, medical or other emergency.
- The prevention, mitigation and control of **hazards to firefighters and emergency responders**.
- The operation and maintenance of any **fire alarm or fire extinguishing** device, equipment or system.



CHAPTER 1

ADMINISTRATION

- Clarify what constitutes “lawfully existing” condition under the 2014 Fire Code (FC 102.3, 102.4 and 102.5).
- “Projects in progress” will be addressed in forthcoming rule (3 RCNY 102-01).
- Design and installation document list (FC105.4) updated.



CHAPTER 1 ADMINISTRATION (cont'd)

- **Recordkeeping (FC107.7).** Consolidate recordkeeping requirements and clarify that records of inspections, tests, servicing, fire watch and other required operations and maintenance be kept for 3 years (except as otherwise provided), and made available for FDNY inspection.



CHAPTER 2

DEFINITIONS

- **Rooftop overcrowding (FC202).** Amend overcrowding definition to include rooftop public gathering spaces. Overcrowding determined by certificate of occupancy; Building Code area-occupant allowance; or with respect to rooftop place of assembly or place of public gathering, minimum of 10 square feet per person.



CHAPTER 3

GENERAL PRECAUTIONS AGAINST FIRE (cont'd)

- **Barbecue regulations (FC307.5)**
 - Allow charcoal, electric, piped natural gas (not LPG) barbecues on commercial premises.
 - Require that windows and doors within 10 feet of barbecue be kept closed when barbecue in use.
 - Clarify that LPG containers allowed on private residential and apartment balconies and rooftops, but limited to 4 small, hibachi-style (16.4 ounce) containers per dwelling unit.
 - Require periodic cleaning of grease or fat accumulations.



CHAPTER 3

GENERAL PRECAUTIONS AGAINST FIRE (cont'd)

- **Coke-fueled salamanders at construction sites (FC307.6).** Restore use of coke-fueled salamanders for drying operations at construction sites, subject to permit and certificate of fitness requirements.
- **Candles and burning incense (FC308.2).** Prohibit use in college dormitories.



CHAPTER 3

GENERAL PRECAUTIONS AGAINST FIRE (cont'd)

- **Rooftop gardens and landscaping (FC318)**
 - Require maintenance of vegetation to mitigate fire hazards.
 - Require garden hose for gardens exceeding 250 square feet (in conformance with 2014 Building Code), or irrigation system based on size, extent and type of garden, or premises history.
- **Marinas (FC319).** Adopt national standard (NFPA 303) for marinas, to supplement existing FDNY regulations.



CHAPTER 3

GENERAL PRECAUTIONS AGAINST FIRES (cont'd)

- **Fixed guideway transit and passenger rail systems (FC321)**. Adopt national standard (NFPA 130), with Fire Department modifications, for emergency ventilation, emergency lighting, fire protection, emergency communication and emergency procedures.
- **Road tunnels (FC322)**. Adopt national standard (NFPA 502), with Fire Department modifications, for emergency ventilation, sprinkler protection, standpipe systems and emergency response plan.



CHAPTER 3

GENERAL PRECAUTIONS AGAINST FIRES (cont'd)

- **Wastewater treatment facilities (FC323).** Adopt national standard (NFPA 820) for fire protection systems in wastewater treatment facilities.
- **Electric generating plants (FC324).** Adopt national standard (NFPA 850) for fire protection systems in electric generating plants.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS

- **Comprehensive reorganization.** Chapter completely reorganized.
- **Eliminates one-size-fits-all plan.** Eliminate existing Fire Code requirement of office building-type fire safety plans for most assembly, business, educational, mercantile and institutional occupancies.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- **Coordination of plan, staffing and communications.** Type of plan determined by:
 - size, complexity and risk vulnerability of occupancy;
 - type and availability of staff to implement plan;
 - building voice communication capability (consistent with Building Code fire alarm requirements).



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- **No plan for small/storefront occupancies.** Eliminate plan requirement for small occupancies of limited size, limited emergency preparedness options and limited staffing.
- **Three types (levels) of plans.** Comprehensive office building-type plan only for largest occupancies that need such plans and are capable of implementing them. Simplified plans for other large occupancies. Informational guides and notices for residential occupancies.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- Type of plans (cont'd):
 - Comprehensive Fire Safety/Emergency Action (Level 1) Plan for largest assembly, hotel, mercantile, educational (college and university), and office occupancies.
 - Simplified Fire and Emergency Preparedness (FEP) (Level 2) Plan for larger buildings/occupancies.
 - Informational Fire and Emergency Guide and/or Notices (Level 3) for apartment buildings and other residential occupancies.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- All plans are occupancy-specific.
 - Fire Code sets forth basic plan elements and staffing requirements.
 - Form of plan and specific plan content to be adopted through rulemaking process.
 - Fire Department will work with property owners and industry groups through rulemaking process to develop plans that address occupancy-specific fire and life safety concerns and that can be implemented by available building occupants.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- Coordinate with existing industry emergency preparedness plans to avoid “reinventing the wheel” or duplicative requirements.
- **Non-fire emergencies.** All plans to address non-fire emergencies, including coordination of CPR/EMS response to medical emergencies.
- **Monitoring of public emergency notification systems.** Emergency preparedness staff member to have access to approved public emergency notification system.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

■ Fire Drills

- Combine fire safety and non-fire emergency drills.
- Drill content to be addressed by rule.
- Drill frequency and participation clarified and consolidated into a single, clear table (FC Table 401.7.6).



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- **Comprehensive fire safety and emergency action (Level 1) plan.** Same as present fire safety/emergency action plan. FLS Director (same as FS/EAP Director), with full staffing.
 - **Building information card.** Required for any building required to prepare a Level 1 plan, and high-rise and large-area buildings required to prepare a fire and emergency preparedness plan.
 - **Floor plans.** The requirement of floor plans, and their form, content and manner of submission, to be determined by rule on an occupancy-specific basis.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- **Submission of altered building floor plans.** Fire Code amended to make submission of updated floor plans a requirement separate from amendment of emergency preparedness plan. Bureaus of Fire Prevention and Operations to address industry concerns about submission of updated floor plans.
- Clarify that resubmission of amended emergency preparedness plan is not required solely for reasons of staffing changes or revision to building information card.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- **Fire and emergency preparedness (Level 2) plan.** Provide for fire and non-fire emergency preparedness in buildings/occupancies of a lesser size, complexity, and/or risk vulnerability than those requiring a Level 1 plan.
 - **Plan preparation.** Plan does not need to be prepared by architect or engineer. Fill-in-the-blank form will be available on website.
 - **Plan submission.** Only high-rise and large-area buildings/occupancies required to file plan. All others required to maintain plan on premises, with submission for enforcement purposes only.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- Fire and Emergency Preparedness Plan (Level 2) Staffing
 - **FEP Coordinator.** All buildings/occupancies required to designate a FEP Coordinator (on-site manager or other responsible person to implement FEP plan and preparedness requirements). FEP Coordinator-designees must attend a training course and obtain a Fire Department Certificate of Fitness (COF). The FEP Coordinator will not be required to be at the premises at all times.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- Fire and Emergency Preparedness Plan (Level 2) Staffing (cont'd)
 - Certificate of Fitness for Announcements and other Fire Safety Activities. Standard Fire Department COF (study materials and same-day computerized examination) in buildings/occupancies required to prepare Level 2 plan when building/occupancy has voice communication capability.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- Fire and Emergency Preparedness (Level 3) Guide and Notices
 - Apartment building fire safety guide and notices to be revised to address non-fire emergencies and to include lessons learned.
 - Develop new guides and notices for dormitories, including guidance to students about evacuation, in-building relocation and sheltering in place.
 - Hotel room notices to be reviewed and revised.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

■ OFFICE BUILDINGS

- High-rise or large-area office buildings, and high-rise office floors (>100/500 persons): **Level 1 plan.**
- Other office buildings required to have a fire safety director under Fire Prevention Code or 2008 Fire Code (>100/500 persons): **Level 1 plan.**
- Office buildings with >100/500 persons above or below street level without voice communication: **Level 2 plan.**



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

HOTELS

- High-rise hotel buildings: Level 1 plan.
- Hotel buildings/occupancies with >50 sleeping rooms/lodgers above street level and voice communication capability (consistent with 2014 Building Code): Level 1 plan.
- Small hotels (any hotel with >30 sleeping rooms/lodgers total, or >15 above street level), except those subject to Level 1 plan: Level 2 plan.
- Other hotels required to have a fire safety director when required by Fire Prevention Code or 2008 Fire Code (retain staffing).



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

ASSEMBLY OCCUPANCIES

- Stadium or very large place of assembly (5,000 or more) or building with combined assembly occupancies of 5,000 or more: Level 1 plan.
- Other assembly/public gathering spaces: Level 2 plan.
 - Large places of assembly (300 or more).
 - Places of assembly provided with voice communication capability.
 - Ballrooms, dance halls and night clubs.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- Assembly/public gathering spaces with a **stage or other entertainment/activities that are the focus of attention are regularly conducted.**
- Bars, catering halls, or restaurants **on one or more high-rise floors, including any rooftop.**
- **Certificate of Fitness for Place of Assembly Fire Safety.** Standard Fire Department COF in assembly occupancies (study materials and same-day computerized examination) in buildings/ occupancies required to prepare Level 1 or Level 2 plan (replaces existing fire guard requirements).



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

■ INSTITUTIONAL OCCUPANCIES

- **Assisted living facilities** and similar institutional (Group I-1) occupancies with >25 persons above or below street level): **Level 2 plan.**
- **Hospitals, nursing homes** and other patient and residential care facilities (I-2) Facilities: **Level 2 plan.**
- **Staffing.** FEP Coordinator and (as applicable) COF For Emergency Announcements and Other Fire Safety Duties.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

■ EDUCATIONAL OCCUPANCIES

- **High-rise Group B building** (colleges and universities) and Group B occupancy on **high-rise floors (>100 persons)**:
 - with voice communication capability: **Level 1 plan.**
 - without voice communication capability: **Level 2 plan.**
- **High-rise Group E building (K-12)** and Group E occupancies on **high-rise floors (>100 persons)**: **Level 2 plan.**
- **High-rise Group R-1 dormitory building** or Group R-1 dormitory building or occupancy with a total of more than 50 sleeping rooms above street level, or communal sleeping facilities for 50 lodgers above street level: **Level 2 plan.**



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

■ MERCANTILE OCCUPANCIES

- **High-rise** mercantile buildings; mercantile occupancies on **high-rise floors** (>300,000 ft²): **Level 1 plan**.
- **Large** mercantile buildings and occupancies (individual/aggregate >30,000 ft²), with >25 employees during regular business hours: **Level 2 plan**.
- **Very large** covered malls (>300,000 ft², excluding anchor stores): **Level 1 plan**.
- **Large** covered malls (>30,000 to 300,000 ft²): **Level 2 plan**.



CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS (cont'd)

- **Mixed Occupancy Buildings**
 - Single plan option
 - Coordination of plans (consult regarding stairwells and elevators, relocation and assembly areas)
 - Coordination of drills (building-wide drill once every two years)
 - Coordination of communications (establish means of communication between FLS/FEP staffs)
 - Notification of FLS/FEP staff in other occupancies of fires and emergencies



CHAPTER 5

FIRE OPERATIONS FEATURES

- **General requirements (FC501)**
 - Address impact of alterations on obligation to comply with Chapter 5 requirements, by incorporating interpretation in Frequently Asked Questions regarding substandard width streets and extending them to private roads. (FC501.4.3) Sprinklering not required when:
 - Cost less than 60 % of building value (other than R-3)
 - No change of occupancy (other than restoring to an R-3)
 - 125 % or less increase in floor area (exclude attic, basement and cellars)
 - Combustible building NOT increased to a height of greater than 35 feet
 - One family changes to a two family (with limitations)
- **Fire apparatus access (FC503)**
 - Reduce required FAAR width from 38 feet to 34 feet (with reductions to 30 feet). (FC503.2.3)



CHAPTER 5

FIRE OPERATIONS FEATURES

(cont'd)

- Fire apparatus access (FC503) (cont'd)
 - Protect buildings on both public streets and fire apparatus access roads of less than 34 feet width curb to curb with sprinkler system. (FC 503.2.10 & 503.3.2)
 - Clarify issue of 1 & 2 family homes set back from street more than 40 feet (incorporating interpretations from Frequently Asked Questions). (FC503.2.4)
 - Relationship of fire apparatus access road and residential driveways for one and two family homes.
 - Protect buildings set back more than 100 feet with sprinkler system.

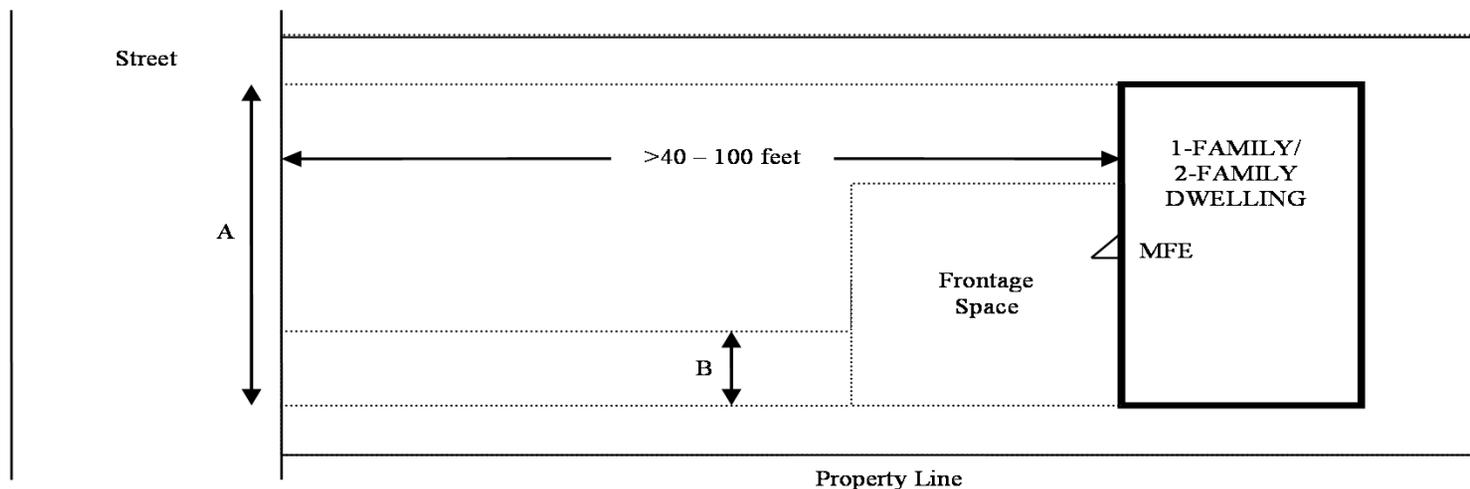


CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

BUILDINGS NOT FRONTING ON A STREET

Driveway may serve as a fire apparatus access road for one and two family dwellings set back >40 up to 100 feet from curb line. (FC503.2.4.1)



MFE = main front entrance

Location of frontage space shown is illustrative only.

A: Fire apparatus access road required by FC503.2.3 (30' – 34' wide)

B: Driveway/FAAR alternative authorized by FC503.2.4.1 (width subject to DOB approval) provided that:

1. The driveway is designed and is used exclusively to provide access only to a single Group R-3 building, and to no other buildings; and
2. The height of the Group R-3 building does not exceed 35 feet.

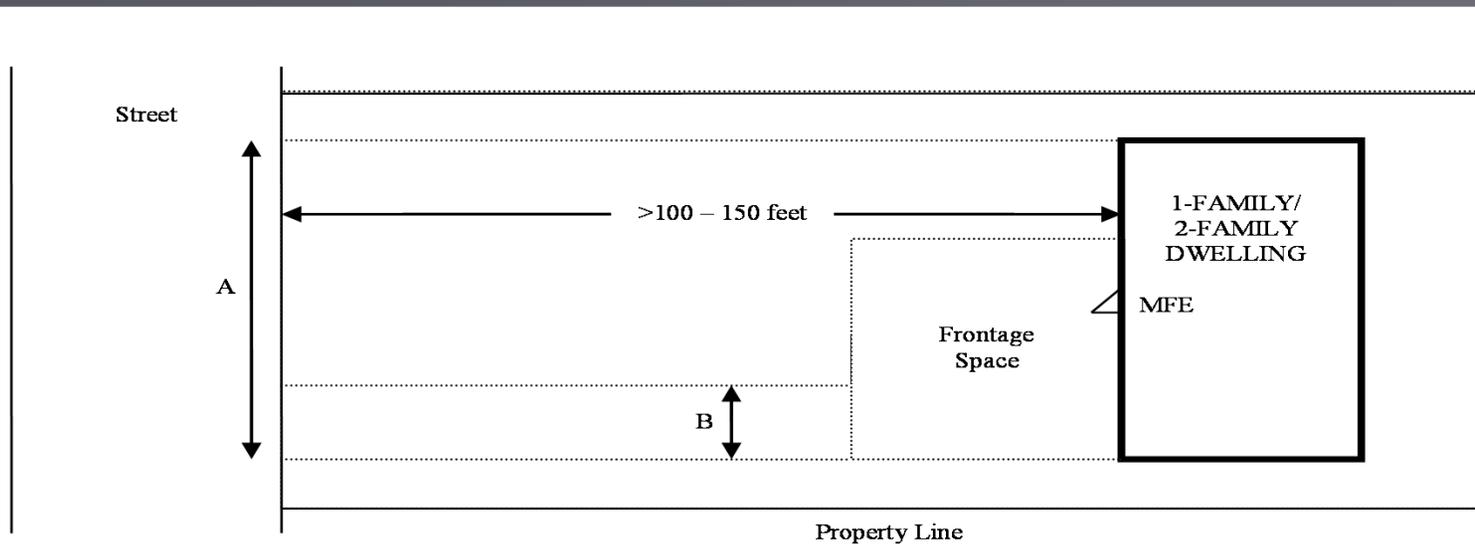


CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

BUILDINGS NOT FRONTING ON A STREET

Fire apparatus access road for one and two family dwellings set back more than 100 feet but not more than 150 feet from curb line. (FC503.2.4.2)



MFE = main front entrance

Location of frontage space shown is illustrative only.

A: Fire apparatus access road required by FC503.2.3 (30' – 34' wide)

B: FAAR alternative authorized provided that the requirements of FC503.2.4.2 are complied with, including a 20-foot wide road and that the building is provided with sprinkler protection.



CHAPTER 5

FIRE OPERATIONS FEATURES

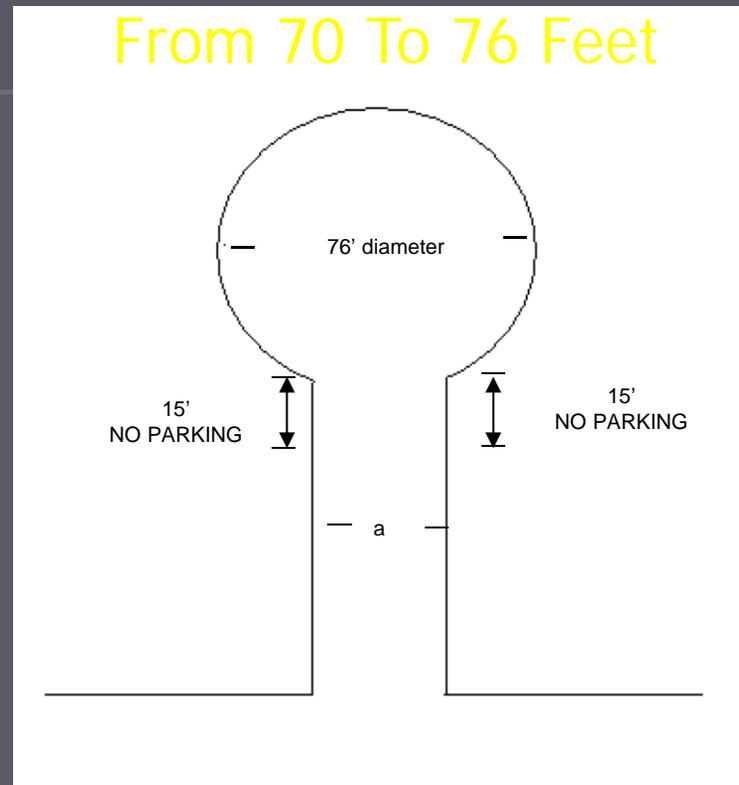
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- **Fire apparatus access (FC503) (cont'd)**
 - Increase size of dead-end turnarounds (from 70 to 76 feet, with option of 90-foot turnaround with 15-foot island). (FC503.2.9)
 - Regulate parking on fire lanes, and require that vehicles yield to fire apparatus. (FC503.4)
 - Clarify parking requirements and restrictions. (FC503.2.7)
 - Allow FDNY to impose parking restrictions and require roadway markings on a private road used as a fire apparatus access road where “the angle of approach, curvature of the road, or other roadway configuration or site conditions impede the ability of fire apparatus to make turns or otherwise navigate” the private road. (FC503.2.7)



CHAPTER 5 FIRE OPERATIONS FEATURES (cont'd)

Increase Size Of Dead-End Turnaround From 70 To 76 Feet



1. 76-Foot-Diameter Turnaround

a. 34 feet except as otherwise provided in FC503.2.3.

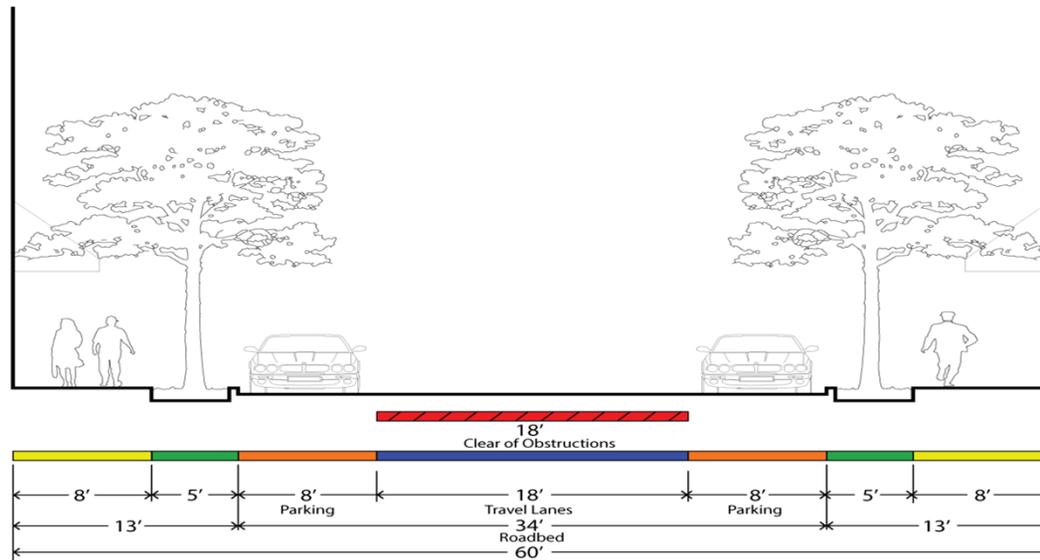
FC FIGURE 503.2.9 DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

Clarifying parking requirements and restrictions (FC503.2.7)



Proposed Street Sections - FAAR's
FDNY/DCP Fire Code Review

Standard 60' Right-of-way
March 4, 2014



CHAPTER 5

FIRE OPERATIONS FEATURES

(cont'd)

- Fire apparatus access (FC503) (cont'd)
 - Eliminate Fire Code parking lot lanes requirements in favor of referencing Building Code and Zoning Resolution parking lot lane requirements, except for parking lot lanes that serve as the fire apparatus access road to the main front entrances of buildings situated in parking lots, which must comply with the fire apparatus access road requirements. (FC503.5)



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

Building and Rooftop Access (FC504)



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

- **Building and rooftop access (FC504)**
 - **Frontage space:** modify definition to clarify concept of main front entrance and location of unobstructed area for firefighting operations (to incorporate interpretation from Frequently Asked Questions). (FC502.1) Plan review to be coordinated with DOB.
 - **Main front entrance:** clarify “main front entrance” for buildings having occupancies with separate entrances. (FC504.1.1)



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

- **Building and rooftop access (FC504) (cont'd)**
 - **Rooftop access:** revise to address obstructions at rooftop access landings from awnings, sunscreens, solar panels, scaffolding, fences. Exterior building markings to indicate location of rooftop access landings when safety requires. (FC 504.4.1, 504.4.2 & 504.4.3)



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

Awnings, sun control devices, solar panels or other structures affixed to an exterior building wall below the roof line shall not obstruct fire apparatus aerial ladder access to the rooftop perimeter access locations. (FC504.4.1.5)



CHAPTER 5 FIRE OPERATIONS FEATURES (cont'd)

Seriously Noncompliant Roofs !



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

- Building and rooftop access (FC504) (cont'd)
 - Clear path (FC 504.4.3, 504.4.4 & 504.4.5)
 - Additional clear paths on buildings 200 feet or more in width or depth, and for irregularly-shaped buildings.
 - 3 foot wide inward swinging gates for fences obstructing clear path.
 - Ship's ladder between multi-level roofs (one story only).
 - Protective railing on shafts and building perimeter adjoining the clear path.
 - Roof clearances (FC 504.4.4, 504.4.6 & 504.4.7)
 - Performance standard for placement of rooftop conduits and piping (avoid obstruction of required access, clear path and required clearances).



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

Noncompliant Fence (FC504.4.1)



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

- **Roof clearances (cont'd)**
 - 3 foot clearance on 3 sides around skylights and scuttles.
 - Reasonable access from clear path to bulkhead doors, fire escapes, cockloft vents, access ladders, skylights, scuttles and shafts.
- **Rooftop gardens and landscaping (FC504.4.9)**
 - Allow landscaping on clear path if securely contained and compacted to form stable continuous path without tripping hazards and without increasing slope of roof.
 - Vegetation limited to 12 inches in height in areas requiring access.



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

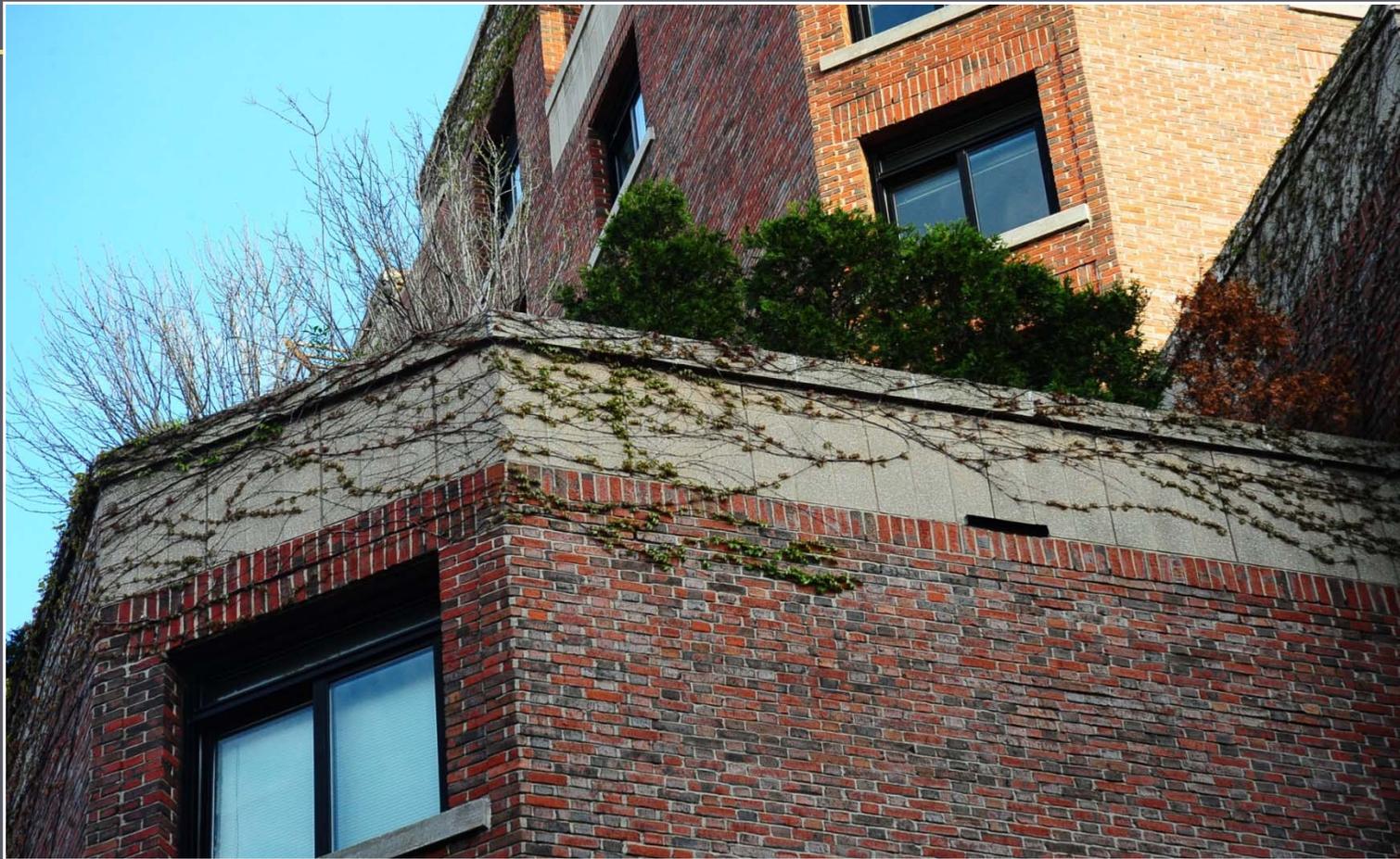
Noncompliant Rooftop Gardens (FC504.4.9)



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

Noncompliant Rooftop Landscaping (FC504.4.9)



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

- **Identification of apartment and guest rooms (FC 505.3 & 505.4).** To facilitate firefighting and other emergency response operations:
 - Mark apartment numbers on or adjacent to entrance door.
 - Post apartment number signs in public entry and corridor opposite stairwell entrance when more than 8 units per floor.
 - Fire emergency markings on door jambs of entrance doors on hotel and apartment doors when more than 8 units per floor in buildings without sprinkler protection.
 - Mark multi-floor dwelling unit on door jambs of entrance doors with directional arrows.
 - Two years for compliance, except three years for emergency markings (two years for emergency markings on multi-floor dwelling unit doors).



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

- **Keys and key access (FC506)**
 - Clarify types of keys and key access requirements.
 - Restrict possession of citywide standard (2642) key and prohibit possession of fire department standard (1620) key by non-Fire Department personnel.



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

- In-building auxiliary radio communication systems (FC511)
 - Required and system design as set forth in 2014 Building Code. (NFPA 72 as modified by Appendix Q)
 - System operation to be certified by FCC licensee upon installation, with FDNY acceptance testing.
 - FDNY permit upon acceptance.
 - Operation and maintenance requirements to be in accordance with the rules.



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

- **Rooftop solar panel installations (FC512)**
 - Flat roofs subject to rooftop access requirements (FC512.2)
 - Clarify that solar panels may not obstruct any rooftop area access.
 - Allow obstruction of clear path if solar panels installed with a FDNY-approved hinged mechanism or otherwise readily movable by one person without use of a tool.
 - Pitched roof buildings (pitch >20 degrees) (FC 512.3 & 512.4)
 - Leave 3 feet wide clearance along the ridge on each roof slope, and 3 feet ridge clearance for roof venting.
 - Locate conduits away from the ridge.
 - Mark conduits with warning indicating electrical current.



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

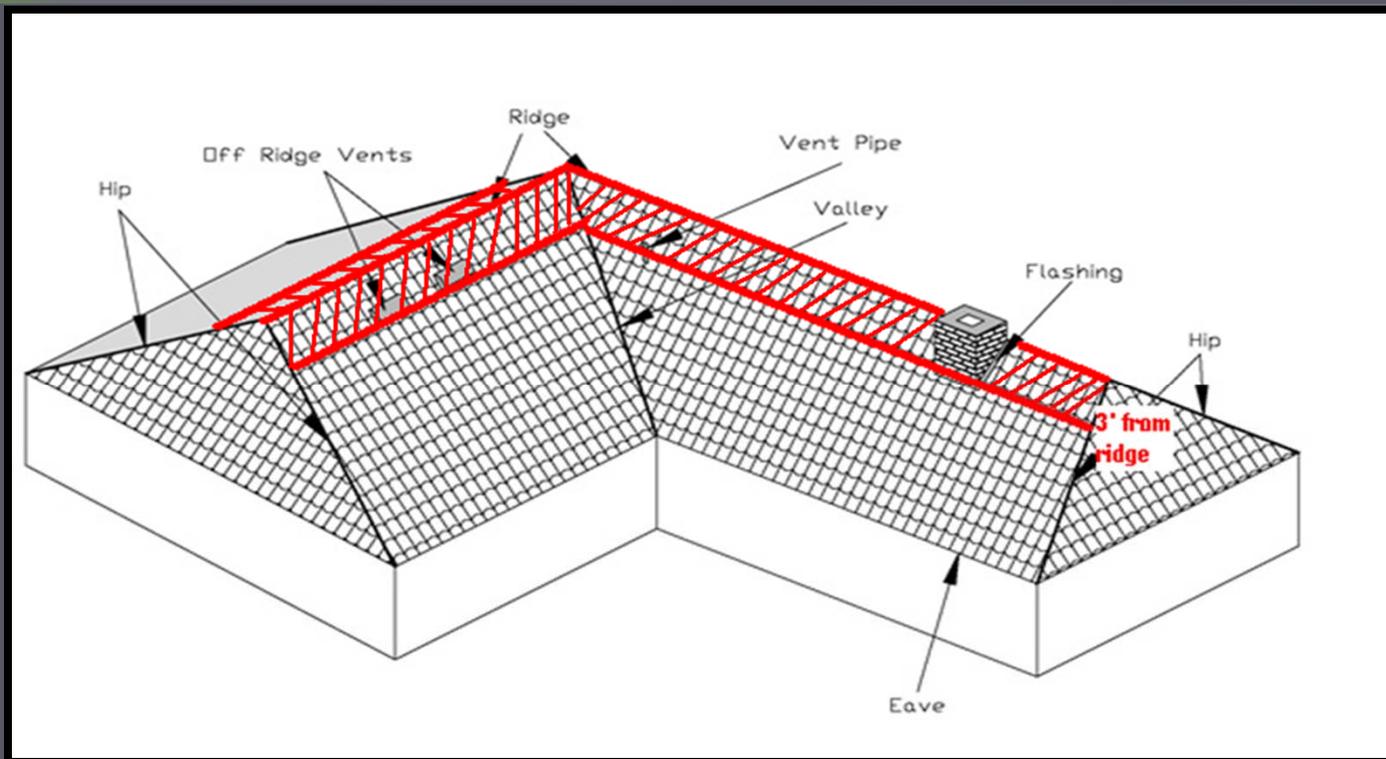
Rooftop Solar Panel Installations (FC512)



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

Solar Panel Installations, Pitched Roofs (FC512)



3 foot wide clearance along the ridge of each slope



CHAPTER 5

FIRE OPERATIONS FEATURES (cont'd)

Seriously Noncompliant Solar Panel Installations (FC512)



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CHAPTER 6

BUILDING SERVICES AND SYSTEMS

■ Electrical equipment, wiring and hazards (FC605)

- **Portable electric space heaters.** Establish safety standards and precautions in connection with use of portable electric heaters, including listing and labeling, and clearances. Restrict types allowed in hospitals and nursing homes and prohibited in college dormitories.
- **Halogen lamps.** Establish safety standards and precautions in connection with use of portable halogen floor lamps, including requiring safety guard, clearances and safe bulb handling, and prohibiting use in hospitals, nursing homes and college dormitories.



CHAPTER 6

BUILDING SERVICES AND SYSTEMS (cont'd)

- Refrigerating systems (FC606)
 - Eliminate emergency control boxes for refrigerating systems, and amend Mechanical Code to require installation of cross-over valves.
- Battery systems (FC608)
 - Regulation of batteries used for back-up power updated to address new technologies, including flooded lead acid, nickel cadmium, valve-regulated lead acid, lithium ion and lithium metal polymer battery systems.



CHAPTER 6

BUILDING SERVICES AND SYSTEMS (cont'd)

- Commercial cooking systems (FC609)
 - Require monthly inspection of commercial cooking equipment utilizing solid fuel by a trained and knowledgeable person (in addition to existing 3-month inspection and cleaning by certificate of fitness holder).
 - Clarify the size and number of Type K portable fire extinguishers required for deep fat fryers.



CHAPTER 7

FIRE-RESISTANCE-RATED CONSTRUCTION

- Fire-resistance-rated construction (FC703)
 - Require all openings protected with smoke barrier doors or smoke dampers to be maintained in accordance with industry standard (NFPA 105).
 - Require all openings protected with fire doors or fire dampers to be maintained in accordance with industry standard (NFPA 80).



CHAPTER 9

FIRE PROTECTION SYSTEMS

- Additional fire protection systems (FC901.4). Clarify procedure by which FDNY may order installation of additional fire protection systems in buildings where certificate of occupancy does not require such systems.



CHAPTER 9

FIRE PROTECTION SYSTEMS

(cont'd)

- **Out-of-service fire protection systems (FC901.7)**
 - **Fire watch.** Clarify requirements for maintenance of a fire watch when a fire protection system is out of service. Fire watch personnel shall:
 - continuously patrol, keeping constant watch for fires;
 - be provided with at least one approved means for notification of the Fire Department and emergency preparedness staff;
 - immediately report any fire to the Fire Department and notify emergency preparedness staff on the premises;



CHAPTER 9

FIRE PROTECTION SYSTEMS

(cont'd)

- be trained in the use of and have portable fire extinguisher;
- be responsible for extinguishing fires limited in size and spread that can be readily extinguished;
- maintain a record of such fire watch on the premises; and
- have no other duties.



CHAPTER 9

FIRE PROTECTION SYSTEMS

(cont'd)

- **Fire watch coverage.** Number of fire guards needed to patrol each floor or area with out-of-service fire protection system at least once an hour.
 - The area to be patrolled by each fire guard not to exceed 50,000 square feet or as specified by Fire Department based on configuration of the premises, impediments to patrol, nature of the occupancy, fire risk, or other fire safety considerations.



CHAPTER 9

FIRE PROTECTION SYSTEMS

(cont'd)

- **Impairment coordinator exception.** Trained and knowledgeable impairment coordinator or other building staff may conduct fire watch in lieu of a fire guard during the initial 4 hours of a planned removal from service, or after discovery of an unplanned out-of-service condition, provided that the floor or area in which the fire protection system is out of service does not exceed 50,000 square feet.



CHAPTER 9

FIRE PROTECTION SYSTEMS

(cont'd)

- **Sprinkler system control valve signage (FC903)**
Require posting of a sign on the exterior wall of a building identifying the location of the sidewalk box housing the sprinkler system control valve, as previously required by 1968 Building Code.
- **Aerosol fire extinguishing system (FC904).** Adopt national standard (NFPA 2010) for installation and maintenance of aerosol fire extinguishing systems.



CHAPTER 9

FIRE PROTECTION SYSTEMS

(cont'd)

- **Electronic monitoring of portable fire extinguishers (FC906).** Allow remote electronic monitoring of portable fire extinguishers in lieu of the visual check and tag requirement. Monitoring device must continuously confirm the proper location and charge of each portable fire extinguisher.
- **Access to and around hydrants (FC912).** Amend to provide minimum clearance around fire department connections, and clarify what objects represent obstructions to access to fire department connection, including fences.



CHAPTER 10

MEANS OF EGRESS

- **Residential building hallway corridor and elevator lobby furnishings (FC1027.4).** Incorporate Frequently Asked Question interpretation clarifying restrictions on hallway furnishings, decorations and other combustible materials in building hallway corridors and elevator lobbies.
 - Incidental furnishings (console table, console bench, mirror, umbrella stand) allowed.
 - Flame-resistant draperies, area rugs and decorative greens allowed.
 - Bicycles, baby strollers and other personal property, and office and household rubbish prohibited.



CHAPTER 10

MEANS OF EGRESS (cont'd)

- **Nonexit door identification (FC1027.7).**
Any door that is not an exit but which can be confused with an exit door must be identified with an approved sign that reads "Not An Exit".



CHAPTER 10

MEANS OF EGRESS (cont'd)

- Maintenance of fire escapes (FC1027.6).

Incorporate existing Frequently Asked Questions:

- Fire escapes and window gates must be maintained unobstructed and in good working order.
- Air conditioners may not block fire escape access.
- Fire escape ladders must not be obstructed by awnings, furniture or parked cars. Safe egress from fire escape ladder must be maintained during construction work, including construction work on adjoining property.



CHAPTER 14

FIRE SAFETY DURING CONSTRUCTION, ALTERATION AND DEMOLITION

- **Portable fueled heaters (FC1403).** Restrict use of portable fueled space heaters at construction sites to the heating season (October 15 to May 30) or other approved times.
- **Prohibition against smoking at construction sites (FC1404).** Incorporate Frequently Asked Question interpretation clarifying that smoking is prohibited within Building Code-required construction fence (or if no fence, areas of building in which work is being conducted pursuant to work permit), and locations at which No Smoking signs must be posted.



CHAPTER 14

FIRE SAFETY DURING CONSTRUCTION, ALTERATION AND DEMOLITION (cont'd)

- **Construction priority (FC 1404 and 1411)**
 - Fire walls of building under construction must be given construction priority, and required fire doors must be installed as soon as practicable. In buildings undergoing alteration or demolition, required fire walls and fire doors must be left in place until construction operations necessitate their removal.
 - Stairways and other components of means of egress to be given construction priority.



CHAPTER 14

FIRE SAFETY DURING CONSTRUCTION, ALTERATION AND DEMOLITION (cont'd)

- **Construction site oxygen/acetylene storage (FC 1406.3 and 1406.4).** Incorporate Frequently Asked Question interpretation addressing storage of oxygen and acetylene for torch operations at construction sites. Allow storage of containers needed for workday on the work floor) (only in approved storage area in unoccupied building). Reserve storage in outdoor or indoor storage areas complying with clearance, quantity and other requirements.



CHAPTER 14

FIRE SAFETY DURING CONSTRUCTION, ALTERATION AND DEMOLITION (cont'd)

- **Construction site fire safety manager (FC1408)**
 - Require fire safety manager separate from site safety manager and coordinator, for any building reaching a height of 20 stories or more than 250 feet, having a lot coverage of 200,000 square feet or greater, or as otherwise prescribed by rule. Below grade stories used in calculating building height.
 - Construction site fire safety manager not required for construction project involving only façade work and no hot work.



CHAPTER 15

FLAMMABLE FINISHES

- **Spray finishing operations (FC1504)**
 - Incorporate NFPA requirement that spray rooms and spray booths cannot be located below grade.
 - Clarify consistent with IFC commentary that a limited spraying space for flammables (instead of spray room or booth) is allowed only if spray operations are “incidental” to business operation.



CHAPTER 22

MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES

- **Defueling of motor vehicles (FC 2201 & 2211).** Require supervision of defueling of motor vehicles by certificate of fitness holder (previously only required at automotive salvage yards).
- **Definitions (FC2202).** Consolidate 9 definitions for various motor fuel-dispensing facilities into 3:
 - Fleet motor fuel-dispensing facility.
 - Full service motor fuel-dispensing facility.
 - Self service motor fuel-dispensing facility.



CHAPTER 22

MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES (cont'd)

- **Dispensing of liquid motor fuel (FC2204)**
 - Require that emergency fuel shut-off switch activate an audible alarm in the dispensing area and any control booth.
 - Amend dispensing warning notice on fuel dispensers.
 - For alcohol-blended motor fuel, require notice on dispensers indicating type and concentration of alcohol.
- **Fleet fueling (FC 2204 & 2208).** Require fleet personnel to be trained and knowledgeable in fuel dispensing.



CHAPTER 22

MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES (cont'd)

- **Tank overfill warning sign (FC2205).** Require warning sign to discontinue filling to be posted adjacent to tank overfill alarm panel.
- **Tank systems (FC2206)**
 - Require audible and visible overfill alarm in the vicinity of fill connection to alert the cargo tank delivery operator.
 - Clarify that vapor recovery system is required only when such system is required by NYS Department of Environmental Conservation.
 - Clarify the requirements under which motor fuel storage tanks may be wet manifolded.



CHAPTER 22

MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES (cont'd)

- **Hydrogen motor fuel dispensing (FC2209)**
 - Allow hydrogen motor fuel dispensing facilities.
 - Permit, supervision (certificate of fitness) and signage requirements.
 - Limitation on storage capacity (3,500 SCF).
 - Self-service and indoor storage and dispensing prohibited (similar to CNG when first introduced).
 - Likely application: powered industrial trucks (forklifts).



CHAPTER 26

WELDING AND OTHER HOT WORK

- **Certificate of approval for natural gas pressure boosters (FC2601)**. Certificate of approval required for devices used to increase the pressure of piped natural gas when used with oxygen for hot work operations.
- **Clearance to combustibles (FC2604)**. Clearance to combustibles reduced from 35 feet to 25 feet for hot work (other than welding and brazing) to conform with OSHA requirements.
- **Containers connected for use (FC2605)**. Specify circumstances under which oxygen and flammable gas may be stored on a cart without providing separation of containers required by FC3504.1.3.



CHAPTER 26

WELDING AND OTHER HOT WORK (cont'd)

- **Fire guards (FC2604).** Amend fire guard requirements for torch work at construction sites.
 - One fire guard may provide fire watch for more than 1 torch operation if within 50 feet travel distance and view is unobstructed.
 - Fire guards NOT required on floor(s) below when hot work conducted:
 - on non-combustible floor more than 35 feet from floor opening or building perimeter;
 - no sparks or slag observed traveling further; and
 - fire safety precautions taken on floors below torch work within 35 feet of floor opening or building perimeter to protect combustibles from sparks or slag.



CHAPTER 26

WELDING AND OTHER HOT WORK (cont'd)

- Fire safety manager to inspect lower floors prior to torch work, take precautions to protect combustible surfaces and materials potentially exposed to sparks and slag, and certify such inspection and actions on hot work authorization.
- Clarify fire guard duties and responsibilities in accordance with FC901.7.



CHAPTER 27

HAZARDOUS MATERIALS—

GENERAL PROVISIONS

- **Maximum allowable quantity per control area (FC2703.1).** Clarify that the maximum allowable quantity per control area, in accordance with FC Table 2703.1.1(1) through 2703.1.1(4), does not apply to unoccupied buildings under construction prior to issuance of certificate of occupancy.
- **Material safety data sheets (FC2703.4).** Clarify location on premises where MSDS must be maintained (where it is readily available for reference by persons handling or using the hazardous material or supervising its storage, handling or use).



CHAPTER 27

HAZARDOUS MATERIALS—

GENERAL PROVISIONS (cont'd)

- **Transportation of LPG in passenger vehicles (FC2707.3).** Prohibit transportation of LPG containers in trunks of passenger vehicles, to ensure firefighter safety.
- **Fire Department explosives escort (FC2707.12).** Fire Department escort required for transportation of fireworks and explosives when USDOT requires placarding, not for below-placarded amounts shipped by parcel post or overnight delivery.



CHAPTER 30

COMPRESSED GASES

- **Tube trailers (FC3003).** Amend to allow, when approved, use of tube trailers to be used as temporary storage system to supply compressed gases for on-site equipment and operations.
- **Medical gas storage (FC3006).** Amend the quantity limits for the storage of medical gas that trigger the need to provide a gas storage room, gas storage cabinet or high hazard storage facility complying with the Building Code.



CHAPTER 34

FLAMMABLE AND COMBUSTIBLE LIQUIDS

- **Supervision (FC 3401.6).** Amend to restore (as modified) the flammable and combustible liquid storage amounts requiring supervision by certificate of fitness holder:
 - 275 gallons in a closed system;
 - 275 gallons of hand sanitizer;
 - 20 gallons of combustible liquids in portable containers;
 - 10 gallons of flammable liquids in portable containers except gasoline and hand sanitizer; and
 - 2.5 gallons of gasoline.
- **Prohibitions (FC3401.7)**
 - Clarify that storage of flammable liquids in areas below grade is prohibited.
 - Clarify that cleaning number six fuel oil tanks by heating number two fuel oil and circulating it within such tanks is prohibited.



CHAPTER 34

FLAMMABLE AND COMBUSTIBLE LIQUIDS (cont'd)

- **Piping standards (FC3403)**. Adopt three new Referenced Standards for tank piping (ASME B31.1, ASME B31.3 & ASME B31.4).
- **Out-of-service fuel tanks (FC3404)**. Require at time of conversion of heating system to alternative fuel or power source that existing fuel oil storage tank be removed or sealed in accordance with requirements for tanks out of service for one year.



CHAPTER 34

FLAMMABLE AND COMBUSTIBLE LIQUIDS (cont'd)

- **Alcohol-based hand rubs (FC3405)**
 - Amended to increase the maximum dispenser capacity from 34 ounces to 68 oz (in locations other than corridors) and from 34 oz to 41 oz (in corridors).
 - Amended to increase the maximum alcohol content by volume from 70 percent to 95 percent.



CHAPTER 34

FLAMMABLE AND COMBUSTIBLE LIQUIDS (cont'd)

- **Dispensing from cargo tanks to construction equipment (FC3406).** Amend existing Fire Code requirements to include:
 - Portable fire extinguisher.
 - Spill containment sufficient for 5-gallon fuel spill.
 - Operator provided with means to notify the Fire Department of a fire.
 - Prohibit fuel dispensing within 25 feet of ignition source.
 - Engines of vehicles being fueled shut off during dispensing operations.
 - Lighting required for nighttime fueling operations.



CHAPTER 35

FLAMMABLE GASES

- **Ethylene oxide (FC3506)**. Adopt NFPA 55 standard.
- **Metal hydride storage (FC3507)**
 - Regulate metal hydride storage systems that store hydrogen to supply a fuel cell that generates electrical current
 - Used as motive power on motor vehicle or powered industrial trucks
- **Microturbines (FC3510)**
 - Incorporate from DOB rule, permit, certificate of fitness, signage, security and maintenance requirements.



CHAPTER 38

LIQUEFIED PETROLEUM GASES

■ Residential storage (FC3803)

- Restrict LPG container storage in apartment buildings and one/two family homes (Group R-2 and R-3 occupancies) to not more than four containers per dwelling unit with each container having a capacity not exceeding 16.4 ounces.
- Clarify that below grade storage of LPG is prohibited.



CHAPTER 40

OXIDIZERS

- **Filling of portable containers (FC4003).** Specify that oxygen containers are to be filled at a compressed gas dispensing facility, except that liquid oxygen ambulatory containers may be filled in residence from a liquid oxygen home care container designed for such purpose, in accordance with the manufacturer's instructions, and a liquid oxygen home care container may be filled outdoors from a cargo tank designed to supply such containers.
- **Liquid oxygen ambulatory and home care containers (FC4006).** Special requirements for storage, handling and use of liquid oxygen in residential dwelling units and residential health care facilities (R, I-1, I-4) for medical purposes, including eliminating permit requirements.



CHAPTER 45

REFERENCED STANDARDS

- **Referenced Standards (FC4502).** Update Referenced Standards to conform to edition adopted in 2009 IFC, except adopt more recent editions for the following Referenced Standards:
 - API Standard 653 & 2000
 - ASME Standard A13.1, B31.1, B31.3 & B31.9
 - ASTM Standard D 86, D 93, D 323, E 681 & E 1529
 - CGA Standard P-1
 - NFPA Standard 12, 22, 24, 25, 55, 72 & 701.



FDNY WEBSITE

- Fire Department Internet Website:
 - www.nyc.gov/fdny
 - Use quick links to “Fire Code” and “FDNY Rules”
- Complete text of 2014 and 2008 Fire Codes
- Complete text of FDNY Rules and FDNY Public Comment form
- Frequently Asked Questions
 - Official interpretations of Fire Code and rules
 - Interim guidelines
- Fire Code public inquiry form





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