

New York City Construction Codes

Presented by John Bower

History

In 1625, the Dutch West India Company established rules for the types and locations of houses that could be built by the colonists of New Amsterdam.

This early attempt at meeting public safety and sanitation needs would evolve into one of the most comprehensive building and zoning codes in the United States.

By 1674, extensive laws governing construction, fire prevention and sanitation were in place.

In 1860, after a tenement fire took 20 lives, New York City's building laws were extensively revised and strengthened. At that time, the position of "Superintendent of Buildings" was created within the Fire Department to enforce the new structural safety laws. An independent "Buildings Department" in Manhattan was later founded in 1892. Each Borough President's office had an autonomous Superintendent of Buildings until 1936, when a citywide Department of Buildings was created.



NYC Building Code History

Fire Disasters often prompted revisions to the building and fire codes.

The Triangle Shirtwaist Fire in 1911 resulted in major changes to the New York State Labor Laws including strict egress requirements and upgraded fire escapes.

To eliminate exceedingly narrow and steep stairs the 1901 Tenement House Act established dimensions for stair width, treads and risers. This was followed by the 1929 Multiple Dwelling Law which included enhanced egress requirements in newly constructed residential building over 75 feet in height.

The 1916 NYC Building Code required one stairwell for each 2,500 sq. ft. of floor area in office buildings. The 1938 NYC Building Code introduced a less absolute approach requiring a minimum of two stairwells in office buildings, specifying a travel distance of no more than 150 feet and requiring that the stairwells had to accommodate the egress load of the floor, often resulting in the requirement of additional stairwells.



NYC Building Code History

The 1968 NYC Building Code increased maximum travel distance to 200 feet in unsprinklered office buildings and 300 feet in sprinklered office buildings.

The invention of the first automatic sprinkler system in 1874 provided a groundbreaking tool to protect life and property.

In 1882, as part of a major rewrite of the New York City Building Code, extensive provisions for theaters were enacted, including a requirement that sprinklers be installed making theaters the first buildings in New York City to require automatic sprinklers.

After the Triangle Shirtwaist Factory fire in 1911, sprinklers were required in factories over seven stories or 90 feet in height.

The 1968 Building Code expanded the requirements for automatic sprinkler systems to high hazard storage, mercantile spaces, and showrooms, but most significantly, high-rise office buildings, nightclubs, and residential buildings were exempted. Over the coming decades, tragedies in all three classes of these buildings would force a change.



NYC Building Code History

Local Law 5 of 1973 further expanded the requirements for the installation of sprinkler systems in new high rise office buildings and in existing high rise office buildings with an alternative for compartmentation.

On December 18, 1975, fire swept through the Blue Angel nightclub on East 54th Street in Manhattan, killing seven. The fire resulted in amendments to the building code, including a strengthening of provisions for places of public assembly, and a requirement that sprinklers be retroactively installed in existing nightclubs.

Residential fires occur in New York City each year, but two back to back tragedies in December 1998 – the first on December 19, which claimed the lives of three firefighters, and a second on December 24, which killed four civilians – galvanized media and public attention, resulting in a law mandating sprinklers in newly constructed residential buildings with four or more units and a retroactive requirement for sprinklers to be installed in similar residential buildings undergoing a gut rehab.



NYC Building Code History

No modern sprinkler system would have been able to contain the massive fires that erupted in the Twin Towers on September 11, 2001. However, following the attack the city, moved to expand the sprinkler requirements of the building code, requiring the installation of sprinklers in existing office buildings over 100 feet in height by 2019.



ADOPTION OF ICC CODES

Reasons for Adoption

- No Comprehensive Building Code Review in 40 years since 1968 Code.
- Desire to adopt a nationally recognized model code to allow practitioners from other areas to be able to understand and effectively work with the NYC Code.
- To include modifications to the model code adopted, in recognition of the unique high density urban environment that exists here.



ADOPTION OF ICC CODES

- Choice between ICC family of codes and NFPA 5000 Building Code.
- ICC Codes were chosen
- Attempt to make code more performance driven than prescriptive
- 2008 NYC Building Code is based on IBC 2003 with modifications
- Mandated three year review cycle



Section BC 903

Automatic Sprinkler Systems



Assembly—A

- A-1 and A-3 (1968 Code F-1 and F-3)
- Sprinklers required for 12,000 sq. ft. or capacity of 300 or cabaret
- Required in all stages and adjacent areas
- Code Section 903.2.1



Assembly--A

- 1968 Code – F Occupancy
- Sprinklers required for cabaret
- Required in all stages and adjacent areas



Educational—E

- E Sprinklers required in below grade areas and in fire areas greater than 20,000 sq. ft.
- Code Section 903.2.2



Educational—E

- 1968 Code – G Occupancies - Below grade areas and in high rise buildings only.



Factory—F

- F fire area exceeds 12,000 sq. ft. or 3 stories above grade or combined floors' fire areas exceed 24,000 sq. ft. – Sprinkler Entire Building
- Code Section 903.2.3



Factory—F

- 1968 Code – D Occupancies –
Where required by Labor Law –
D-1 greater than 7,500 sq. ft.



Mercantile—M

- Any Group M fire exceeds 12,000 sq. ft. or all Group M Fire Areas Combined exceed 24,000 sq. ft. - Sprinkler Entire Building.
- M spaces that exceed 7,500 sq. ft.
- Code Section 903.2.6



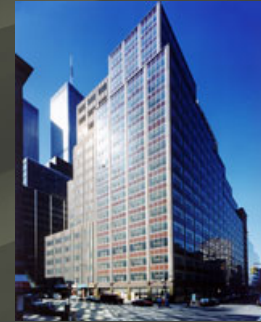
Mercantile—M

- 1968 Code – Group C .
- M spaces that exceed 7,500 sq. ft.



Residential—R

- 3 or more units
- In certain one- and two-family single family dwellings and multiple single family dwellings (townhouses) with more than 3 stories above grade
- Code Section – 903.2.7



Residential—R

- 1968 Code –
J Occupancies
- Four or more dwelling units



General Requirements

- Occupancy load of 30 + that are located 55 ft. + above grade – Code Section 903.2.10
- Combination sprinkler standpipes may be used in all except H (High Hazard)
- Code Section – 903.1.1 requires alternative systems where water is hazardous or ineffective.



General Requirements

- NFPA 25 Inspection, Testing & Maintenance requirements are now mandated by the 2008 Fire Code.
- W-12 Certificate of Fitness is replaced by S-12. New S-13 Certificate for Standpipe systems.
- System impairments must be reported to the FDNY.



Significant Modifications to NFPA 13 – 2002

- 6.3.6.5 – Non-Metallic Pipe allowed in R Occupancies 6 stories or less.
- 7.5.3.2 – Requires backflow preventer on anti-freeze systems – Eliminates buffer tank
- 8.14.8.2 – Sprinklers are not required in closets and pantries in Group R Occupancies other than hotels and motels that do not exceed 12 sq. ft. and where the room or space upon which the closet or pantry opens is equipped with sprinklers that afford protection to the opening of the closet or pantry and where the walls or ceilings are surfaced with non-combustible or limited combustible materials.



- 8.15.1.2.5 – Modified to read – Means shall be provided downstream of all pressure reducing valves for flow tests. Deleted – at sprinkler system demand.
- 8.16.5.1.3 – Modified to allow small hose stations to be supplied by a separate piping system only and only when a standpipe system is not otherwise required.
- 11.2.3.1.1 – Deleted the requirement for adding hose stream allowances to the calculated sprinkler system demand.



- 15.2.2.4 – 5 PSI required pressure at the highest level of sprinklers is waived for sprinkler booster pumps when secondary power is provided.
- 15.2.4.2 – Combined sprinkler and standpipe systems may be used in Occupancies A, B, E, F, I, M, R and S.
- Section 16.2.1.4
- This section allows for the hydrostatic testing of sprinkler system modifications affecting 20 or fewer sprinklers to be performed at system working pressures.
- This does not mean, turn the water on and check for leaks.



- Section 16.2.1.4 Continued
- The system has to be pressurized to its working pressure, the gauge reading noted, control valve closed and the pressure held for one hour with no leakage noted.
- 18.1 – Adopts NFPA 25 Standard for Inspection, Testing and Maintenance and references the NYC Fire Code which does the same.



Significant Modifications to NFPA 13D – 2002

- 4.3.1 – When there is no Fire department Connection, systems are tested at 50 PSI above normal operating pressure.
- 5.2.1 – Non-metallic pipe to be used for wet systems only.
- 6.2 (Item 5) – Common domestic and sprinkler water supply may be used if domestic water flow is shutdown upon sprinkler operation and closure of the main sprinkler control valve will also shut off the domestic water supply.



- 7.1.2 – All valves, except those on meter set, shall be locked open and supervised (Central station or local audible signal)
- 8.6.4 – Sprinklers may be omitted in garages provided that at least one sprinkler head is located within three feet of any communicating opening between the garage and the dwelling.



Significant Modifications to NFPA 13R – 2002

- Modified for NYC to 6 stories instead of 4.
- 6.5.3 (Item 5) – Same as 6.2 (item 5) in NFPA 13D.
- 6.6.1.2 – Same as NFPA 13D 7.1.2.
- 6.8.5 – Added without floors to the exception to installing sprinklers in attics.
- 6.8.7 – Location of sprinklers installed in R-1 Occupancies (Hotels) to be per NFPA 13 – 2002.



Section BC 904

Alternative Systems



Section BC 904

Alternative Systems

Code Sections – 903.1.1 and 903.3.1.1 require alternative extinguishing systems where water is considered hazardous or ineffective.

The requirements for alternative systems are specified in Section 904 of the building code.



Section BC 905

Standpipe Systems

Section BC 905



Standpipe Systems

- All buildings 2 or more stories with 10,000 sq. ft. floor area
- 3 more stories with 7,500 sq. ft.
- Floors located 55 feet or more above the lowest level of Fire Department vehicle access with an occupancy load of 30 or greater.
- Any floor with occupancy located 75 feet or more above the lowest level of Fire Department vehicle access.

- Code Section 905.3



Standpipe Systems

- 1968 Code –
- All buildings 2 or more stories with 10,000 sq. ft. floor area.
- 3 more stories with 7,500 sq. ft.
- All buildings exceeding six stories or 75 feet in height.



General Requirements

- Manual fire pump eliminated.
- Stored water supply per NFPA 14 except in R-2 occupancies
- Standpipes zoned in max heights of 300 ft. Fire Department connections zoned in 600 ft. heights.
- 2 or more fire department connection zones for buildings over 600 ft. One zone for each 600 feet.
- 350 PSI maximum pressure in the system except in high zone fire department connection risers.
- 65 PSI required at topmost outlet of all standpipe risers in each zone
- Hose & racks not required in fully sprinklered buildings. Class III versus Class I.
- Hose valve and riser required at each floor in every required stairway at the riser on the floor landing level.



General Requirements

- All Other locations per BC Section 905.4. Note item 6 of this section that requires additional hose connections where an otherwise required hose connection is located more than 150 away from any portion of the floor.
- Referenced Standard – NFPA 14 – 2003 Modified – BC Q105



Significant Modifications to NFPA 14 – 2003

- **3.3.9 High-Rise Building.** A building greater than 23 m (75 ft.) in height. Where the building height is measured from the lowest level of fire department vehicle access to the floor of the highest occupiable story. For the purposes of this section, a penthouse of any area with an occupant load greater than 10 shall be considered a story.
- **5.4.1.1** Class I standpipe systems in buildings not classified as high-rise buildings shall be permitted to be manual-wet or automatic-wet.



Significant Modifications to NFPA 14 – 2003

9.1.2 Manual standpipe systems shall have an approved water supply accessible to a fire department pumper Where manual combination standpipe systems are provided in accordance with the provisions of section 5.4.1.1 of this referenced standard an automatic water supply sufficient to provide the required sprinkler system demand shall be provided. Where such supply is provided by an automatic fire pump, the minimum pump capacity shall be as required by the sprinkler system demand in accordance with Section 903 of the *New York City Building Code* and NFPA 13. Where such water supply is provided by pressure or gravity tanks the minimum water supply shall also be as required in accordance with the above.



Significant Modifications to NFPA 14 – 2003

6.3.2 A listed check valve shall be installed in each fire department connection and located as near as practicable to the point where it joins the system. In addition, each high zone siamese zone shall be provided with a swing-type check valve located at each connection between the high zone siamese express riser and the high zone standpipe system and located at the level of such connection.



Significant Modifications to NFPA 14 – 2003

- **7.2 Pressure Limitation.**
- The maximum pressure at any point in the system at any time shall not exceed 24.1bar (350 psi), except for piping to high zone Siamese connections, and shall not, in any case, be greater than the pressure rating of the system components in accordance with section 4.2 of this referenced standard. Maximum height per zone is limited to 300 feet.



Significant Modifications to NFPA 14 – 2003

7.2.1.1 Where the residual pressure at a 40-mm (1½-in.) outlet on a hose connection exceeds 6.9 bar (100 psi), an approved pressure-~~regulating~~-restricting device shall be provided to limit the residual pressure at the flow required by Section 7.10 to 6.9 bar (100 psi).

7.8.1.1 Hydraulically designed standpipe systems shall be designed to provide the waterflow rate required by Section 7.10 at a minimum residual pressure of ~~100 psi (6.9 bar)~~ 65 psi (4.5 bar) at the outlet of the hydraulically most remote 65-mm (2½-in.) hose connection and 4.5 bar (65 psi) at the outlet of the hydraulically most remote 38-mm (1½-in.) hose station.



Significant Modifications to NFPA 14 – 2003

- **7.9.1.1** -The maximum standpipe system zone height for any building is 91 440 mm (300 feet). In the lowest zone in a building, such height shall be measured from grade plane. Floors below grade plane may be included in the lowest zone, provided that the maximum siamese zone height for the siamese zone that includes the lowest zone, in accordance with 4.8.2.2 (j), is not exceeded.



Significant Modifications to NFPA 14 – 2003

- **7.9.4.1** In buildings with occupied floors less than 91.4 m (300 feet) in height above the lowest level of fire department vehicle access, water supplies may be provided by a public waterworks system in accordance with 9.1.4(1), by automatic fire pumps in accordance with 9.1.4(2), or by gravity tanks in accordance with 9.1.4(4).



Significant Modifications to NFPA 14 – 2003

7.9.4.2.1 All zones servicing occupied floors located higher than 91.4 m (300 feet) above the lowest level of fire department vehicle access but not more than 152.4 m (500 feet) above grade plane, shall be equipped with a special service fire pump, in accordance with 9.1.4(4)(1), to boost supply to pressures as required by 7.8.1.1 and 7.8.3.1. A Pressure Reducing Valve (PRV) by-pass shall be provided, where necessary, and arranged to provide water supply from the upper zone to the lower zone at the required pressures. Where a PRV is not necessary to provide required pressures, a normally open bypass shall be provided.



Significant Modifications to NFPA 14 – 2003

- 7.9.4.3 Where portions of a standpipe system service floors located 152.4 m (500 feet) or more above the lowest level of fire department vehicle access, all portions of the system shall be provided with a primary and auxiliary means of water supply in accordance with 9.1.4 and the following:
 - (1) Primary water supplies shall serve one zone only as the primary supply.
 - However, the primary water supply for one zone may be used as the auxiliary supply for no more than one other zone.



Significant Modifications to NFPA 14 – 2003

- (2) Intermediate tanks, which serve as the suction source for the pumps providing primary water supply for zones located higher than 91.4 m (300 feet) above grade plane, shall be located so as to provide the auxiliary water supply for the next lowest zone at the required pressures by gravity only, and such pressures shall not exceed the minimum pressures required in such next lowest zone by more than 15 percent.



Significant Modifications to NFPA 14 – 2003

- (3) The auxiliary water supply for the topmost section of the system zone shall be
- provided by a gravity tank in accordance with 9.1.4(4) and shall be equipped with a special service fire pump, in accordance with 9.1.4(4)(1), to boost supply to pressures as required by 7.8.1.1 and 7.8.3.1.



Significant Modifications to NFPA 14 – 2003

- (4) Zone heights shall be selected such that the topmost zone has a minimum height of 45.7 m (150 feet) so as to provide an auxiliary water supply from the intermediate or roof tank(s) to the next lowest zone at pressures as required by 7.8.1.1 and 7.8.3.1 by gravity only, and such pressures shall not exceed the minimum pressures required in such next lowest zone by more than 15 percent.



Significant Modifications to NFPA 14 – 2003

7.12.1 A permanently installed drain riser of adequate size shall be provided adjacent to each standpipe or attached sprinkler system equipped with pressure-regulating devices to facilitate tests of each device.

7.12.1.1 The riser shall be equipped with a plug and be located on every floor.



Significant Modifications to NFPA 14 – 2003

- **9.2 Minimum Supply for Class I and Class III Systems.**
- The water supply shall be capable of providing the system demand established by Section 7.8 and Section 7.10 for at least 30 minutes except where manual standpipe systems are permitted in accordance with section 5.4.1.2, water supplies shall be provided in accordance with section 9.1.3 of this referenced standard.



Significant Modifications to NFPA 14 – 2003

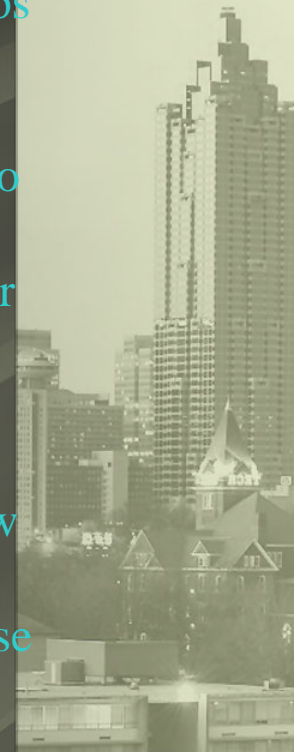
- **9.3 Minimum Supply for Class II Systems.**
- The minimum supply for Class II systems shall be capable of providing the system demand established by Section 7.8 and Section 7.10 for at least 30 minutes.
- **9.4 Minimum Supply for Group R-2 Occupancies.** The water supply servicing standpipe systems in Group R-2 occupancies shall not be less than 500 gpm, and the minimum stored water supply in any gravity tank or intermediate tank shall not be less than 15,000 gallons per zone.



- Highlights to New York City Changes to NFPA 14 – 2003
- Sections To Review – Continued
- Hydrostatic Testing
- NFPA 14 – 2003 - Section 11.4.1
 - Test Pressures – 200 PSI or 50 PSI above the maximum system pressure where maximum pressure is greater than 150 PSI.
 - Could be as high as 400 PSI except for express riser piping to high zone fire department connections where test pressure would be 50 PSI above the maximum pressure in such risers. In a 900 foot high building that pressure would be 440 PSI. Per section 11.4.6 – All piping between the fire dept. connection and its check valve shall be tested.
 - Test pressures are measured at the lowest point of the individual system or zone.



- Highlights to New York City Changes to NFPA 14 – 2003
- Sections To Review – Continued
- Pump Testing
- All pumps associated with standpipe systems are fire pumps and must be tested.
- Since not all pumps required will pump to the roof, test headers or flow metering arrangements must be provided to test each pump.
- Adequate drainage must be provided for discharge of water during testing.
- Pump testing to be done in accordance with NFPA 20 requirements, per which the pumps are to be tested at churn (no flow), their rated flow and at 150 % of rated flow or the maximum flow obtainable.
- Testing at 150 % of rated flow will generally require the use of nozzles with greater orifice sizes than 1-1/8”.



- Highlights to New York City Changes to NFPA 14 – 2003
- Sections To Review – Continued
- Flow Testing (NFPA 14 – 2003 – Section 11.5)
- A flow test is to be conducted at each roof outlet to verify
- that the required pressure is available at the required flow.
- Section 11.5.9 – All flow tests are to be conducted with
- pump(s) operating.
- Section 11.5.4 - The maximum flow required from a single
- hose connection is 250 GPM.



Special Inspections

Special Inspections Overview

- Special inspections are required for all sprinkler and standpipe applications approved after 7-1-08.



Special Inspections

Procedure

- Design applicant files TR-1 at the time of application indicating special inspections required.
- Second TR-1 is filed at the time of permit designating the special inspector. This TR-1 must be signed by the owner and the design applicant approving the special inspector and is required before issuance of a permit.
- Third TR-1 is filed by the special inspector at time of job completion, certifying completion of the special inspection. This TR-1 must be completed before sign-off.



Special Inspections

Qualifications

- Special inspectors, per code section 1704.1, must be employed by the owner.
- NYS State licensed mechanical engineers or NYC Class A or B licensed Master Fire Suppression Contractor's may perform special inspections of sprinkler and standpipe systems.
- Licensed contractor's performing special inspections must be independent of the installing contractor.



Special Inspections

Special Inspection Classes

- Class 1 – Any project
- Class 2 – Any project except: Major Buildings (10 or more stories), Full Building Demolition and Certain alterations and enlargements of major buildings.
- Class 3 – Any work in up to three family dwellings or the alteration, including partial demolition, of less than 10,000 square feet of gross floor area.



Special Inspections

Registration and Accreditation

- Special inspection agencies must have been registered with DOB by May 13, 2013.
- Class 1 special inspection agencies were required to have been accredited by May 13, 2013 to maintain registration and to be able to perform special inspections on work permitted after 5-13-13.



Special Inspections

- Please see 1 RCNY Section 101-06 or the OTCR portion of the Department of Buildings website for additional information regarding special inspections.



Recent Legislation Local Law 63

Local Law 63 Enacted 10-7-09

- Requires hydrostatic testing of new and altered standpipe systems as they are erected or demolished.
- For new systems tests will be required at 75 feet and every 100 feet thereafter and at the completion of the work.



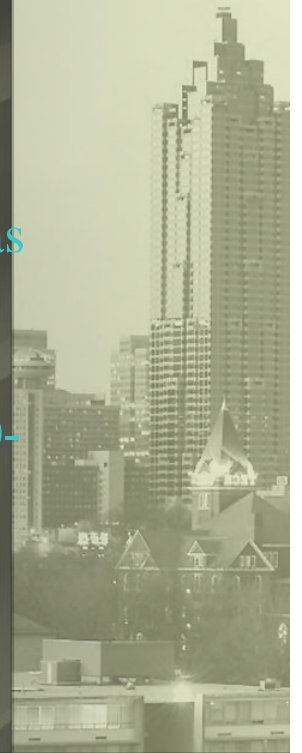
IL 63

- In freezing conditions an interim test may be done with dry nitrogen or air per NFPA 14 standards. When weather conditions permit, a hydrostatic test must be performed.
- For enlargements tests must be done for every 75 feet of added height and at the completion of the work.
- For demolitions a test shall be performed at the commencement of the work.



IL 63

- For alterations a test must be performed at the completion of the work.
- Hydrostatic tests must be performed at 300 PSI or 50 PSI above the maximum system pressure for 1 hour.
- Tests must be witnessed by the department or by the special inspector. Self-cert tests are not considered as witnessed by the department.
- This local law's effective date was 120 days from 10-7-09.



Recent Legislation Local Law 58

Local Law 58 Enacted 9-3-09

- Requires color coded painting of all new and existing standpipe and sprinkler system piping.
- All risers and cross connections of sprinkler and standpipe systems are to be painted red.
- Where piping is required to be listed and labeled painting shall not obscure labels.



- In buildings under construction exposed portions of piping including piping that will be enclosed at a later time must be painted. Piping already enclosed need not be painted.
- In existing buildings all exposed risers and cross connections must be painted.



- Exceptions not requiring painting:
 1. Attachments, gauges, valves and operable parts other than valve handles.
 2. Horizontal branch lines.



- Painting of Valve Hand Wheels is as follows:
- Combination sprinkler standpipe valves – Yellow
- Standpipe only valves – Red
- Sprinkler only valves - Green
- Systems will not be considered to be in a state of readiness until painted as verified by the special inspector.



LL 58

- The effective date of this local law was 180 days from 9-3-09.
- Existing buildings were to comply within 3 months of the effective date



RECENT LEGISLATION LOCAL LAW 60

Local Law 60 Enacted 9-3-09

- Cutting and capping of standpipe and sprinkler systems must be performed by a licensed plumber or fire suppression contractor, as applicable, and who has obtained a permit for that work.
- Standpipe and sprinkler systems shall be maintained to the level up to the floor immediately below the floor being demolished.



- The required red painting must be maintained during demolition operations.
- Systems shall be maintained as non-automatic with fire department connections in place.
- Damaged or inoperable sprinkler systems can only be removed upon granting of a variance from the above approved by both the Buildings and Fire Departments.



- Generally, the shutdown, for more than 8 hours, or removal of any sprinkler system requires FDNY approval by request for a variance to the provisions of the NYC Fire Code that require the maintaining in service of any fire protection system.



Procedures

- The requirements of DOB TPPN 3-07 must be followed.
- Where the DOB plan examiner determines that a Fire Dept. review is required, the DOB objection, a complete set of the documents and a Fire Department application for modification-variance.
 - must be forwarded to the Fire Department for review and approval.



- Note that it would be a violation of the law to remove an existing sprinkler or standpipe system without a permit and knowingly without Fire Department approval when required.
- The effective date of this local law was 180 days from 9-3-09.
- The requirements pertaining to the removal of sprinkler systems have been modified and clarified by Buildings Bulletin 2012-009, which will be discussed later.



Recent Legislation Local Law 64

Local Law 64 Enacted 10-7-09

- An air pressurized alarm system will be required for all dry standpipe systems during construction and demolition.
- Systems must be monitored from the fire department connection to the top of each or any riser.



IL 64

- This work must be performed by a licensed Plumber or Master Fire Suppression Contractor, as applicable, who obtains a permit for the work.
- Maximum supervisory pressure of 25 PSI.
- Local alarm only. Upon loss of air pressure and alarm all work at the site shall cease, except for repair of the standpipe system, until the system is restored.



- A manual 2-1/2 inch air release connection piped to the system side of the siamese connection check valve shall be provided adjacent to each siamese connection. This arrangement, with multiple valves if necessary, shall allow full air release in no more than 3 minutes, verifiable by an actual air release test performed at the time of initial installation.



- Temporary standpipe systems are required when construction reaches a height of 75 feet.
- The same number of standpipe risers required for the permanent installation are required for the temporary installation.
- Buildings requiring standpipe systems because of area only and that are not 75 feet high do not generally require temporary standpipe systems.



IL 64

- The OP-98 for certification of the air monitoring system must be submitted either before or with the first hydrostatic test. Never after.
- The effective date of this local law was 120 days from 10-7-09.



Recent Buildings Bulletins



Buildings Bulletin 010-029

Buildings Bulletin 2010-029

- A copy of this Bulletin is included in your packet.
- Confirms that the installation of sprinkler systems in existing buildings constructed to prior codes does not trigger a requirement to upgrade the water supplies to the 2008 code requirements.
- Limits the use of the reduction in size of the sprinkler area of operation allowed for the use of quick response sprinklers in certain existing buildings.
- Clarifies other issues concerning sprinkler and standpipe systems in existing buildings.



Buildings Bulletin 012-009

Buildings Bulletin 2012-009

- A copy of this Bulletin is included in your packet.
- Clarifies temporary sprinkler installation and compartmentation requirements for existing buildings undergoing interior alterations.
- Highlights
 - Alterations on Unoccupied Floors – The existing system can be removed provided a Temporary Sprinkler loop is provided at the core protecting the paths of egress between all exit stairs and active elevator lobbies.



Buildings Bulletin 012-009

Buildings Bulletin 2012-009

- Alterations on Partially Occupied Floors - The entire floor sprinkler system must remain intact and operational except that sprinkler heads in the area undergoing alterations shall be placed in accordance with NFPA 13 requirements.
- For scopes of work involving five or fewer contiguous floors an FDNY variance is not required. The fire department is to be notified indicating a detailed scope of work, date and time and duration of the disconnection and temporary fire protection measures to be provided.



Current Overview

- The three year code revision cycle is nearing completion. Proposed legislation, Intro. 1056, has been sent to City Council and public hearings have been held.
- The revised code will be based on IBC 2009.
- The referenced standards will be the 2007 editions of NFPA 13, 13D, 13R, 14 and 20.



Current Status

- The work of all technical committee's is complete.
- Passage of final 2011 Building Code legislation is expected before the end of 2013.
- Effective date is expected to be in early 2014.



Updated and New Referenced Standards

Updated and New Referenced Standards

- The referenced standards will be the 2007 editions of NFPA 13, 13D, 13R, 14 and 20.
- NFPA 20 – The Standard for Fire Pump Installations will be a reference standard to the code.



Highlights 2011 Code

- Highlights of 2011 Code Changes
- LAA Limits will change.
- Category 1 Work – The limit for all sprinkler and standpipe work allowed under an LAA except replacement of sprinkler heads of same size, type and position is increased from \$25,000 to \$35,000 per building per year



Highlights 2011 Code

- Highlights of 2011 Code Changes
- LAA Limits Continued
- Category 2 Work – Replacement of sprinkler heads of the same type, size and position will be unlimited.



Highlights 2011 Code

- Highlights of 2011 Code Changes
- Exception 1.1 to Section 905.3.1, that allows a Class I standpipe system to be installed in lieu of a Class III system, has been modified to require additional locked hose storage boxes to be located on every 10th floor in addition to the lobby box previously required. The quantity of their contents has been reduced.



Highlights 2011 Code

- Highlights of 2011 Code Changes
- Separate Code Sections for Fire Department Connections (Section 912) and Pumps (Section 913) – No significant changes in requirements



Highlights 2011 Code

- Highlights of 2011 Code Changes
- BC Q102 – 9.2.1.3.3.1 – Clarification that Flexible Sprinkler Drop connections must be rigidly fixed to the building structure at the sprinkler end of the hose, independent of the ceiling suspension system, in accordance with Appendix R of the NYC Building Code.



Highlights 2011 Code

- Highlights of 2011 Code Changes
- BC Q102 – 11.1.4.2 - Clarification of hydraulic calculation requirements with regard to inclusion of hose stream allowances and explicitly stating that balancing the hydraulically calculated system demand to gravity tank available pressures is not required.



Intro. 1056

Intro. 1056

- A full copy of the legislation is available from the New York City Council Website Intro. No. 1056.
- <http://legistar.council.nyc.gov/Legislation.aspx>

