

2022 NYC Building Code:

Overview and Summary of Changes

Presented by JM Zoning LLC





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2022 NYC Construction Code

Summary Overview of Major Changes

Goals of the Construction Code Revision

- **Update NYC Codes to 2015 International Building Codes**
 - Reference Standards
 - Re-organized BC Definitions
 - Include most recent errata (list of fixes to errors in printing)
- **Correct errors, typos, and inconsistencies**
- **Administrative Code Definitions** included in all technical codes (MC, PC, FGC)

Effective Date(s) of the 2022 Construction Code

- **2022 NYC Construction Code (Local Law 126/2021) is effective November 7, 2022 for applications filed on or after November 7, 2022, except:**
 - Amendments to the following sections or articles in the **General Administrative Provisions already took effect on January 1, 2022:**
 - Section 28-401.11 Term of License
 - Articles 421, 422, & 425 Elevator Agency Licenses
 - Article 303 Periodic Boiler Inspections
 - Article 304 Elevators & Conveying Systems
 - Article 323 Periodic Inspection of Parking Structures
 - Amendments to **28-110.1 (Site Safety Plan)** and **Chapter 33** of the New York City Building Code shall apply to:
 - All work on major buildings for which a site safety plan is approved on or after **November 7, 2022**
 - All temporary construction equipment permits and all crane and derrick permits, where the application for approval of such permit is filed on or after **November 7, 2022.**

Select Highlights

COMBUSTIBLE EXTERIOR WALL PROVISIONS

- Exterior walls made from combustible materials to undergo testing to **NFPA 285** industry standards
- As-built construction must match approved and tested design (through **increased filing details and special inspection review**)
- Exterior walls made from combustible materials require **internal sections of non-combustible fire-blocking**
- Exterior walls made from combustible materials require must use a **33% more effective thermal barrier** between building interior and exterior wall assembly (test duration increase from 15 to 20 minutes using ASTM or E119 or UL 263 criteria)

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- Exterior walls made from combustible materials are **not permitted in the immediate vicinity of balconies** or other outdoor accessible spaces
- Exterior walls made from combustible materials are permitted for **existing building without sprinkler systems with installation of a 3-foot horizontal band of non-combustible material (brick) to separate each floor** of combustible material to contain fire to a single floor
- Exterior walls made from combustible materials are **prohibited in combination with new wood construction types** (mass timber, SCL, CLT).

CROSS-LAMINATED TIMBER PROVISIONS

- **General Requirements:**
 - Cross-Laminated Timber (CLT) accepted as **Type IV Construction**
 - CLT permitted in buildings that are **fully sprinklered** per NFPA 13
 - CLT permitted in building **up to 85’ or 7 stories**
 - CLT must be manufactured per **ANSI/APA PRG 320**
- **Specific Requirements:**
 - Exterior Walls
 - 6” thick, 2-hour rated, exterior surfaces protected (gypsum, non-combustible material, etc.)
 - Not permitted where load bearing inside fire district
 - Not permitted in buildings with occupancy groups I-1, R-1, R-2 or F
 - Interior Walls or Partitions
 - 4” thick, 1-hour rated
 - Floors
 - 4” thick, continuous from support to support
 - Roof Decks
 - 3” thick, continuous from support to support
 - Columns & Beams (prohibited)
 - Concealed Spaces (prohibited)

SPECIAL INSPECTIONS

- **BC 1705.5.6 & Table 1705.6 – CLT & SCL Construction (NEW INSPECTION)**
 - Added new section and table to provide requirements for special inspection of Type IV construction using CLT (Cross Laminated Timber) & SCL (Structural Composite Lumber) elements
- **BC 1705.16 – Combustible Exterior Wall Coverings (NEW REQUIREMENTS)**
 - Expanded section for the EIFS special inspection to require MCH, HPL and other exterior wall coverings that have combustible materials to also be subject to special inspection – new requirement added to verify that the installation complies with information

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- provided on approved construction documents, matches the NFPA 285 tested assembly, and confirmation of the installation of thermal barriers and fire-blocking
 - fka BC 1704.13, Exterior insulation and finish systems (EIFS)
- **BC 1705.25 – Structural Stability (NEW REQUIREMENTS)**
 - Required to verify the ability of such structural system to remain in position or revert to the original position or another stable equilibrium position acceptable by this code, without incurring damage to the structural system from the activity or load to which it had been subjected until the completion of construction.
 - Including but not limited to special inspections for concrete, structural steel, and deep foundation installation.
 - The registered design professional responsible for plans for a new building, alteration, or other work requiring structural stability inspections shall identify those areas on the plans submitted to the department in accordance with Section 1704.1.1.1.
 - The means and methods of implementing the structural stability measures shall be prepared by a registered design professional and filed with the department where required in this section and elsewhere in this code.
 - New Sub-Sections as follows:
 - **BC 1705.25.1 – Alterations to existing structures**
 - **BC 1705.25.2 – Construction operations influencing adjacent structures**
 - **BC 1705.25.3 – Excavations**
 - **BC 1705.25.4 – Underpinning (& alternate methods of support of buildings and adjacent property)**
 - **BC 1705.25.5 – Demolition (Mechanical means & Other means of demolition)**
 - **BC 1705.25.6 – Raising & moving of a building**
 - **BC 1705.25.7 – Inspection program**
 - **BC 1705.25.8 – Design documents**
 - BC 1705.25.8.1 – Monitoring
 - BC 1705.25.8.2 – Additional requirements for design documents for demolition
 - BC 1705.25.8.3 – Additional requirements for design documents for underpinning and alternative methods for support of buildings and adjacent properties
 - BC 1705.25.8.4 – Additional requirements for design documents for protection of the sides of excavations and blasting
- **BC 1705.26 – Tenant Protection Plan Special Inspection (NEW INSPECTION)**
 - Added new special inspection and table to verify compliance with tenant protection plans requirements.
- **BC 1705.32.1 – Reuse of Existing Chimneys (NEW INSPECTION)**

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- Special inspection to verify the condition of an existing chimney lining and breaching when a new heating system appliance is installed.

ELEVATORS

- **Elevator Safety Initiatives**
 - Increase minimum size of emergency hatch (Appendix K1 – 2.14.1.5.1)
 - Elevator in readiness to serve all floors (BC 3003.3.1)
 - Hybrid LULA/LIFTS to be provided with door locking monitoring (Appendix K1 – 5.2.1.13)
 - Elevator and dumbwaiter shafts no longer required to have smoke venting (BC 713.12.1)
- **Elevator Accessibility Initiatives**
 - New accessible push-button requirements for destination-oriented elevator keypads (BC 1109.7.2)
- **Elevator Cost-Savings Initiatives**
 - Removes the need for separate machine rooms by allowing machine room-less elevators (MRLs) to be located within the elevator hoist way (BC 3005.1)
 - Allowable height of private residential elevators serving a single dwelling unit to be increased from 50-foot to 75-foot rise (BC 3002.4.3)

ALARM SYSTEMS

- Emergency voice communication now required on Residential Occupancy Group R-2 buildings that are 75' or more in height, lowered from 125' (BC 907.5.2.2)
- Allowance for R-2 occupancies in buildings 125' or less in height to use batteries as the secondary power supply for emergency voice communication systems and ARCS systems
- Full ARCS system is no longer required for R-2 buildings < 125'

SIDEWALK SHED

- Parapets of sidewalk sheds to be fabricated from mesh material to clearly see building and prevent construction material/equipment storage on top of shed and hidden from view
- Shed design to be more open (fewer columns and more opening between sidewalk and street)
- Cantilevered platforms are more readily accepted (but still require a CCD1)

2022 NYC Construction Codes Overview & Email Summary: Chapter 11 Accessibility

Updates to Chapter 11

BC 1101.3	<i>Special Provisions for Prior Code Buildings</i>
BC 202	<i>Definitions – Primary Function</i>
BC 1101.4	<i>Alterations affecting an area containing a primary function</i>
BC 1105.1.8	<i>Automatic Doors</i>
BC 1106	<i>Parking and Passenger Loading Facilities</i>
BC 1107.2.2	<i>Type B+NYC Toilet and Bathing Rooms</i>
BC 1107.6.1.1	<i>Accessible Units</i>
BC 1108.2	<i>Place of Assembly Requirements</i>
BC 1109.2.3	<i>Lavatories</i>
BC 1109.7.1	<i>Limited-Use/Limited Application (LULA) elevators.</i>
BC 1109.7.2	<i>Destination-Oriented Elevators</i>
BC 1109.8.1	<i>Platform Lifts (Prior Code Buildings)</i>
BC 1109.9	<i>Storage</i>
BC 1109.11	<i>Seating at Tables, Counters and Work Surfaces</i>
BC 1109.15	<i>Gaming Machines and Gaming Tables</i>
BC 1110	<i>Accessible Recreation</i>
BC 1111	<i>Accessible Signage</i>
Appendix P	<i>Requirements of 2014 BC Appendix P Relocated (see BC 1107.2.2 above)</i>

BC 1101.3 Special Provisions for Prior Code Buildings

1101.3 | Special Provisions for Prior Code Buildings

*Special provisions for prior code buildings. **The provisions of this chapter shall apply to alterations, including minor alterations but excluding ordinary repairs, and changes of use or occupancy to prior code buildings, ...***

Exception: The provisions of this chapter are not applicable to:

- 1. Group R-3 occupancies in buildings with first occupancy on or before March 13, 1991.*
- 2. Group R-3 occupancies in buildings with first occupancy after March 13, 1991, and originally constructed in a single structure with fewer than four dwelling or sleeping units.*

- **NEW LANGUAGE** clarifies that “Ordinary Repairs” are exempt from applying 2022 BC Chapter 11 Provisions.

1101.3.1 | Requirements Based on Change of Occupancy or How a Space is Used

Requirements based on change of occupancy or how a space is used. Accessible features and construction governed by this chapter shall be provided:

- 1. To the entire building, as if the building were hereafter erected, where a change is made in the main use or dominant occupancy of such building.*
- 2. Throughout a space, including the immediate entrance(s) thereto, where an alteration is made that is considered either: (i) a change in occupancy classification of such space in accordance with this code, or (ii) a change in the zoning use group of such space in accordance with the New York City Zoning Resolution.*

- 2.1. Where the immediate entrance(s) to such space provides direct access to the sidewalk, such immediate entrance(s) shall be provided with an accessible route to the sidewalk. Where the immediate entrance(s) to such space are only through an adjacent space, such as a building lobby, such space shall be provided with an accessible route, through the adjacent space, to the sidewalk.

- 2.2. Where elevator service is provided in the building, **an accessible route shall be required to a rooftop**, where prior to a change in use or occupancy, such rooftop was not intended for general public or occupant use.

- **NEW LANGUAGE** removes the exception that waived a requirement for the primary entrance to be made accessible if said entrance was located at an elevation differential of more than 18 inches from the level of the sidewalk.
- **NEW LANGUAGE** clarifies where a change of use or occupancy occurred and a rooftop is provided for general tenant use; if there is an elevator in the building, the rooftop must be accessible. If there is not an elevator in the building, the rooftop occupancy can be established without providing an accessible route.

BC 1101.4 Alterations Affecting an Area Containing a Primary Function

202 | Definitions...PRIMARY FUNCTION AREAS.

PRIMARY FUNCTION AREAS. An area of a building or facility containing a major activity for which the building or facility is intended is a primary function area.

- **NEW DEFINITION**

1101.4 | Alterations affecting an area containing a primary function.

Alterations affecting an area containing a primary function. Where an alteration affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible. **The costs of providing the accessible route are not required to exceed 20 percent of the value of the alterations affecting the area of primary function.** The accessible route to the primary function area shall include toilet facilities and drinking fountains serving the area of primary function.

Exceptions:

1. This provision does not apply to alterations limited solely to windows, hardware, operating controls, electrical outlets, and signs.
2. This provision does not apply to alterations limited solely to mechanical systems, electrical systems, installation or alteration of fire protection systems and abatement of hazardous materials.
3. This provision does not apply to alterations undertaken for the primary purpose of increasing the accessibility of a facility.
4. This provision does not apply to altered areas limited within a Type B or Type B+NYC dwelling unit.

- **NEW SECTION** clarifies requirement to provide accessible routes within primary function areas shall not be required to exceed 20 percent of the value of the alterations affecting said area.

1105.1.8 | Automatic Doors.

Automatic doors. *In facilities with the occupancies and building occupant loads indicated in **Table 1105.1.8**, at least one accessible public entrance shall be either a full power-operated door or a low-energy power-operated door.*

Exception: For ground floor business or mercantile occupancies which are not yet demised for tenancy, the requirements of this section shall not apply until the occupant load for the tenant or tenants has been determined.

Table 1105.1.8 | Public Entrance with Power-Operated Doors

OCCUPANCY	OCCUPANT LOAD ≥
A-1, A-2, A-3, A-4, B, R-1	200
E, M	300

- **NEW REQUIREMENT** to provide at least one accessible entrance with a full power-operated or a low-energy power-operated door.
- **EXCEPTION** provided for ground-floor mercantile (M) retail occupancies that are not yet demised for tenant fit out.

BC 1106 Parking and Passenger Loading Facilities

1106.2 | Groups R-2 and R-3.

*Groups R-2 and R-3. Where parking is provided for occupancies in Groups R-2 and R-3, which are required to have Accessible, Type B+NYC, or Type B units, the number of accessible parking spaces shall be in compliance with Section 1106.1 and such number of accessible parking spaces shall be dispersed in accordance with Section 1106.6. Where parking is provided within or beneath a building, accessible parking spaces shall also be provided **within or beneath the building**.*

1106.2.1 | Lease, rental, or assignment of spaces.

Lease, rental, or assignment of spaces. In a parking facility accessory to Occupancy Group R-2 or R-3 serving only the residents or employees of the management of such occupancy or provided in compliance with Section 25-412 of the New York City Zoning Resolution.

1106.3 Hospital outpatient facilities.

Hospital outpatient facilities. At least 10 percent, but not less than one
1106.4 Rehabilitation facilities and outpatient physical therapy facilities. At least 20 percent, but not less than one...

1106.5 Van spaces...

- **NEW REQUIREMENT** Accessible parking spaces that are not charging stations are covered in the sections above.

1106.7.3 | Valet and attended parking.

*Valet and attended parking. The number of accessible parking spaces in facilities that utilize valet and attended parking services shall be provided in accordance with **Table 1106.7.3**, and Sections 1106.7.3.1 and 1106.7.3.2.*

Table 1106.7.3 | Valet and Attended Accessible Parking Spaces

TOTAL PARKING SPACES PROVIDED IN PARKING FACILITIES	REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES
01-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1,000	2% of total
1,001 and over	20, plus one for each 100, or fraction thereof, over 1,000

- **EXPANDED & CLARIFIED** accessibility requirements where attended, or valet parking is present.

1106.7.3.1 | Valet parking.

Valet parking. In a facility utilizing valet parking services in which vehicles are parked and later returned to their drivers by a valet employed by the facility, **the number of accessible parking spaces shall be provided in accordance with Table 1106.7.3 of this code. A passenger loading zone complying with Section 1106.7 of this code shall be provided at valet parking services where the valet shall take control of the vehicles. Passenger loading zones shall comply with Section 503 (Passenger Loading Zones) of ICC A117.1.**

1106.7.3.2 | Attended parking.

Attended parking. In an attended parking facility in which vehicles customarily are parked and later returned to their drivers by an attendant employed by the parking facility, the number of accessible parking spaces shall be provided in accordance with Table 1106.7.3 of this code.

1106.7.3.2.1 | Passenger loading zone.

Passenger loading zone. A passenger loading zone complying with Section 1106.7 of this code shall be provided where an attendant shall take control of the vehicles. Passenger loading zones shall comply with Section 503 (Passenger Loading Zones) of ICC A117.1.

1106.7.3.2.2 | Retrieval of vehicles.

Retrieval of vehicles. **The attendant shall park and retrieve all vehicles not equipped with special controls*** entering the facility in which an individual with disabilities is either the driver or a passenger, provided accessible parking space is available.

- **EXCEPTION** about “cars with special controls” is a relocated code provision. Such car drivers must be provided with an accessible space and accessible route, even if attended parking is provided.

1106.8 | Electrical vehicle charging stations.

Electrical vehicle charging stations. Electrical vehicle charging stations shall comply with Sections 1106.8.1 through 1106.8.5.

Exception: *Electrical vehicle charging stations intended for use by a designated vehicle or driver shall not be required to comply with this section.*

- **NEW REQUIREMENT**

1106.8.1 | Number of accessible vehicle charging stations.

Number of accessible vehicle charging stations. Where provided for common use, at least five percent of the total number of electrical vehicle charging stations per facility, but not less than one for each type of electric vehicle charging station, shall be accessible. Where a multiport electric vehicle charging station can simultaneously charge more than one vehicle, the number of electric vehicle charging stations shall be counted as the number of electric vehicles that can be simultaneously charged. The number of accessible vehicle charging stations are in addition to the required accessible parking spaces.

- **NEW REQUIREMENT** For example, a parking lot with 100 electrical vehicle charging stations must have at least 5 charging stations that are accessible

1106.8.2 | Electric vehicle charging space.

Electric vehicle charging space. At each electrical vehicle charging station required to be accessible, the charging space shall comply with the requirements for a van accessible parking space complying with Sections 502.2 through 502.5 of ICC A117.1.

1106.8.3 | Accessible route.

Accessible route. At each electric vehicle charging station required to be accessible, the charging station shall be located along an accessible route. An accessible route shall be provided between the charging station and the charging space.

Exception: *In existing facilities with no accessible route, electrical vehicle charging stations are not required to be located along an accessible route.*

1106.8.4 | Obstructions.

Obstructions. Electric vehicle charging stations shall be designed so accessible routes are not obstructed by cables or other elements.

1106.8.5 | Electrical vehicle charging station controls.

Electrical vehicle charging station controls. Electric vehicle charging stations and electric vehicle charging station controls shall comply with Sections 309.2 and 309.3 of ICC A117.1.

- **NEW SECTIONS & REQUIREMENT** related to accessible vehicle charging.

BC 1107 Dwelling and Sleeping Units

1107.2.2 Type B+NYC unit toilet and bathing rooms.

Type B+NYC unit toilet and bathing rooms. Type B+NYC unit toilet and bathing rooms. **Where toilet and bathing rooms are provided in a Type B+NYC dwelling unit or sleeping unit, all such toilet and bathing rooms shall comply with Sections 1107.2.2.1 through 1107.2.2.9.** Within each such toilet room, at least one lavatory, and one water closet shall comply with Sections 1107.2.2.1 through 1107.2.2.7. Within each bathing room, at least one lavatory, one water closet, and either a bathtub or shower shall comply with Sections 1107.2.2.1 through 1107.2.2.8. Toilet and bathing fixtures shall be in a single room, such that travel between fixtures does not require travel beyond the room in which the fixtures of such toilet or bathing room is located. Additional fixtures shall comply with Section 1107.2.2.9.

Exception for Type A toilet and bathing room:

Where at least one toilet and bathing room complying with Sections 1003.11 (Toilet and Bathing Facility) and 1003.3.2 (Turning Space) of ICC A117.1 is provided within a Type B+NYC dwelling unit or sleeping unit in accordance with Items 1 through 3 of this exception, other toilet and bathing rooms in the same unit shall be required to comply only with Sections 1004.3 (Accessible route), 1004.4 (Walking Surfaces), 1004.5.2 (User Passage Doorways), 1004.9 (Operable Parts) and 1004.11.1 (Grab Bar and Shower Seat Reinforcement) of ICC A117.1...

- **NOTE** Type B+NYC Toilet & Bathing Room Requirements Removed from Appendix P

1107.2.2 | TYPE B+NYC UNIT TOILET AND BATHING ROOMS.

1107.2.2.1	Accessible route
1107.2.2.2	Operable parts
1107.2.2.3	Knee and toe clearance
1107.2.2.4	Overlap ▪ 1107.2.2.5 Lavatory
1107.2.2.6	Mirrors and medicine cabinets
1107.2.2.7	Water closet
1107.2.2.7.1	Location
1107.2.2.7.2	Clearance
1107.2.2.7.2.1	Parallel approach
1107.2.2.7.2.2	Forward approach
1107.2.2.7.2.3	Parallel and forward approach
1107.2.2.7.3	Grab bars
1107.2.2.7.3.1	Fixed side wall grab bars
1107.2.2.7.3.2	Rear wall grab bars
1107.2.2.7.4	Height
1107.2.2.7.5	Flush controls
1107.2.2.7.6	Dispensers
1107.2.2.8	Bathing facilities
1107.2.2.8.1	Bathtubs
1107.2.2.8.1.1	Grab bars

1107.2.2.8.2 Showers

1107.2.2.9 Additional Fixtures

1107.6.1.1 | Accessible units.

Accessible units. Accessible dwelling units and sleeping units shall be provided in accordance with Table 1107.6.1.1. Where buildings contain more than 50 dwelling units or sleeping units, the number of Accessible units shall be determined per building. Where buildings contain 50 or fewer dwelling units or sleeping units, all dwelling units and sleeping units on a site shall be considered to determine the total number of Accessible units. Accessible units shall be dispersed among the various classes of units. Roll-in showers provided in Accessible units shall include a permanently mounted folding shower seat.

Table 1107.6.1.1 | Accessible Dwelling Units and Sleeping Units

TOTAL NUMBER OF UNITS PROVIDED	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITHOUT ROLL-IN SHOWERS	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITH ROLL-IN SHOWERS	TOTAL NUMBER OF REQUIRED ACCESSIBLE UNITS
01-25	1	0	1
26-50	2	0	2
51-75	3	1	4
76-100	4	1	5
101-150	5	2	7
151-200	6	2	8
201-300	7	3	10
301-400	8	4	12
401-500	9	4	13
501-1,000	2% of Total	1% of Total	3% of Total
> 1,000	20, plus 1 for each 100, or fraction thereof > 1,000	10, plus 1 for each 100, or fraction thereof > 1,000	30, plus 1 for each 100, or fraction thereof > 1,000

- **NEW REQUIREMENT**

BC 1108 Special Occupancies (Assembly, Drinking and Dining)

1108.2 | Assembly area seating.

Assembly area seating. Assembly areas with seating shall comply with Sections 1108.2.1 through 1108.2.5. Lawn seating shall comply with Section 1108.2.6. Assistive listening systems shall comply with Section 1108.2.7. Performance areas viewed from assembly seating areas shall comply with Section 1108.2.8. Dining and drinking areas shall comply with Section 1108.2.9.

- **NEW REQUIREMENT** with respect to accessibility to “drinking areas (bars)” and “performance areas” associated with Public Assembly Spaces. Some reorganization of Code sections - **Added cross-references to assistive listing systems, performance areas, drinking and dining areas, lawn seating**

1108.2.7 | Assistive listening systems.

Assistive listening systems. Each building, room or space used for assembly purposes where audible communications are integral to the use of the space, **regardless of the occupancy load of such space**, shall have an assistive listening system in compliance with ICC A117.1, including Section 706 (Assistive Listening Systems) and Appendix N of this code.

Exception: **Other than in courtrooms, an assistive listening system is not required where there is no audio amplification system.**

Table 1108.2.7.1 | Receivers for Assistive Listening Systems

CAPACITY OF SEATING IN ASSEMBLY AREAS	MINIMUM REQUIRED NUMBER OF RECEIVERS	MINIMUM NUMBER OF RECEIVERS TO BE HEARING AID COMPATIBLE
50 or less	2	2
51-200	2, plus 1 per 25 seats over 50 seats*	2
201-500	2, plus 1 per 25 seats over 50 seats*	1 per receivers*
501-1,000	20, plus 1 per 33 seats over 500 seats*	1 per receivers*
1,001-2,000	35, plus 1 per 50 seats over 1,000 seats*	1 per receivers*
> 2,000	55, plus 1 per 100 seats over 2,000 seats*	1 per receivers*

- **NEW REQUIREMENT**

1108.2.7.2 | Ticket windows.

Ticket windows. Where ticket windows are provided, at least one window at each location shall have an assistive listening system.

- **NEW REQUIREMENT**

1108.2.9 | Dining and drinking areas.

Dining and drinking areas. In dining and drinking areas, **all interior and exterior floor areas shall be accessible and be on an accessible route.**

Exceptions:

1. An accessible route between accessible levels and stories above or below is not required where permitted by Section 1104.4 (Multilevel buildings and facilities.), Exception 1.
2. An accessible route to dining and drinking areas in a mezzanine is not required, provided that the mezzanine contains less than 25 percent of the total combined area for dining and drinking and the same services, and decor are provided in the accessible area.
3. In sports facilities, tiered dining areas providing seating required to be accessible shall be required to have accessible routes serving at least 25 percent of the dining area, provided that accessible routes serve accessible seating and where each tier is provided with the same services and similar view.
4. Employee-only work areas shall comply with Sections 1103.2.2 and 1104.3.1.

- **NEW REQUIREMENT**

1108.2.9.2 | Dining and drinking counters.

Dining and drinking counters. Where seating is provided at dining or drinking counters, at least one 60-inch-long portion of the counter shall be provided with two accessible seating spaces. Such accessible seating space shall comply with Section 902 (Dining Surfaces and Work Surfaces) of ICC A117.1 and shall not be located within 40 inches of either end of the counter, so as to provide individuals with disabilities with the same level of service and experience as that provided to others.

Exceptions:

1. Where the linear length of counter is 12 feet (3657.6 mm) or less, one accessible seating space shall be provided, at least 30 inches (762 mm) long, for each accessible seating space required by Section 1108.2.9.1 of this code. Such accessible seating space may be located anywhere along the counter.
2. In Group R-2 occupancies, one accessible seating space shall be provided, at least 30 inches (762 mm) long, for each accessible seating space required by Section 1108.2.9.1 of this code.

- **NEW REQUIREMENT**

1108.5 | Assembly areas without seating.

Assembly areas without seating. Assembly areas without seating shall comply with Section 1108.2.7 (Assistive listening systems).

BC 1109 Other Features and Facilities (Assembly, Drinking and Dining)

1109.2.3 | Lavatories.

Lavatories. Where lavatories are provided, at least 5 percent, but not less than one, shall be accessible. Where an accessible lavatory is located within the accessible water closet compartment, at least one additional accessible lavatory shall be provided in the multicompartment toilet room outside the accessible water closet compartment. Where the total lavatories provided in a toilet room or bathing facility is six or more, at least one lavatory with enhanced reach ranges shall be provided.

- **NEW REQUIREMENT** Text adds further clarifying language to align with the federal ADA Standards. The change ensures that an accessible lavatory is available for users in the common area of a toilet or bathing room.

1109.7.1 | Limited-Use/Limited-Application (LULA) elevators.

Limited-Use/Limited-Application (LULA) elevators. LULA elevators shall comply with Section 408 of ICC A117.1 and with Part 5.2 of ASME A17.1 as modified by Appendix K of this code and shall be limited to a maximum rise of not more than 25'. In new construction, such LULA elevators shall be permitted: 1. To be a part of the required accessible route where either a wheelchair lift complying with Section 1109.7 is permitted or a private residence elevator complying with Section 409 (Private Residence Elevators) of ICC A117.1 is permitted; 2. To be part of the required accessible route in places of religious services; or 3. In multilevel buildings and facilities not required to have an accessible route pursuant to the exceptions in Section 1104.4.

- **NEW REQUIREMENT** Maintains the limit on travel distance but **eliminates the 3 stop limit of the 2014 BC.**

1109.7.1.1 | Prior code buildings.

Prior code buildings. In prior code buildings, LULA elevators shall comply with Section 408 of ICC A117.1 and with Part 5.2 of ASME A17.1 as modified by Appendix K of this code. LULA elevators shall be limited to a maximum rise of not more than 25 feet and shall be permitted to be a part of the required accessible route as follows:

1. *In spaces complying with Section 1109.7.1 of this code where a LULA is permitted in new construction;*
2. *Where the total floor area of the entire building is less than 10,000 square feet; or*
3. *Where it serves an individual occupancy of less than 10,000 square feet in buildings of 10,000 square feet or more.*

- **NEW REQUIREMENT** Removes the 2014 BC prohibition of LULAs in buildings of 10,000 square feet or more provided that the area comprising the individual occupancy served is < 10,000 square feet. NYC has many large buildings comprised of smaller tenancies. These changes are intended to encourage greater accessibility in portions of prior code existing buildings.

BC 1109.7.2 | DESTINATION-ORIENTED ELEVATORS.

Destination-oriented elevators. Where destination-oriented elevators are provided, hall call consoles shall comply with Sections 1109.7.2.1 through 1109.7.2.3. Responding elevator cars shall comply with Section 1109.7.2.5.

BC 1109.7.2.1	<i>Hall call console number and location.</i>
BC 1109.7.2.1.1	<i>Transfer floors, sky lobbies and floors containing building entrances.</i>
BC 1109.7.2.1.2	<i>Other floors.</i>
BC 1109.7.2.2	<i>Required features.</i>
BC 1109.7.2.2.1	<i>Accessibility function button.</i>
BC 1109.7.2.2.1.2	<i>Identification.</i>
BC 1109.7.2.2.2	<i>Audio output.</i>
BC 1109.7.2.2.2.1	<i>Content.</i>
BC 1109.7.2.2.2.2	<i>Delivery method and volume.</i>
BC 1109.7.2.2.3	<i>Visible display screen.</i>
BC 1109.7.2.2.3.1	<i>Contrast</i>
BC 1109.7.2.2.3.2	<i>Size.</i>
BC 1109.7.2.2.3.3	<i>Duration.</i>
BC 1109.7.2.2.4	<i>Floor selection controls.</i>
BC 1109.7.2.2.4.1	<i>Numeric keypad.</i>
BC 1109.7.2.2.4.2	<i>Step scanner.</i>
BC 1109.7.2.2.5	<i>Tactile discernibility.</i>
BC 1109.7.2.3	<i>Hall call console arrangement.</i>
BC 1109.7.2.3.1	<i>Accessibility function button.</i>
BC 1109.7.2.3.2	<i>Floor selection controls.</i>
BC 1109.7.2.3.3	<i>Display screens.</i>

BC 1109.7.2.4 Instructions.

BC 1109.7.2.5 Responding car.

1109.7.2.1 | Hall call console number and location.

Hall call console number and location. Hall call consoles shall be located and provided in a number complying with Section 1109.7.2.1.1 or 1109.7.2.1.2, as applicable. **Where provided, hall call consoles shall be located on accessible routes** connecting to the elevator landings they serve.

Exception: Where hall call consoles are an integral part of security barriers, **at least one console for each type of use at each distinct location shall be located on an accessible route** connecting to the elevator landings served by all such consoles.

- **NEW REQUIREMENT** Establishes (2) compliance paths for call consoles, based on location. Additional requirements for consoles that are integrated with security barriers.

1109.7.2.1.1 | Transfer floors, sky lobbies, and floors containing building entrances.

Transfer floors, sky lobbies, and floors containing building entrances. Elevator landings on transfer floors, sky lobbies and floors containing building entrances shall provide at least one wall-mounted hall call console adjacent to each elevator hoistway entrance. When the accessibility function button is activated, the system shall assign an elevator car located to one side (left or right) of the hall call console to be the responding elevator.

- **NEW REQUIREMENT** Each hoistway entrance has an adjacent console.

1109.7.2.1.2 | Other floors.

Other floors. Floors other than those subject to Section 1109.7.2.1.1 shall provide one hall call console for every five elevators, or fraction thereof, on each side of the elevator landing. The hall call console shall be located immediately adjacent to one or more elevator hoistway entrances. When the accessibility function button is activated, the system shall assign the elevator car located closest to one side (left or right) of the hall call console to be the responding elevator.

- **NEW REQUIREMENT** 1 elevator = 1 console; 5 elevators = 1 console; 6 elevators = 2 consoles. Accessibility button calls the closest elevator.

1109.7.2.2 | Required features.

Required features. **Hall call consoles shall include the features specified in this section. Consoles shall not be flush with the surrounding surfaces and shall protrude or be recessed a minimum of ¼ inch (19 mm) and a maximum 4 inches (101.6 mm).**

- **NEW REQUIREMENT** Console must be discernable from surroundings.

1109.7.2.2.1 | Accessibility function button.

Accessibility function button. Hall call consoles shall provide accessibility function buttons complying with Section 1109.7.2.2.1.

1109.7.2.2.1.1 | Upon Activation.

Upon Activation. *The accessibility function button shall be programed to activate the audio output required by Section 1109.7.2.2.2.*

1109.7.2.2.1.2 | Identification.

Identification. *Accessibility function buttons shall be visibly and tactilely identified.* The visible identification shall consist of the International Symbol of Accessibility or the dynamic accessibility symbol and shall be a minimum height of $\frac{5}{8}$ inch. The visible symbol shall contrast with its background, light-on-dark or dark-on-light. The tactile identification shall consist of three raised dots. All dots shall be the same size and shall have a base diameter of 0.059 inch minimum and 0.063 inch maximum. Dot height shall be 0.025 inch minimum and 0.037 inch maximum. The dots shall be spaced $\frac{1}{4}$ inch at base diameter, measured center to center, and shall be arranged in the form of an equilateral triangle with the vertex pointing up.

1109.7.2.2.2 | Audio output.

Audio output. *Audio output shall be provided for floor selection and responding elevator identification.* Audio output shall be initiated upon activation of the accessibility function button and shall comply with Sections 1109.7.2.2.2.1 and 1109.7.2.2.2.

1109.7.2.2.2.1 | Content.

Content. *Audio output shall include all the information necessary to successfully call and locate the responding elevator without the use of a visual display including, but not limited to operating instructions, floor selection options, confirmation of floor selection, responding elevator car designation, directions to the responding elevator car and error messages.*

1109.7.2.2.2.2 | Delivery method and volume.

Delivery method and volume. *Audio output shall be provided through a mechanism that does not require the use of private listening devices, and that is located at the hall call console. Audio output shall commence within one second of the activation of the accessibility function button.* Audio output shall be synthesized speech or recorded or digitized human speech. *Volume shall be a minimum of 10 dBA above ambient sound level, measured during peak occupancy, but shall not exceed 80 dB, measured horizontally 36 inches (914.4 mm) from the source.* Audio output for floor selection shall commence at the hall call console used within one second of activation of the accessibility function button. *Audio output for responding car identification shall commence when the elevator arrives and shall be repeated until the elevator doors begin to close.*

1109.7.2.2.3 Visible display screen.

Visible display screen. *Visible display screens, including touchscreens, shall be provided in accordance with this section.*

1109.7.2.2.3.1 Contrast.

Contrast. Characters, numbers, and symbols shall contrast with the background on which they are displayed at a ratio of 4.5:1 (relative illuminance). The background shall be solid and static.

Exception: Information unrelated to floor levels and their selection shall not be required to comply with Section 1109.7.2.2.3.1.

1109.7.2.2.3.2 Size.

Size. Characters, numbers and symbols shall be a minimum height of 5/8 inch (15.9 mm).

1109.7.2.2.3.3 | Duration.

Duration. Elevator assignment characters and numbers shall be displayed for a minimum of five seconds.

1109.7.2.2.4 | Floor selection controls.

Floor selection controls. Hall call consoles shall provide a method of floor selection that does not require user vision. Input methods shall comply with Section 1109.7.2.2.4.1 or 1109.7.2.2.4.2.

1109.7.2.2.4.1 | Numeric keypad.

Numeric keypad. Numeric keypads shall be a minimum of 2 3/4 inches (69.9 mm) wide by 5 inches (127 mm) high and shall be arranged in a 12-key ascending telephone keypad layout. Individual keys shall be tactilely discernible, and the number five key shall be tactilely distinct from the other keys. Where the keypad provides an alphabetic overlay on numeric keys, the relationships between letters and digits shall conform to ITU-T Recommendation E.161.

1109.7.2.2.4.2 | Step scanner.

Step scanner. Step scanners shall consist of three horizontally arranged buttons. The center button shall serve as the “select” button and may also serve as the accessibility function button. The button to the right of the center button shall be the “up” button and the button to the left of the center button shall be the “down” button. When the “up” and “down” buttons are pressed and released, the scanner shall announce the next floor above and below, respectively. When the user releases the “up” or “down” button, the system shall pause to allow the user to press the “select” button. If the “select” button is not chosen, the system shall resume at the next floor in the sequence when the button is again depressed. In buildings with more than ten floor levels, when the “up” or “down” buttons are depressed and held for more than three seconds, the scanner shall present options for floor selection in groups of ten beginning with the next group of ten above or below the floor last announced. An interval of silence, one second minimum and two seconds maximum, shall be provided between such announcements.

Exception: Step scanners may consist of one button, where the application for construction document approval is submitted within six months after the date of enactment of this section. The button shall serve as the “select” button and may also serve as the accessibility function button.

- **EFFECTIVE** This portion of Local Law 126 of 2021: Nov. 2022 + 6 months = **May 2023**

1109.7.2.2.5 Tactile discernibility.

Tactile discernibility. Accessibility function buttons and floor selection controls shall be tactilely discernible and shall be raised above surrounding surfaces. When pressed, buttons shall provide

mechanical motion to indicate activation. Where a step scanner complying with Section 1109.7.2.2.4.2 is provided, the “up” and “down” arrows shall include tactilely discernible “up” and “down” arrows. The “up” and “down” arrows shall be tactilely distinct from the tactile marking on the accessibility function button.

- **NEW REQUIREMENT** Through touch, users must be able to discern activation of Select, Up, & Down buttons.

1109.7.2.3 | Hall console arrangement.

Hall console arrangement. Features of hall call consoles shall be arranged in accordance with Section 1109.7.2.3. Where an accessibility function button complying with Sections 1109.7.2.2.1 and 1109.7.2.3.1 also serves as the “select” button, the provisions of Section 1109.7.2.3.2 shall not apply.

- **NEW REQUIREMENT** Scoping section establishes requirements for accessibility & floor selection buttons, and display screens.

1109.7.2.3.1 | Accessibility function button.

Accessibility function button. The accessibility function button shall be located at a height of 36 inches minimum and a maximum of 42 inches above the finish floor and shall be nominally centered on the hall call console.

1109.7.2.3.2 | Floor selection controls

Floor selection controls. Floor selection controls shall be located above the accessibility function button and shall be no higher than 48 inches (1220 mm) above the finish floor and shall be nominally centered on the console.

1109.7.2.3.3 | Display screens.

Display screens. Where provided, display only screens shall be located above the floor selection controls.

- **NEW REQUIREMENT** Button locations must be standardized, allowing users to anticipate proper locations.

1109.7.2.4 | Instructions.

Instructions. Where hall call consoles are provided, written instructions on the proper use shall be posted in a conspicuous location, adjacent to such devices. The instructions shall include, but are not limited to, operating instructions, and console features.

1109.7.2.5 | Responding car.

Responding car. When an elevator car responds to a call following activation of the accessibility function button, it shall provide audio output complying with Section 1109.7.2.2.2. In addition, during travel, the responding car shall provide an in-car announcement of all floors on which it stops.

- **NEW REQUIREMENT** Written instructions, plus audio output ensure greater accessibility for users.

1109.8.1 | Prior code buildings.

Prior code buildings. *In prior code buildings, platform (wheelchair) lifts installed in accordance with Section 410 (Platform Lifts) of ICC A117.1, ASME A18.1, and Chapter 30 of this code, shall be permitted to be a part of the required accessible route.*

- **CLARIFICATION** that wheelchair lifts may be utilized as components along an accessible route in prior code buildings.

1109.9 | Storage.

Storage. *Where fixed or built-in storage elements including but not limited to cabinets, coat hooks, shelves, medicine cabinets, lockers, closets, and drawers are provided in required accessible spaces, at least 5 percent, but not less than one of each type shall be accessible.*

1109.9.1 | Equity.

Equity. *Accessible facilities and spaces shall be provided with the same storage elements as provided in the similar non-accessible facilities and spaces.*

- **NEW REQUIREMENT** Establishes that accessible storage elements be of the same type.

1109.9.3 | Cycle Storage.

Cycle Storage. *Cycle storage shall comply with Section 905 (Storage Facilities) of ICC A117.1 and Sections 1109.9.3.1 through 1109.9.3.4 of this code.*

1109.9.3 Cycle Storage.

1109.9.3.1 Accessible Cycle Storage.

1109.9.3.2 Accessible Route.

1109.9.3.3 Turning Space.

1109.9.3.4 Loading Area.

- **NEW REQUIREMENT** Previously silent on the ZR requirements for bicycle storage, the new requirements address storage, route, turning, and loading requirements applicable to hand and tricycles.

1109.11 | Seating at tables, counters and work surfaces.

Seating at tables, counters and work surfaces. *Where seating or standing space at fixed or built-in tables, counters or work surfaces is provided in accessible spaces, at least 10 percent of the total number of seating and standing spaces, but not less than one of each type, shall be accessible.*

Exception: *Check-writing surfaces at check-out aisles not required to comply with Section 1109.12.2 are not required to be accessible.*

1109.11 Seating at Tables, Counters and Work Surfaces.

1109.11.1 Dispersion.

1109.11.2 *Visiting Areas.*

1109.11.2.1 *Cubicles and Counters.*

1109.11.2.2 *Partitions.*

- **NEW REQUIREMENT** The concept of accessibility at seating, counters, etc. aligns with IBC. Notably, the NYC requirement has been increased to 10% of the total.

1109.15 | Gaming machines and gaming tables.

Gaming machines and gaming tables. Five percent, but not less than one, of each type of gaming table provided shall be accessible and provided with a front approach. Five percent of gaming machines provided shall be accessible and provided with a front approach. Accessible gaming machines shall be distributed throughout the different types of gaming machines provided

- **NEW REQUIREMENT** The concept of accessibility at gaming facilities aligns with IBC. Notably, the NYC requirement has been increased to 5% of the total, aligning with a 2009 US DOJ casino settlement.

BC 1110 RECREATIONAL FACILITIES

1110.1 | General.

General. Recreational facilities shall be provided with accessible features in accordance with Sections 1110.2 through 1110.4.

1110.1 *General.*

1110.2 *Facilities Serving Group R-2 and R-3 Occupancies.*

1110.2.1 *Facilities Serving Accessible Units.*

1110.2.2 *Facilities Serving Type A, Type B+NYC and Type B Units in a Single Building.*

1110.2.3 *Facilities Serving Type A, Type B+NYC and Type B Units in Multiple Buildings.*

1110.3 *Other Occupancies.*

1110.4 *Recreational Facilities ▪ 1110.4.1 Area of Sport Activity*

- **CLARIFIATION & EXPANSION** The section expands the scope of recreational accessibility & applicability to accessory facilities.

1110.2 | Facilities serving Group R-2 and R-3 occupancies.

Facilities serving Group R-2 and R-3 occupancies. Recreational facilities that serve Group R-2 and R-3 occupancies shall comply with Sections 1110.2.1 through 1110.2.3, as applicable.

1110.2.1 | Facilities serving Accessible units.

Facilities serving Accessible units. In Group R-2 occupancies where recreational facilities serve Accessible units, every recreational facility of each type serving Accessible units shall be accessible.

1110.2.2 | Facilities serving Type A, Type B+NYC & Type B units in a single building.

Facilities serving Type A, Type B+NYC & Type B units in a single building. In Group R-2 and R-3 occupancies and where there are four or more dwelling units, where common recreational facilities serve

a single building containing Type A, Type B+NYC units or Type B units, 25 percent, but not less than one, of each type of recreational facility shall be accessible. Every recreational facility of each type on a site shall be considered to determine the total number of each type that is required to be accessible.

1110.2.3 | Facilities serving Type A, Type B+NYC & Type B units in multiple buildings.

Facilities serving Type A, Type B+NYC & Type B units in multiple buildings. In Group R-2 and R-3 occupancies, where there are four or more dwelling units within a single structure, on a single site where multiple buildings containing Type A, Type B+NYC units or Type B units are served by common recreational facilities, 25 percent, but not less than one, of each type of recreational facility serving each building shall be accessible. The total number of each type of recreational facility that is required to be accessible shall be determined by considering every recreational facility of each type serving each building on the site.

1110.3 | Other occupancies.

Other occupancies. Recreational facilities not falling within the purview of Section 1110.2 shall be accessible.

- **NEW REQUIREMENT** The section grants equal access to amenities, regardless of occupancy group classification.

BC 1111 SIGNAGE

1111.1 | Signs.

Signs. Required accessible elements shall be identified by the dynamic accessibility symbol, in accordance with Figure 1111.1, at the following locations.

1. Accessible parking spaces required by Section 1106.1.
2. Accessible parking spaces required by Section 1106.2.
3. Accessible passenger loading zones.
4. Accessible rooms where multiple single-occupant toilet rooms or bathing rooms are clustered at a single location pursuant to Section 1109.2, Exception 3. Where multiple single user portable toilet or bathing units are clustered at a single location pursuant to Section 1109.2, Exception 8.
5. Accessible entrances where not all entrances are accessible. The sign, where provided, shall include a contact telephone number or instructions to gain access if an otherwise accessible building entrance is locked at all times or locked when the building is otherwise open.
6. Accessible check-out aisles where not all aisles are accessible. The sign, where provided, shall be above the check-out aisle in the same location as the check-out aisle number or type of check-out identification.
7. Family or assisted-use toilet and bathing rooms.
8. Accessible dressing, fitting, and locker rooms where not all such rooms are accessible.
9. Accessible areas of rescue assistance in accordance with Section 1009.9.
10. Exterior areas for assisted rescue in accordance with Section 1009.9.
11. In recreational facilities, lockers that are required to be accessible in accordance with Section 1109.9.
12. Accessible seating.
13. Accessible portable toilets.
14. Public telephones.
15. Refuse Disposal and Refuse Storage Rooms.

1111.2 Directional Signage.

Directional Signage. Directional signage indicating the route to the nearest like accessible element shall be provided at or in close proximity to the following locations, such that an individual with disabilities will not be required to retrace the approach route from the inaccessible element.

1. Inaccessible building entrances.
2. Inaccessible public toilets and bathing facilities.
3. Elevators not serving an accessible route.
4. At each separate-sex toilet and bathing room indicating the location of the nearest accessible family or assisted-use toilet and bathing room where provided in accordance with Section 1109.2.1 of this code.
5. At exits and exit stairways serving an accessible space, but not providing an approved accessible means of egress, signage shall be provided in accordance with Section 1009.10 of this code.
6. Where drinking fountains for people using wheelchairs and drinking fountains for standing persons are not located adjacent to each other, directional signage shall be provided indicating the location of the other drinking fountains.

These directional signs shall include the dynamic accessibility symbol. Such signs shall comply with either Section 703.2, or Sections 703.3 and 703.4, of ICC A117.1.

- **NEW REQUIREMENT** for signage at drinking fountains, when not adjacent to those for standing users.

2022 NYC Construction Codes Overview & Email Summary: Combustible Exterior Wall Coverings

COMBUSTIBLE EXTERIOR WALLS: COVERED TOPICS

- All exterior walls made from combustible materials required to undergo testing to industry standards (NFPA 285)
- Filing details and special inspection review for all buildings using exterior walls made from combustible materials.
- All exterior walls made from combustible materials require non-combustible fire blocking installed periodically.
- In existing buildings, 3-foot horizontal band made of non-combustible material (brick) must be installed to separate each floor of combustible material when not protected by full-building sprinkler system.

GLOSSARY

HPL = High Pressure Laminate considered to be one of the most durable decorative surface materials and is available with special performance properties including chemical, fire and wear resistance.

MCM = Metal Composite Material is made from several different components. It is a factory-manufactured panel consisting of metal skins bonded to both faces of a solid plastic core.

FRP = Fiber-Reinforced Polymer are composite materials made of a polymer reinforced with fibers. The polymer is usually an epoxy, vinylester or polyester thermosetting plastic that is combined with a fiber, such as glass or carbon, in order to make the polymer strong and stiff.

BC 718.2.6 Fireblocking

718.2.6 | Architectural trim.

*Architectural trim. Fireblocking shall be installed within concealed spaces of exterior wall coverings and other exterior architectural elements where permitted to be of combustible construction as specified in Section 1406 or where erected with combustible frames, at maximum intervals of 20 feet (6096 mm) so that there will be no open space exceeding 100 square feet (9.3 m²). Where wood furring strips are used, they shall be of approved wood of natural decay resistance or preservative treated wood. If non-continuous, such elements shall have closed ends, with at least 4 inches (101.6 mm) of separation between sections. **For the purposes of this section, fenestration products, and flashing of fenestration products and water-resistive barrier flashing and accessories at other locations, including through wall flashings and attachment accessories, shall not be considered combustible construction.***

- **ANALYSIS:** As part of larger text changes for combustible exterior wall coverings, added new text to clarify that minor, non-contiguous, combustible components are not considered combustible construction.

718.2.6 | Exceptions

1. Fireblocking of cornices is not required in single-family dwellings. Fireblocking of cornices of a two-family dwelling is required only at the line of dwelling unit separation.

2. Fireblocking shall not be required where the exterior wall covering does not contain plastic or foam plastic insulation, is installed on noncombustible framing and the exterior wall covering is one of the following materials:

- 2.1. Aluminum siding having a minimum thickness of 0.019 inch (0.5 mm).
- 2.2. Corrosion-resistant steel siding not less than 0.016 inch (0.4 mm) at any point.
- 2.3. Walls in which the water-resistive barrier is the only combustible component, and the exterior wall has a wall covering of brick, concrete, stone, terra cotta, stucco, or steel with minimum thicknesses in accordance with Table 1405.2.

3. Exterior wall coverings containing plastics, metal composite materials (**MCM**) or high-pressure decorative exterior-grade compact laminates (**HPL**) panels shall comply with Section 718.2.6.1.

- **ANALYSIS:** As part of larger text changes for combustible exterior wall coverings, modified Exc. 2 and 3 to exempt fireblocking when used with non-combustible exterior wall coverings and direct combustible exterior wall coverings to BC 718.2.6.1.

718.2.6 | Exterior wall coverings containing plastics, metal composite materials (MCM**) or high-pressure decorative exterior-grade compact laminates (**HPL**) panels.**

Exterior wall coverings containing plastics, metal composite materials (**MCM**) or high-pressure decorative exterior-grade compact laminates (**HPL**) panels. Exterior wall coverings containing plastics complying with Chapter 26, metal composite materials (**MCM**) or high-pressure decorative exterior-grade compact laminates (**HPL**), shall be fireblocked.

718.2.6.1.1 | Locations.

Locations. Noncombustible fireblocking materials shall be required at all of the following locations to cut off concealed spaces within the exterior wall covering:

1. Around wall openings.
2. In alignment with the slab edge, for a height of not less than 8 inches (203.2 mm), and at maximum intervals of 20 feet (6096 mm) vertically.
3. Between different occupancy groups, horizontally or vertically, as applicable.

- **ANALYSIS:** As part of larger text changes for combustible exterior wall coverings, new text added to require fireblocking at specific locations when using combustible exterior wall coverings

718.2.6.1.2 | Foam plastic insulation.

Foam plastic insulation. Foam plastic insulation in the exterior wall covering shall be interrupted with noncombustible materials approved for fireblocking at locations specified in Section 718.2.6.1.1.

EXCEPTIONS:

1. One-story buildings complying with Section 2603.4.1.4.
2. Fireblocking shall not be required at each floor level and interrupt the foam plastic insulation provided the foam plastic insulation has a flame spread index of not more than 25 as determined in accordance with ASTM E 84 or UL 723 and comply with the following conditions:

- 2.1. Concrete and masonry veneer. Fireblocking material shall not be required at each floor level for concrete or masonry veneer installed less than 75 feet (22 860 mm) above grade as part of an exterior wall covering containing foam plastic insulation, with or without air space, and installed on masonry or concrete backup walls.
- 2.2 Exterior insulation and finish systems (EIFS). Fireblocking material shall not be required at each floor level for EIFS containing foam plastic insulation installed less than 75 feet (22 860 mm) above grade and installed on masonry or concrete backup walls.
- 3. Detached one- and two-family dwellings. Fireblocking of foam plastic insulation shall not be required at each floor level in detached one- and two-family dwellings of Type V construction that do not exceed three stories or 40 feet (12 192 mm) in height above grade plane.

- **ANALYSIS:** As part of larger text changes for combustible exterior wall coverings, new text added to require that foam plastic insulation used in combustible exterior wall coverings to be interrupted with non-combustible materials, i.e., fireblocking.

Exceptions provided for 1-story buildings and detached 1-/2-family buildings. Also, where concrete/masonry veneer or EIFS is installed on masonry or concrete back-up walls and the building is a non-high rise building, fireblocking at floor slabs is not required.

Chapter 14 Exterior Walls and Combustible Materials

1401.2 | Construction documents.
Construction documents. Construction documents for exterior wall coverings required to be tested in accordance with NFPA 285 pursuant to this code shall include the following data and information:

1. Design documentation of the NFPA 285 tested assembly from the manufacturer shall be included in the construction documents. This shall include section and elevation drawings that identify materials and components of the tested assembly, including panel sizes and joint locations. All components used in the tested assembly shall be clearly identified. Material thicknesses, relative locations of components and offsets shall be fully dimensioned.
2. Information shall be provided for verification in accordance with Sections 1706.16 and 1705.20 special inspections.
3. A certification by the applicant that “Any deviation which occurs during the course of installation will be evaluated and approved by the applicant of record or registered design professional. No deviation shall be approved that would result in an assembly that would otherwise fail to pass the acceptance criteria of NFPA 285.”

- **ANALYSIS:** New requirement that construction documents include more specific information consistent with the assembly tested per NFPA 285. The information shown on construction documents will be verified during construction by the special inspector. Applicant of Record or another registered design professional must approve deviations that occur during construction

1403.5 | Vertical and lateral flame propagation.

Vertical and lateral flame propagation. Exterior walls that contain foam plastic insulation including exterior insulation and finish systems (EIFS), metal composite material (MCM) systems, high pressure decorative exterior-grade compact laminates (HPL), and fiber-reinforced polymer (FRP) shall be tested in accordance with and comply with the acceptance criteria of NFPA 285.

Foam plastic insulation assemblies and FRP shall be tested in accordance with Section 2603.5.5. MCM systems shall be tested in accordance with Section 1407.11. HPL systems shall be tested in accordance with Section 1409.11. Approved NFPA 285 tested assembly design documentation shall be included on the submitted construction documents complying with Section 1401.2.

Deviation from the NFPA 285 tested design shall be approved by the registered design professional and additional documentation shall be provided if requested by the department. Combustible exterior wall coverings shall comply with Section 1406 of this code. Exception: Fiber-reinforced polymer (FRP) where permitted by Section 2613.5 not to be tested

- **ANALYSIS:** New section with updated NFPA testing requirements for combustible exterior walls containing EIFS, MCM, HPL and FRP. All exterior wall assemblies containing the aforementioned materials are subject to full scale testing (regardless of height above grade or square footage). A few exceptions are in place for limited FRP and foam plastic insulation applications. Exterior wall assemblies greater than 40 feet in height above grade with combustible water-resistive barriers are subject to the acceptance criteria of NFPA 285.

1403.5.1 | Exterior walls with water-resistive barriers.

Exterior walls with water-resistive barriers. Exterior walls on buildings of Type I, II, III, or IV construction that are greater than 40 feet (12 192 mm) in height above grade plane and contain a combustible water-resistive barrier shall be tested in accordance with and comply with the acceptance criteria of NFPA 285. For the purposes of this section, fenestration products and flashing of fenestration products and water-resistive barrier flashing and accessories at other locations, including through wall flashings and attachment accessories, shall not be considered part of the water-resistive barrier.

EXCEPTIONS:

1. *Walls in which the water-resistive barrier is the only combustible component, and the exterior wall has a wall covering of brick, concrete, stone, terra cotta, stucco, or steel with minimum thicknesses in accordance with Table 1405.2 of this code.*
2. *Walls in which the water-resistive barrier is the only combustible component and the water resistive barrier has a peak heat release rate of less than 150 kW/m² (203.9 hp/m²), a total heat release of less than 20 MJ/m² (18 956 BTU/m²) and an effective heat of combustion of less than 18 MJ/kg (17 060 BTU/lb) as determined in accordance with ASTM E 1354 and has a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E 84 or UL 723. The ASTM E 1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at a incident radiant heat flux of 50 kW/m².*

- **ANALYSIS:** Per exception 1, NFPA 285 testing is not required for exterior walls with water-restive barrier assemblies if they are covered with a material (at its respective minimum thickness) listed in table 1405.2

1406.2 | Combustible exterior wall coverings.

Combustible exterior wall coverings. Combustible exterior wall coverings, including architectural trim, shall comply with this section.

EXCEPTIONS:

1. **(HPL)** Plastics complying with Chapter 26.
2. **Metal composite materials (MCM) complying with Section 1407.**
3. **High pressure decorative exterior grade compact laminates complying with Section 1409.**

- **ANALYSIS:** Specific combustible materials were added under the exceptions. The requirements for these materials are found in other locations in the code.

1406.2.1 Type I, II, III and IV Construction.

Type I, II, III and IV Construction. In buildings of Type I, II, III and IV construction, exterior wall coverings shall be permitted to be constructed of combustible materials in accordance with Section 1406.2.1.1, subject to the following limitations:

1. **Combustible exterior wall coverings shall not exceed 10 percent of an exterior wall surface area on any given story.** Such combustible exterior wall covering shall not be permitted on exterior walls where the fire separation distance is 5 feet (1524 mm) or less.
2. **Combustible exterior wall coverings shall be limited to 40 feet (12 192 mm) in height above grade plane.**
3. Combustible exterior wall coverings constructed of fire-retardant-treated wood complying with Section 2303.2 for exterior installation shall not be limited in wall surface area where the fire separation distance is 5 feet (1524 mm) or less and shall be permitted up to 60 feet (18 288 mm) in height above grade plane, regardless of the fire separation distance.
4. Wood veneers shall comply with Section 1405.5.
5. **Combustible exterior wall coverings shall not be permitted on buildings of Type IV construction utilizing CLT or SCL complying with Section 602.4.** 6. Combustible exterior wall coverings shall not be permitted at exterior balconies in accordance with Section 1406.3.

- **ANALYSIS:** New requirements have been added that limit the use and extents of combustible exterior wall materials

1406.3 | Exterior balconies and similar projections.

Exterior balconies and similar projections. **Exterior wall covering on walls abutting balconies, and cladding on the sides and underside of balconies, shall be constructed of noncombustible materials.** Exterior walls abutting balconies shall be noncombustible up to 12 feet (3657.6 mm) above the walking surface or to the underside of the balcony above, whichever is less. On cantilevered balconies, the exterior wall abutting the balcony, plus 3 feet (914.4 mm) on each side, shall be constructed of

noncombustible materials. On recessed and semi-recessed balconies, the exterior walls abutting the balconies shall be constructed of noncombustible materials.

EXCEPTION:

Combustible exterior wall coverings shall be allowed on balconies in Type V construction with a fire separation distance greater than or equal to 5 feet (1524 mm).

- **ANALYSIS:** Noncombustible materials must be used at exterior balconies and their surrounding construction.

1406.5 | Retrofit of existing buildings.

Retrofit of existing buildings. Combustible materials shall not be permitted for use at the outermost surface of the exterior wall covering for exterior envelope retrofits of existing non-sprinklered buildings over 75 feet (22 860 mm), unless the following conditions are satisfied:

1. The outermost surface of the combustible exterior wall covering shall be interrupted by a noncombustible material at least 3 feet (914.4 mm) high between the top of one opening and the bottom of the opening immediately above to form a continuous band across building elevations.
2. On walls without openings, a 3 feet (914.4 mm) high noncombustible band shall interrupt the outermost surface of the combustible exterior wall covering at least every 15 feet (4572 mm) vertically

- **ANALYSIS:** Combustible materials are permitted to be used on retrofits under 75 feet. For buildings 75 feet combustible material use is conditionally permitted by including provisions to interrupt combustible facade construction in retrofits with 3-foot bands of noncombustible materials.

BC 1407-1409, 2603 MCM, EIFS, HPL and PLASTICS

1407.1.2, 1408.1.1, 1409.1.1, 2601.2 | PROHIBITED LOCATIONS

The use of [MCM, EIFS, HPL, plastics] in exterior wall coverings is subject to the following limitations:

1. [MCM, EIFS, HPL, plastics] is prohibited in exterior wall coverings in Type IV construction utilizing cross-laminated timber (CLT) or structural composite lumber (SCL) complying with Section 602.4.
2. [MCM, EIFS, HPL, plastics] is prohibited in exterior wall coverings at exterior balconies in accordance with Section 1406.3.

- **ANALYSIS:** Restrictions on the use of combustible materials were added to Type IV construction utilizing CLT/SLC and exterior balconies

1407.10, 1408.9, 1409.10, 2603.5.2 | THERMAL BARRIER

[MCM, EIFS*, HPL, foam plastic insulation*] shall be separated from the interior of a building by an approved thermal barrier consisting of 5/8-inch (15.9 mm) Type X gypsum wallboard or equivalent thermal barrier material that will limit the average temperature rise of the unexposed surface to not more than 250°F (121°C) after 20 minutes of fire exposure in accordance with the standard time-temperature curve of ASTM E 119 or UL 263. The thermal barrier shall be installed in accordance with

criteria established by testing in accordance with UL 1715, where the thermal barrier shall remain in place for 20 minutes.

*EIFS and foam plastic insulation have additional testing options (FM 4880, UL 1040, NFPA 286).

- **ANALYSIS:** Updated requirements for the installation of thermal barriers to separate combustible materials from the interior of the building. Updates include the use of 5/8” Type X GWB and increasing the fire exposure duration to 20 minutes.

1407.11, 1409.11 | FULL SCALE TESTING (MCM, HPL)

[MCM, HPL] system shall be tested in accordance with, and comply with, the acceptance criteria of NFPA 285. Such testing shall be performed on the **[MCM, HPL]** system with the **[MCM, HPL]** in the minimum and maximum thicknesses intended for use, including any required fireblocking.

Approved NFPA 285 tested assembly design documentation of the **[MCM, HPL]** system shall be included on the submitted construction documents complying with Section 1401.2 of this code. Deviation from the NFPA 285 tested design shall be approved by the registered design professional and additional documentation shall be provided if requested by the department.

- **ANALYSIS:** Full scale testing requirements have been added for all MCM and HPL exterior wall applications.

BC 1408.8, 2603.5.5 | FULL SCALE TESTING (EIFS, FOAM PLASTIC INSULATION)

2603.5.5 Vertical and lateral fire propagation.

Vertical and lateral fire propagation. The exterior wall assembly shall be tested in accordance with and comply with the acceptance criteria of NFPA 285. **NFPA 285 design documentation of the tested exterior wall assembly shall be included on the submitted construction documents complying with Section 2601.2.1.**

EXCEPTIONS:

1. One-story buildings complying with Section 2603.4.1.4.
2. **Wall assemblies where the foam plastic insulation is covered on each face by not less than 1 inch (25 mm) thickness of masonry or concrete and meeting one of the following:**
 - 2.1. **There is no airspace between the insulation and the concrete or masonry.**
 - 2.2. **The insulation has a flame spread index of not more than 25 as determined in accordance with ASTM E airspace between the insulation and the concrete or masonry is not more than 1 inch (25 mm).**

- **ANALYSIS:** Full scale testing requirements have been expanded for EIFS. The requirements for foam plastic insulation applications have been updated to include documentation requirements. New exceptions have been added to this section.

BC 2613.5 | FIBER-REINFORCED POLYMER EXTERIOR USE

2613.5. Exterior Use.

Exterior Use. Fiber-reinforced polymer shall be permitted to be installed on the exterior walls of buildings of any type of construction when such polymers meet the requirements of Section 2603.5. Fireblocking shall be installed in accordance with Section 718.

EXCEPTIONS:

1. *Compliance with Section 2603.5 is not required when all of the following conditions are met:*
 - *1.1 The fiber-reinforced polymer shall not exceed an aggregate total of 20 percent of the area of the specific wall to which it is attached, and no single architectural element shall exceed 10 percent of the area of the specific wall to which it is attached, and no contiguous set of architectural elements shall exceed 10 percent of the area of the specific wall to which they are attached.*
 - *1.2 The fiber-reinforced polymer shall have a flame spread index of 25 or less. The flame spread index requirement shall not be required for coatings or paints having a thickness of less than 0.036 inch (0.9 mm) that are applied directly to the surface of the fiber-reinforced polymer.*
 - *1.3 Fireblocking complying with Section 718.2.6 shall be installed. 1.4 The fiber-reinforced polymer shall be installed directly to a noncombustible substrate or be separated from the exterior wall by one of the following materials: corrosion-resistant steel having a minimum base metal thickness of 0.016 inch (0.41 mm) at any point, aluminum having a minimum thickness of 0.019 inch (0.5 mm) or other approved noncombustible materia*
2. *Compliance with Section 2603.5 is not required when the fiber-reinforced polymer is installed on buildings that are 40 feet (12 190 mm) or less above grade when all of the following conditions are met:*
 - *2.1 The fiber-reinforced polymer shall meet the requirements of Section 1406.2.*
 - *2.2 Where the fire separation distance is 5 feet (1524 mm) or less, the area of the fiber-reinforced polymer shall not exceed 10 percent of the wall area. Where the fire separation distance is greater than 5 feet (1524 mm), there shall be no limit on the area of the exterior wall coverage using fiber-reinforced polymer.*
 - *2.3 The fiber-reinforced polymer shall have a flame spread index of 200 or less. The flame spread index requirements do not apply to coatings or paints directly to the surface of the fiber-reinforced polymer.*
 - *2.4 Fireblocking complying with Section 718.2.6 shall be installed...*

- **ANALYSIS:** Section 2613.5 provides requirements that specifically address the use of FRP on the exterior of buildings. This section allows FRP to be used on the exterior of buildings of all types of construction when it meets specific requirements.

Exception 2 recognizes that FRP can be used on buildings up to a height of 40 feet in a manner consistent with other combustible exterior wall coverings.

BC 1705.16 | SPECIAL INSPECTIONS OF COMBUSTIBLE EXTERIOR WALL COVERINGS

1705.16 | Combustible exterior wall coverings.

Combustible exterior wall coverings. Special inspections shall be required for all exterior wall coverings containing combustible materials installed more than 15 feet (4572 mm) above adjacent finished grades and alterations to existing exterior wall coverings containing combustible materials installed more than 15 feet (4572 mm) above adjacent finished grades. Exterior insulation and finish system (EIFS) applications, metal composite materials (MCM), high-pressure decorative exterior-grade compact laminates (HPL) and exterior wall covering containing combustible veneers, combustible framing, combustible water-resistive barriers and foam plastic insulation installed more than 15 feet (4572 mm) above adjacent finished grades and alterations to existing installations more than 15 feet (4572 mm) above adjacent finished grades shall be inspected in accordance with Section 1705.16.1.

EXCEPTIONS:

1. Water-resistive barriers that are the only combustible component in the exterior wall covering satisfying the requirements of Exceptions 1 or 2 of Section 1403.5.1.
2. Type VB construction up to 40 feet (12 192 mm) or less in height above grade.

- **ANALYSIS:** Special inspection requirements have been added for several types of combustible wall materials.

1705.16.1 | Inspection Program.

Inspection program. The special inspection shall include verification of compliance with the approved construction documents for the following: attachment to structure; component properties; thicknesses, orientation, cavity sizes and location of thermal barriers, fireblocking and cavity closures; installation of waterproofing membranes, weeps, drains, mold prevention features are as specified; and conformance with the manufacturers' installation instructions, and NFPA 285 tested assembly design documentation. The special inspector shall verify that individual components required to be labeled in accordance with this code do bear such labels.

- **ANALYSIS:** Additional inspection criteria have been included to align with the new code requirements. These include inspections for physical properties as well as verification of compliance with submitted assembly design documentation.

1705.16.2, 1705.16.3, 1705.16.4 | WATER-RESISTIVE BARRIER, THERMAL BARRIER, FIREBLOCKING.

1705.16.2 | Water-resistive barrier coating.

Water-resistive barrier coating. A water-resistive barrier coating complying with ASTM E 2570 requires special inspection of the water-resistive barrier coating when installed over a sheathing substrate. Inspection of water-resistive barrier coating must verify conformance with approved construction documents, manufacturer's installation instructions, and NFPA 285 tested assembly design documentation.

1705.16.3 | Thermal barrier.

Thermal barrier. The special inspector shall confirm the installation of the thermal barrier is in accordance with the approved construction documents, manufacturer's installation instructions, and NFPA 285 tested assembly design documentation.

EXCEPTION:

Foam plastic insulation installation on one-story buildings not required to have thermal barrier complying with Section 2603.4.1.4 of this code.

1705.16.4 | Fireblocking.

Fireblocking. The special inspector shall confirm the installation of fireblocking is in accordance with Chapter 7 of this code, the approved construction documents, manufacturer’s installation instructions, and NFPA 285 tested assembly design documentation. EXCEPTION: EIFS systems and exterior wall coverings not required to have fireblocking pursuant to Section 718.2.6.1 of this code.

- **ANALYSIS:** Additional special inspection criteria have been added to the code. These new criteria include tested assembly (NFPA 285) requirements for thermal barriers, fireblocking, and water resistive membranes.

EXTERIOR COMBUSTIBLE MATERIALS SUMMARY: NEW vs UPDATED REQUIREMENTS					
MATERIAL	PROHIBITED LOCATIONS	FIREBLOCKING	THERMAL BARRIERS	FULL SCALE TESTING	SPECIAL INSPECTIONS
Metal Composite Materials (MCM)	1407.1.2	718.2.6.1.1 1407.16	1407.10	1403.5 1407.11	1407.15 1705.16
Exterior Insulated Finish System (EIFS)	1408.1.1	1408.7	1408.9	1403.5	1408.6 1705.16
High Pressure Laminates (HPL)	1409.1.1	2613.5	2613.5 2603.5	1403.5 1409.11	1409.15 1705.16
Fiber-reinforced Insulation	2601.2	718.2.6.1.2	1403.5	1403.5	1705.16
Foam Plastic Insulation	2601.2	2603.5.5.1	1403.5 2603.5.5	1403.5 2603.5.5	1705.16 2603.5.8
Water-resistive Barrier				1502.5.1	1705.16.2
NEW REQUIREMENT			UPDATED REQUIREMENT		

UPDATES & CLARIFICATIONS: BUILDINGS BULLETIN

Upcoming Buildings Bulletin to clarify fireblocking and performance testing requirements

CHIMNEYS & VENTS

§28-104.13 | Construction Documents for Extension, Alteration or Relocation of an Existing Chimney or Vent.

Construction Documents for Extension, Alteration or Relocation of an Existing Chimney or Vent. Where an owner of a new or altered taller building is required by section 2113 of the New York city building code, section 801 of the New York city mechanical code or section 501 of the New York city fuel gas code to extend, alter or relocate an existing chimney or vent on an affected building, such work shall be filed under a separate application for the affected building.

- **ANALYSIS:** This new provision clarifies that chimney extensions or relocations should be filed under a separate application. Such application would be filed for the building served by the chimney.

§28-118.23 | Extension, alteration, or relocation of chimneys and vents.

Extension, alteration, or relocation of chimneys and vents. No certificate of occupancy shall be issued until all chimneys and vents required to be extended, altered, or relocated by section 2113 of the New York city building code, section 801 of the New York city mechanical code or section 501 of the New York city fuel gas code have been so modified.

EXCEPTIONS:

1. A certificate of occupancy may be issued to the new or altered taller building where access is granted, and conditions are observed that result in a determination that chimney, or vent alteration is not required, and a revised chimney or vent plan is submitted pursuant to section 107.18 of the New York city
2. A certificate of occupancy may be issued to the new or altered taller building where one or more of the chimneys or vents requiring alteration has not been altered or proven to comply with the applicable requirements of the New York city fuel gas code or New York city mechanical code as required when the following conditions have been met:
 - 2.1. The owners of the affected buildings have provided their refusal of consent in writing, or the owner of the affected buildings failed to grant consent after the owner of the new or altered taller building has made all the required notifications to the affected building owners; and
 - 2.2. The owner of the new or taller building demonstrates to the department in the form of a written statement from a registered design professional that there is no hazard to the occupancy in whole or in part of the new or altered building from the continued operation of the chimneys or vents in question.

- **ANALYSIS:** Certificate of Occupancies will not be issued until chimney extension, alteration or relocation work will be complete with certain exceptions, including conditions for where the owner of an affected building did not grant consent for alterations of their chimney.

107.18 | Construction documents for extension or relocation of an existing chimney or vent.

Construction documents for extension or relocation of an existing chimney or vent. Where an owner of a new or altered taller building is required by Section 801 of the New York City Mechanical Code, Section 501 of the New York City Fuel Gas Code, or Section 2113 of this code, to extend, alter or relocate an existing chimney or vent on an affected building, the construction documents for the new or altered taller building shall comply with the requirements of Section 107.18.1 of this code.

- **ANALYSIS:** Construction documentation is now required for extensions or relocations of existing chimneys and vents of affected buildings.

107.18.1 | Chimney and vent plan.

Chimney and vent plan. At the time of initial filing for construction, a chimney and vent plan shall be included as part of the construction documents. Such chimney and vent plan shall include the following information for all chimneys and vents within 100 feet (30 480 mm) of construction:

1. A drawing identifying the location of each existing chimney and vent.
2. A chimney and vent schedule containing the following information for each chimney and vent:
 - 2.1. The cross-sectional area of the chimney or vent outlet.
 - 2.2. The horizontal distance measured from the adjacent construction to the outlet
 - 2.3. The elevation of the outlet.
 - 2.4. The appliance, mechanical system, or fireplace to which the chimney or vent is attached, including the flue gas temperature, or a notation that this information is not yet known.
 - 2.5. If extension, alteration, or relocation is required and describing the expected work.
3. Calculations demonstrating which chimneys and vents require no alteration based on the termination requirements including but not limited to those found in Section 503.5.4 of the New York City Fuel Gas Code and Section 801.20 of the New York City Mechanical Code.

- **ANALYSIS:** Construction documents shall include drawings, schedules and calculations for all chimney and vents within 100' of construction.

BC 1705.32: SPECIAL INSPECTION OF CHIMNEYS & VENTS

1705.32 | Chimneys and Vents.

Chimneys and Vents. **New and altered chimneys and vents, replacing an existing appliance in accordance with Section 503.5.6 of the New York City Fuel Gas Code, or change in appliance in accordance with Section 507 of the New York City Fuel Gas Code and Section 807 of the New York City Mechanical Code shall be subject to special inspection.** The chimney or vent shall be inspected to verify compliance with the approved construction documents, and proper clearance or isolation from adjacent combustible construction. Testing of the chimney or vent shall be performed as applicable in accordance with Section 810 of the New York City Mechanical Code and Section 503.5.6 of the New York City Fuel Gas Code. Special inspection of seismic bracing shall be performed in accordance with Section 1705.12 of this code. Exception: A pressurized smoke test need not be performed on existing and new Listed Type B gas vents and Type L vents. Listed Type B gas vents and Type L vents shall be visually inspected for the presence of a continuous inner wall, proper installation, and no damage or deterioration via readily

accessible areas of the vent system, such as the appliance, tee caps, cleanout openings, or termination. The vent system shall be inspected for proper clearances, protection, and damage.

1705.32.1 | Reuse of Existing Chimneys

Reuse of existing chimneys. When a new heating system appliance is installed, the special inspector shall verify the condition of the existing chimney lining and breaching. Deficiencies shall be reported as required by Section 1704.1.1.2.

- **ANALYSIS:** Text in this section is newly clarified as applicable to new & altered chimneys; replaced appliances; and changes in appliances (i.e., oil to gas conversions). A new special inspection has been added to verify the condition of an existing chimney lining and breaching when a new heating system appliance is installed.

MECHANICAL CODE (MC)

801.1.1 | Existing chimneys and vents.

Existing chimneys and vents. Existing chimneys and vents shall comply with the requirements of Section 28-104.13 of the New York City Administrative Code and Sections 801.1.1.1 through 801.1.1.8 of this code.

801.1.1.1.1 | Chimney and vent plan.

Chimney and vent plan. Applications for a new or altered building shall include a chimney and vent plan submitted pursuant to Section 107.18 of the New York City Building Code.

- **ANALYSIS:** Section modified to include cross references to newly added administrative and Administrative Building Code provisions, regarding construction documents for extension, alteration or relocation of existing chimneys and vents.

FUEL GAS CODE (FGC)

The owner of the new or altered building shall notify the owner of any building that may require a chimney or vent to be altered. Notification, plans and required documents shall comply with the requirements of Sections 501.1.1.3.1 through 501.1.1.3.3.

501.1.1.3.1 First notice.

First notice. Written notice in a form acceptable to the department shall be provided to the building owner not less than 60 days prior to a request for permit for construction on the new or altered building. Such notice shall include a request for access to determine the need to alter the existing chimney or vent and a description of such work. Notice shall be sent by regular mail and certified mail, return receipt requested. A copy of such return receipt shall be filed with the department.

501.1.1.3.2 Second notice.

Second notice. Written notice in a form acceptable to the department shall be provided to the building owner not more than 45 days following commencement of work after a permit has been issued for the new or altered building. Such notice shall include a request for access to determine the need to alter the existing chimney or vent and a description of such work. Notice shall be sent by regular mail and certified mail, return receipt requested. The second notice shall also be posted by a licensed process server at the

public entrance of the building requiring a chimney or vent to be altered. A copy of such return receipt and proof of service by the licensed process server shall be filed with the department.

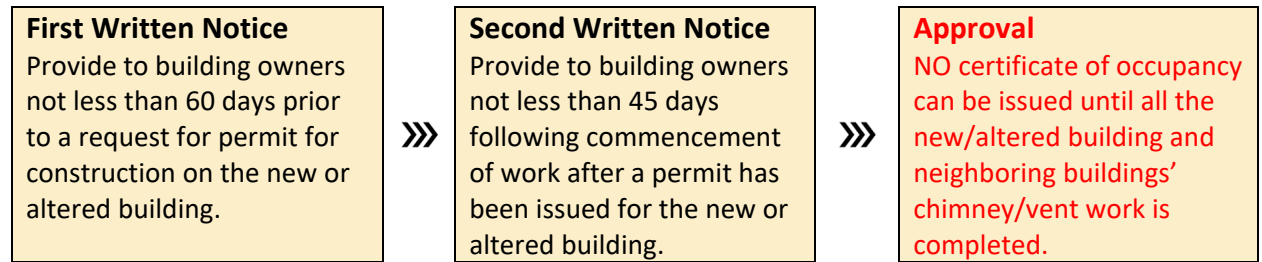
Exceptions:

1. A second notice shall not be required where an application to alter the affected chimney or vent has been filed with the department.
2. A second notice shall not be required where access is granted and conditions are observed that result in a determination that chimney or vent alteration is not required and a revised chimney and vent plan is submitted to the department.

501.1.1.3.3 | Plans and required documentation for alteration work.

Plans and required documentation for alteration work. Where access is granted and conditions are observed that result in a determination that chimney or vent alteration is required, plans for such alteration work shall be provided to the owner of the existing building and a request for written consent to submit construction documents and perform such work shall be made..

FGC 501.1.1.1.3 | WRITTEN NOTIFICATION, PLANS & REQUIRED DOCUMENTS



- **ANALYSIS:** Section expands requirements concerning the need to provide two written notifications to neighbors
 - Second Notice requirement added
 - More details added concerning requirements for both notices
 - Neighbors of adjacent buildings shall be provided with plans and other documentation describing planned alteration, as well as describing adjacent owners’ requirements for altering their chimneys/vents to ensure code compliance.
 - Access to neighbors’ properties, needed to ascertain chimney/vent work scope, must also be requested by building owner performing planned alteration work.
 - Similar to MC 801.1.1.3

FGC 501.1.1.4 | ALTERATION OF CHIMNEY & VENT FILING REQUIREMENTS/APPROVAL

FGC 501.1.1.4 Approval.

Approval. It shall be the obligation of the owner of the new or altered building to:

1. Prepare and submit a chimney and vent plan to the department pursuant to Section 107.18 of the New York City Building Code.
2. Provide required notification pursuant to Section 501.1.1.3 of this code.

3. Provide plans pursuant to Section 501.1.1.3.3 of this code.
4. Prepare and submit construction documents to the department pursuant to Section 28-104 of the Administrative Code for the alteration of existing chimneys or vents which conform to the requirements of this chapter;
5. Obtain permit(s) for the proposed work in accordance with Section 28-105 of the Administrative Code;
6. 6. ...

- **ANALYSIS:** Section was expanded to include new/modified procedural requirements and cross references discussed in previous slides (Similar to MC 801.1.1.6)

FGC 501.1.1.6 | ALTERATION OF CHIMNEY & VENT PROCEDURE REQUIREMENTS

FGC 501.1.1.4 Procedure.

Procedure. The construction documents for the proposed chimney extension, alteration or relocation shall be submitted to the department pursuant to Section 28-104 of the Administrative Code. No certificate of occupancy shall be issued for the new building pursuant to Section 28-118.23 of the Administrative Code until the work associated with the construction documents for the proposed chimney extension, alteration or relocation has been signed-off by the department. **EXCEPTIONS:**

1. A certificate of occupancy may be issued where access is granted, and conditions are observed that result in a determination that chimney or vent alteration is not required and a revised chimney or vent plan is submitted pursuant to Section 107.18 of the New York City Building Code documenting such.
2. A certificate of occupancy may be issued in accordance with Section 28-118.23, Exception 2 of the Administrative Code.

- **ANALYSIS:** Section modified to include cross references to added administrative code and building code Chapter 1 administrative provisions regarding filing procedure and with new requirement that no certificate of occupancy can be issued until all of the new/altered building and neighboring buildings' chimney/vent work is completed.
 - The exceptions permitting issuance of certificate of occupancy in specific instances where safety concerns are addressed.
 - Similar to MC 801.1.1.4.

FGC 501.15 | EXISTING CHIMENY & VENT TESTING

501.15 Existing chimneys and vents...

501.15.5 Testing.

Testing. Testing of existing chimneys shall be in accordance with Section 1705.32 of the New York City Building Code.

ANALYSIS: NEW section added to clarify that required testing of existing chimneys shall comply with New York Code Building Code provisions.

2022 NYC Construction Codes Overview: Tenant Protection Plans

2014/2022 NYC Administrative Code §28-120.1

2014/2022 BC 3303.10 Operations in occupied buildings.

TENANT PROTECTION PLAN REQUIREMENTS

OFFICE OF THE TENANT ADVOCATE

- Created by Local Law 161 of 2017.
- Charged with monitoring TPP compliance and receiving complaints directly from tenants
- Conducts “Random” and “Special” audits of TPPs (referrals from OBM for “Inadequate TPP”)
- Staffed by:
 - Tenant Liaisons to intake complaints
 - ACPE and Examiners to conduct audits
 - Inspection Team
 - Data Analyst
- Contact OTAPlanExam@buildings.nyc.gov.

TENANT PROTECTION PLAN (TPP) VS. OCCUPANT PROTECTION PLAN (OPP)

BC 3303.10 Operations in occupied buildings.

*When construction or demolition activity occurs in an occupied building, barricades, signs, drop cloths, and other protective means shall be installed and maintained as necessary to provide rea-sonable protection for the occupants against hazard and nuisance. **Such protective means shall be indicated on an occupant protection plan, or where a tenant protection plan is required by Section 3303.10.1, on a tenant protection plan.***

BC 3303.10.1 Tenant protection plan.

In buildings containing any occupied dwelling units, including newly constructed buildings that are partially occupied where work is still ongoing within the building, all alteration, construction, or partial demolition work shall be performed in accordance with a tenant protection plan as required by Article 120 of Title 28 of the Administrative Code.

BC 3303.10.2 Inspections of tenant protection plan.

The owner shall notify the department in writing at least 72 hours prior to the commencement of any work requiring a tenant protection plan. The department shall conduct an inspection of 10 percent of such sites within seven days after the commencement of such work to verify compliance with the tenant protection plan. The department shall conduct follow up inspections of such sites every 180 days until such construction is completed to verify compliance with the building code and tenant protection plan. Thereafter, the department shall conduct an inspection within 10 days of receipt of a complaint concerning such work. Where the department receives a complaint alleging that dust is not being contained or controlled in accordance with a tenant protection plan, it shall conduct an inspection within 24 hours. The department shall, in collaboration with the department of health and mental hygiene, develop a procedure to complete a lead-contaminated dust test upon a determination that dust is not being contained or controlled during such tenant protection plan inspections or an inspection conducted in response to a complaint, and take any appropriate enforcement action, including the issuance of an order pursuant to section 28-207.2 of the administrative code. The department of health and mental hygiene shall assist the department to implement such procedure, including submitting dust samples

collected by the department to a laboratory for analysis. The department shall refer the result of any such inspection to the department of health and mental hygiene for review and further inspection in accordance with the New York city health code.

BC 3303.10.3 Enforcement of tenant protection plan.

If work is not being performed in accordance with the tenant protection plan, the commissioner may issue a stop work order pursuant to section 28-207.2 of the administrative code.

- The **Tenant Protection Plan (TPP)** is required whenever any dwelling unit remains occupied during construction. The TPP is required even when residential space is not within the proposed construction area (e.g., work on commercial spaces in a mixed-use building).
- The **Occupant Protection Plan (OPP)** is required for non-residential projects as per 2014 BC 3303.10 and are NOT filed with or reviewed by NYCDOB. A copy of the OPP must be available on-site for review by authorized personnel and NYCDOB inspectors.
- For commercial construction in mixed-use buildings, **both a TPP (for tenant protection) and an OPP (for commercial areas)** must be provided.

RECENT DOB PROCESS UPDATES

DOB NOW WORK TYPES THAT CURRENTLY REQUIRE A TPP

- | | | |
|---------------------|-------------------------------|--------------------------------|
| • Antenna | • General Construction | • Sprinkler |
| • Boiler | • Mechanical | • Standpipe |
| • Curb Cut | • Plumbing | • Structural |
| • Earthwork | • Sign | • Support of Excavation |
| • Foundation | | |

TPP REQUIREMENT IN DOBNOW

- TPPs required if **one or more dwelling unit(s) will be occupied during construction.**
- TPPs are now a **“Prior to Permit” required item.**
- Prepared by the RDP (registered design applicant) engaged by the Contractor, except for 1- or 2-family houses, where it may be submitted by the AOR of the application.
- In DOB NOW, the **Tenant Protection Plan is now an online fillable form**

TPP AMENDMENTS

- **TPPs can be amended at any time by inputting a “TPP Update.” A PAA is no longer required.**
- To update the TPP after its approval, the Action can be found in the TPP Request dashboard accessed from the left menu bar or in the TPP tab in the main Job Filing window.
- Click the drop-down menu in the Filing Action column to select **Update TPP.**

- Click **Yes** to confirm that you wish to Amend the TPP.
- For guidance creating a TPP in DOB NOW, please refer to the [“DOB NOW BUILD: Tenant Protection Plans and Site Safety Plans”](#) training available on DOB’s website.

TPP PLAN EXAMINATION

- **TPPs are no longer reviewed by a DOB Plan Examiner.**
- They are simply received into the system, like other “Prior to Permit” required items.
- **TPPs are subject to random or special audits.**
- OTA has a TPP audit team that performs audits for TPPs filed after the “prior to permit” effective date. All boroughs are covered.
- For jobs filed before the “prior to permit” effective date, TPP audits are referred to Borough Plan Examiners.

BACKGROUND: WHY TPPS ARE NECESSARY

LEGISLATED TENANT PROTECTIONS EVOLVED FROM HARASSMENT DURING CONSTRUCTION

- Interruption and/or denial of essential services (heat, water, gas, etc.)
- Unsafe living conditions (blocked egress, compromised fire protection, etc.)
- Unsafe construction practices
- Byproducts of the building process (noise, debris, dust, fumes, etc.)

HISTORICAL NYC DOB TENANT PROTECTION REQUIREMENTS

- **1984:** NYC DOB Directive 1: genesis of the “seven essential elements of a Tenant Safety Plan” (now TPP).
- **2008:** Tenant Protection Plan requirements included in the Building Code.
- **2017, 2019 & 2021:** “Tenant Protection” Legislation.

LEGISLATIVE REQUIREMENTS

§28-120.1 TENANT PROTECTION PLAN.

Tenant protection plan. A tenant protection plan shall be prepared and submitted for the alteration, construction, or partial demolition of buildings in which any dwelling unit will be occupied during construction, including newly constructed buildings that are partially occupied where work is ongoing. The tenant protection plan shall be prepared by a registered design professional and filed with the department. The registered design professional preparing the tenant protection plan shall be retained by the general contractor performing the alteration, construction, or partial demolition work. No permit shall be issued for work that requires a tenant protection plan unless such plan is approved by the department. Such plan shall contain a statement signed by the owner and signed by the applicant

affirming that the building contains dwelling units that will be occupied during construction and shall identify in sufficient detail the specific units that are or may be occupied during construction, the means and methods to be employed to safeguard the safety and health of the occupants throughout the construction, including, where applicable, details such as temporary fire-rated assemblies, opening protectives, or dust containment procedures. Such means and methods shall be described with particularity and in no case shall terms such as “code compliant,” “approved,” “legal,” “protected in accordance with law” or similar terms be used as substitute for such description. The tenant protection plan must be site specific. The elements of the tenant protection plan may vary depending on the nature and scope of the work but at a minimum, must comply with all applicable laws and regulations, including the New York city construction codes, the New York city housing maintenance code, the New York city noise control code, and the New York city health code, and shall make detailed and specific provisions for:

1. **Egress.** At all times in the course of construction provision shall be made for adequate egress as required by this code and the tenant protection plan shall identify the egress that will be provided. Required egress shall not be obstructed at any time except where approved by the commissioner.
2. **Fire safety.** All necessary laws and controls, including those with respect to occupied dwellings, as well as additional safety measures necessitated by the construction shall be strictly observed.
3. **Health requirements.** Specification of means and methods to be used for control of dust, disposal of construction debris, pest control and maintenance of sanitary facilities shall be included.
 - **3.1. Lead and asbestos.** Where the work involves disturbance of lead-based paint, as defined in section 27-2056.2, or paint of unknown lead content or asbestos, there shall be included a statement of compliance with applicable provisions of law relating to lead and asbestos, including whether the firm performing proposed work holds the certification or certifications required to perform such work pursuant to section 27-2056.11, and disclosure of any open violations related to lead issued by the department of health and mental hygiene or the department of housing preservation and development.
4. **Compliance with housing standards.** The requirements of the New York city housing maintenance code, and, where applicable, the New York state multiple dwelling law shall be strictly observed.
5. **Structural safety.** No structural work shall be done that may endanger the occupants.
6. **Noise restrictions.** Specification of means and methods to be used for the limitation of noise to acceptable levels in accordance with the New York city noise control code shall be included. Where hours of the day or the days of the week in which construction work may be undertaken are limited pursuant to the New York city noise control code, such limitations shall be stated.
7. **Maintaining essential services.** Where heat, hot water, cold water, gas, electricity, or other utility services are provided in such building or in any dwelling unit located therein, the tenant protection plan shall specify the means and methods to be used for maintaining such services during such work in accordance with the requirements of the New York city housing maintenance code. If a disruption of any such service is anticipated during the work, then such plan shall specify the anticipated duration of such disruption and the means and methods to be employed to minimize such disruption, including the provision of sufficient alternatives for such service during such disruption. Notification of the disruption must be given to all affected occupants of occupied dwelling units.

- **Exception:** In the following instances, the tenant protection plan may be prepared and filed by the registered design professional of record for the alteration, construction, or partial demolition work as part of the underlying application:
 - **1. Work in occupied one- and two-family homes.**
 - **2. Work limited to the interior of a single dwelling unit of an occupied multiple dwelling with no disruption to the essential services of other units, where such dwelling is owner-occupied.** For a dwelling unit within a property that is owned by a condominium or held by a shareholder of a cooperative corporation under a proprietary lease, the unit must be occupied by the owners of record for such unit.

LOCAL LAW AMENDMENTS OF TPP REQUIREMENTS

- **LL 154/2017:** TPP reform and inspection requirements
- **LL 116/2019:** TPP now submitted “Prior to Permit”
- **LL 118/2019:** Owner signature required; increased violation cost
- **LL 40/2021:** Enhanced TPP requirements related to lead-safe work

RECENT LEGISLATIVE UPDATES

- **Local Law 40 of 2021, effective 4/18/2022,** requires enhanced protections where lead-based paint, or paint of unknown lead content will be disturbed.

TENANT PROTECTION PLAN TARGET AUDIENCE

- Unlike other DOB filings, **Tenants, not Design Professionals,** are the target audience.
- Must be in **plain English** - should not use technical terms.
- Be **clear** - no conflicting information.
- Be **site specific**.
- **Do not use terms such as “code complaint,” “by law,”** etc.
- **All documents** referenced in the TPP **must be accessible to the public.**

TPP CREATION IN DOB NOW: GENERAL REQUIREMENTS

As noted previously, all DOB NOW TPP submissions are done as online “input” into the DOB NOW system prior to permit. In compliance with 2014 NYC Administrative Code 28-120.1, the ten required elements of a Tenant Protection Plan to be input into DOB NOW are:

- **1: List all units that will or may be occupied during construction**
- **2: Egress**
- **3: Fire Safety**
- **4: Health Requirements**
- **5: Lead & Asbestos**

- **6: Compliance with Housing Standards**
- **7: Structural Safety**
- **8: Noise Restrictions**
- **9: Maintaining Essential Services**
- **10: Other Requirements (as applicable)**

FLOOR PLAN DIAGRAMS

- **In many cases, adequate TPP information can be provided through narrative means only.**
- **In certain circumstances, floor plans must be provided to explain tenant protections clearly.**
Examples include:
 - **Blocking or Closing Means of Egress:** plans must show modified egress paths & temporary signage required to direct tenants along those paths to egress stairs and/ or the public right-of-way.
 - **Phased Construction:** plans must show varying egress paths, signage, etc. as each phase is undertaken.
 - Note that the contractor, through the TPP applicant, is responsible for determining whether or not floor plan diagrams are necessary, subject to DOB audit.

TPP NARRATIVE VS. TPP DIAGRAMS

- **TPP Narrative is required**
 - DOB NOW input narratives are the “Official” TPP
 - Copying the code is not sufficient
- **TPP Diagram is optional**
 - Supplemental to, not replacement of, narrative
 - Diagrams are provided to clarify the narrative
 - Information provided should also be in narrative
 - TPP Diagrams are not necessary for most apartment renovations
- **No tenant protection plan is the same. Every TPP needs to reflect:**
 - Construction activities specific to the apartment
 - The apartments’ relation to the rest of the building occupants and the building's layout.
 - The contractor should be involved in discussions of the TPP.

DESCRIPTON OF ITEMS

ELEMENT 1: LISTING UNITS OCCUPIED DURING CONSTRUCTION

- **List all units** that will / may be occupied during construction.
- **For smaller buildings, a complete, unit-by-unit list should be provided.**

- For larger buildings, a more general statement is acceptable: ***“All (total number of units) units will be occupied during construction, except for the following: (list unoccupied units).”***

INADEQUATE ANSWER: 16 Apartments

GOOD ANSWER(S): Apartments 1a, 1b, 2a, 2b, 4a, 4b, 5a, 5b, 6a, 6b, 8a. or “There are a total of 10 apartments in the building. All apartments in the building will be occupied during construction, except for apartments 3a, 3b, 7a, 7b and 8b.”

ELEMENT 2: EGRESS

- Describe in **detail how egress will be maintained.**
- If any egress will be temporarily blocked, **show/describe alternative egress routes.** “Phased” floor plans may be required (to show alternative routes, temporary exit sign locations, etc.).
- If to remain in use during construction, **describe how egress any path within the construction area will be protected and maintained.**
- If required due to unprotected or compromised egress paths, then **state that a Fire Watch is required** (including hours of operation).

RELEVANT QUESTIONS:

- Are construction personnel and/ or materials going to pass through public egress paths?
- Is any change to any egress path going to occur during construction?
- Is any temporary directional signage needed?
- Are there fire escapes on the building?

ELEMENT 3: FIRE SAFETY

- Describe in detail what areas or components will be compromised during construction (fire rated partitions, pipe chases, stair enclosures, floor & ceiling assemblies, etc.).
- State/show where fire extinguishers will be provided.
- If a sprinkler or standpipe system is affected, describe the scope and any service interruptions anticipated (cross-reference to item 7).
- If a Fire Watch is required due to unprotected or compromised egress paths, then state that (including hours of operation).

RELEVANT QUESTIONS:

- Are public hallways or tenant separations being compromised?
- Are there sprinkler and standpipe systems?
- Will work on fire-rated elements be complete after one day?
- If not, then how are those elements protected during off-hours?

ELEMENT 4: HEALTH REQUIREMENTS

- Describe in detail how dust will be controlled (HEPA vacuums, wet mopping, filter fabric over windows and/ or mechanical grilles & registers, etc.).
- Describe how debris will be removed, including frequency of removal.
- Describe how sanitary facilities will be maintained/ provided.
- Note: Although also listed here, noise control should be in Item 8

RELEVANT QUESTIONS:

- How are entries protected (unit and/ or public as applicable)?
- How are public hallways, stairs & elevators affected/ protected?
- How are materials being delivered and disposed?
- How are construction workers entering and leaving the premises?
- Are the proposed mitigation methods sufficient to control dust?

ELEMENT 5: LEAD & ASBESTOS

- State what lead and asbestos testing was done and give the results.
- Refer to types and availability of relevant testing forms (ACP5 to asbestos, for example). **Forms need not be part of the TPP.**
- Typically, asbestos abatement and lead abatement are not part of the NYCDOB construction filing. However, tenant protections required for any remaining lead and / or asbestos that is not being disturbed must be described.
- Local Law 40 of 2021, effective April 18, 2022 requires additional information to be included in their replies:
 - State disturbance of lead paint or paint of unknown substances
 - Provide name of firm and certify that firm is certified to perform work
 - List open violations with DOHMH and/or HPD

RELEVANT QUESTIONS:

- Was the structure built prior to 1978 (Federal lead paint ban)?
- Was the structure built prior to April 1, 1987 (NYC asbestos ban)?
- Are lead- or asbestos-containing material quantities great enough to require special handling and/or abatement?

ELEMENT 6: COMPLIANCE WITH HOUSING STANDARDS

- NYS Housing Maintenance Code (Title 27, Chapter 2)
- NYS Multiple Dwelling Law (1929- initial issuance)
- Both of these references impose requirements on building owners, landlords and tenants to maintain safe and sanitary buildings. General contractors are not directly mentioned but must

comply as necessary (to the extent of the contractual relationships to the building owner and/or unit owner / tenant).

RELEVANT QUESTIONS:

- Was the structure built prior to 1929 (MDL adoption)?
- Will the building management share responsibility for any tenant protections during construction?

INADEQUATE ANSWER: The requirements of the NYCHMC, where applicable, shall be strictly observed.

GOOD ANSWER: The proposed work will comply with the New York City Housing Maintenance Code and the New York State Multiple Dwelling Law.

ELEMENT 7: STRUCTURAL SAFETY

- If no structural work is proposed, then simply state that.
- If any structural work is proposed, describe in detail how tenants will be protected during such work. Cross-referencing to a different TPP filed under a separate structural filing is acceptable.

RELEVANT QUESTIONS:

- Is temporary shoring or underpinning required?
- Will building fire protection be compromised (element 3)?
- Will related scaffolding or a sidewalk shed be required?
- Will the structural work compromise the tenant’s use of the apartment?
- Will the work necessitate tenant relocation??

ELEMENT 8: NOISE REDUCTION

- A separate Noise Mitigation Plan is required to be submitted to the NYC Department of Environmental Protection (see specific requirements in AC 24-219).
- The Noise Mitigation Plan is an online submission to DEP which is required prior to construction start. Specifics need not be provided in the TPP, but a cross-reference to the plan and any DOB-issued After-Hours Variance (AHV) is required as applicable.
- In some cases, mention of the AHV in the TPP may be required in order to obtain AHV.

RELEVANT QUESTIONS:

- How does construction noise affect tenants within the building?
- What are strategies to minimize disruption?

ELEMENT 9: MAINTAINING ESSENTIAL SERVICES

- Almost all applications will require some interruption of “Essential Services” such as water, electricity and/or gas for other tenants. Exceptions occur when individual units have in-unit shutoff valves.
- Describe all anticipated Essential Service Disruptions. Cross-referencing to a different TPP for a separate filing is acceptable.
 - Type of interruption
 - Number and duration of interruptions
 - Notifications to be provided
 - Description of sufficient alternative to be provided

RELEVANT QUESTIONS:

- In what season will the interruption occur (heat shutoff in winter)?
- Will tenants need to be relocated in order to have access to services?
- Will temporary replacement services (e.g., boiler) be required?

INADEQUATE ANSWER: Heat, hot water, cold water and electricity shall be maintained in accordance with the requirements of the New York City housing maintenance code; and notice shall be given to occupants in advance of any disruption of such services.

GOOD ANSWER(S): All utilities throughout the building, except for water, will not be disturbed. The water will be shut off for replacement of the bathroom sink and will not take longer than 2 hours. During this time, water bottles will be provided to maintain water access. The passenger elevator will not be used during construction.

ELEMENT 10: OTHER ITEMS

- Any special circumstances should be described.
- If supplemental floor plan diagrams are provided, they may be mentioned in this item but should also be cross-referenced within other items as necessary to make the TPP as easily understood as possible.

RELEVANT QUESTIONS:

- What other work types have been filed separately that have their own TPPs?
- How is the tenant protection work being divided among different contractors/ subcontractors for a particular overall project?
- Should a single TPP be developed for submission to all work types filed? How can contractors cooperate to create it??

INADEQUATE ANSWER: 28-104.8.4.1 Public availability of tenant protection plan. Upon issuance of a permit for work containing a tenant protection plan, the department shall make the tenant protection plan publicly available on its website. 28-104.8.4.2 Provision of copy of tenant protection plan to occupants upon request. The owner of a building undergoing work for which a tenant protection plan is required by section 28-104.8.4 shall, upon request from an occupant

of a dwelling unit within such building, provide such occupant with a paper copy of the tenant protection plan approved by the department.

GOOD ANSWER(S): Refer to Job #M123456789-11 for the tenant protection plan related to the structural work.

TPP CREATION IN DOB NOW: **UPDATES**

- If the work scope changes during construction, the TPP must be updated to reflect any additional tenant protections required (as applicable).
- Updates to TPPs will not be reviewed by DOB plan examiners. They are automatically approved by the DOB NOW system as “professionally- certified” documents.
- Updated TPPs must be available on-site as soon as they are necessary to reflect actual conditions at the premises.
- Floor plan diagrams, if included, must be uploaded as TPP attachments/drawings (not as AI1).

TPP CREATION IN DOB NOW: **PRE-SIGNOFF OCCUPANCY (NB TCO)**

- In many cases, buildings are granted partial occupancy for dwelling units while construction is completed elsewhere in the structure (e.g., commercial units in mixed- use buildings).
- Per 2014 BC 3303.10.1, a TPP is required as soon as any dwelling unit is occupied in any building that is still undergoing construction. This is true even if construction is no longer occurring in residential portions of the building.
- All open applications for a building (“project”) that require a TPP must have one. For example, if General Construction (GC), Plumbing (PL), and Mechanical (MS) applications for a building are still open when residential occupancy occurs, then all three of those applications must file a TPP.
- Pre-Signoff TPPs are submitted in DOB NOW as per the regular protocol. No DOB review will occur, but all TPPs are subject to DOB audit, violations, Stop Work Orders, etc.

TPP CREATION IN DOB NOW: **TAKEAWAYS**

- **TPPs are for tenants, not design professionals.** They should be presented in clear, simple language in an organized and easily understood way.
- **TPPs must be detailed and specific.**
- **TPPs must fully address all ten elements listed in DOB NOW.**
- There are often multiple TPPs filed for a “project’s” various work types (General Construction, Plumbing, Mechanical, etc.). **Related TPPs must be coordinated with each other.**
- **Do not refer to the underlying DOB application or documents,** which may not be available for viewing by the public.
- **Do not use generic terms such as “code compliant,” “protected in accordance with law,” etc.**
- **Do not use professional jargon or cite code sections by number.**

TENANT PROTECTION PLAN ENFORCMENT

- **Notify DOB at least 72 Hours prior to start of work.**
- **Post TPP Notice to Occupants at the Building and Distribute to all Occupants.**
- **Provide a printed copy of the entire TPP on request.**
- **Site Inspections in response to Complaints by the Public.**
- **Site Inspections for TPP compliance –Randomly selected.**
- **The Occupant Notice must be printed and displayed at the job site and distributed to all occupants.**

SAFE CONSTRUCTION BILL OF RIGHTS

- Part of the Housing Maintenance Code
- Must include:
 - Description of work being conducted & the specific location
 - Hours of construction work.
 - Projected timeline for the completion of work.
- Description of the amenities/essential services unavailable/interrupted during work & plan to minimize the interruption.
- Contact info (Phone #) for Agent/Owner for non-emergency matters & emergency matters 24hrs/7 days a week during construction.

TPP VIOLATION & CIVIL PENALTIES

- **Failure to File a Tenant Protection Plan (TPP)**
 - First Offense: \$10,000;
 - Second Offense: up to \$25,000.
- **Inadequate TPP**
 - OATH violation with penalty of \$1,600.
 - Referred for TPP audit.
- **Failure to Comply with TPP**
 - OATH violation with penalty of \$1,600.
 - FTM-No Fire Stopping (if applicable) penalty of \$2,500
- **Failure to Post TPP Notice and/or Safe Construction Bill of Rights**
 - OATH violation with penalty of \$1,250 for each.
- **Failure to Notify the Department 72 hours prior to start of work**
 - OATH violation with penalty of \$1,250.
- **Stop Work Order** is issued if dangerous conditions are present.

2022 NYC Construction Codes Overview:

Construction Safety: Site Safety Oversight

Chapter 33 Safeguards During Construction & Demolition

DEFINITIONS

DEFINITIONS: GENERAL

Definitions in **2014 Code BC Section 3302.1 Definitions** have been relocated to **2022 Code BC Chapter 2 Definitions**.

- This change follows the national standard (ICC)
- In addition to moving the definitions from Chapter 33 to Chapter 2, the definitions have also been updated.

DEFINITIONS: INCIDENT

The term “**ACCIDENT**” in BC Chapter 33 – 2014 becomes “**INCIDENT**” in BC Chapter 2 – 2022.

- There is no change to the substance of the definition.
- However, text has been added **BC 3301.8** to recognize that Site Safety Managers/Coordinators and Construction Superintendents have primary responsibility to report at their sites. Hoisting Machine Operators, Concrete Safety Manager, etc. also have responsibility to report:

3301.8 Incidents and damage to adjoining property.

The department shall be notified immediately by the permit holder, or a duly authorized representative, **of any incident** at a construction or demolition site, or of any damage to adjoining property caused by construction or demolition activity at the site. **Where required by Section 3301.13.11 or Section 3310.8.2.1, incidents, or damage to adjoining property shall instead be reported by the construction superintendent or the site safety manager or coordinator.**

3301.8.1 Additional notifications. Nothing in this section shall diminish or relieve other notification requirements imposed by this chapter, including but not limited to, notifications by the site safety manager, site safety coordinator, concrete safety manager, or hoisting machine operator.

DEFINITIONS: TEMPORARY CONSTRUCTION

The term “**TEMPORARY CONSTRUCTION**” in BC Chapter 33 – 2014 becomes “**TEMPORARY CONSTRUCTION INSTALLATIONS**” in BC Chapter 2 – 2022.

- Definition of “Temporary Construction Installations” expanded to better reflect scope of items intended to be captured.
- BC 16 (Structural) provided details for design of “Temporary Construction Installations.” This includes **design loads for wind** and **wind action plans**.

DEFINITIONS: MAJOR BUILDING

The definition of a “**MAJOR BUILDING**” in BC Chapter 33 – 2014 reads:

An existing or proposed building 10 or more stories or 125 feet (38 100 mm) or more in height, or an existing or proposed building with a building footprint of 100,000 square feet (30 480 m²) or more regardless of height, or an existing or proposed building so designated by the commissioner due to unique hazards associated with the construction or demolition of the structure.

The definition of a “**MAJOR BUILDING**” in BC Chapter 2 – 2022 reads:

*An existing or proposed building **seven or more stories or 75 feet (22 860 mm) or more in height**, or an existing or proposed building with **a building footprint of 100,000 square feet (30 480 m²) or more regardless of height**, or an **existing or proposed building so designated by the commissioner due to unique hazards associated with the construction or demolition of the structure.***

- Reduction in stories from 10 to 7
- Reduction in building height from 125 feet to 75 feet in height
- Use the most stringent of the two (stories or building height)
- **NOTE:** *This provision does not go into effect until **12/11/2024***

CONSTRUCTION SUPERINTENDENT (CS)

CONSTRUCTION SUPERINTENDENT: GENERAL

- The 2014 and 2022 Codes were **amended** by Local Law 141 of 2021
- Local Law 141 of 2021 made significant changes to the Construction Superintendents (CS) designation
- Some changes of Local Law 141 go into effect before the 2022 Codes, other changes will go into effect at the same time as the 2022 Codes

CONSTRUCTION SUPERINTENDENT: JOBS REQUIRING A CS

3301.13.3 Designation of primary construction superintendent. *The permit holder shall designate a primary construction superintendent **who shall carry out all duties and responsibilities assigned to the construction superintendent by this chapter and rules promulgated by the commissioner, and notify the department of such designation**, prior to the commencement of **work, for** the following types of jobs:*

1. *The construction of a new building;*
2. *The full demolition of an existing building;*
3. *An alteration to an existing building that involves one or more of the following:*
 - 3.1 *A vertical enlargement;*
 - 3.2 *A horizontal enlargement;*
 - 3.3 *The alteration or demolition of more than 50 percent of the **gross** floor area of the building during the course of work over any **12-month** period;*
 - 3.4 *The removal of one or more floors during the course of work over any **12-month** period;*
 - 3.5 *Work that requires a special inspection for underpinning; or*
 - 3.6 *Work that requires a special inspection for the protection of sides of excavations; or*
4. *Other jobs that pose an enhanced risk to the public and property, as determined by the commissioner.*

CONSTRUCTION SUPERINTENDENT: EXEMPTIONS TO JOBS REQUIRING A CS

CS under the BC 2014

3301.13.3 Designation of primary construction superintendent... Exceptions: Notwithstanding the above, a construction superintendent is not required for: **1. Work listed in Section 3310.1, for which a site safety manager or coordinator must be designated.** 2. Work which solely involves the construction of a new 1-, 2-, or 3-family building.

CS under the BC 2022

3301.13.3 Designation of primary construction superintendent... Exception: **A construction superintendent is not required for work that solely involves a 1-, 2-, or 3-family building, or an accessory use to such building, provided the permit holder for such work is registered as a general contractor in accordance with Article 418 of Chapter 4 of Title 28 of the Administrative Code.**

- Under the 2014 BC major buildings projects (which required a SCM or SSM) were exempt from a requirement to have a CS
- **Under the 2022 BC, major building projects must have a designated Construction Superintendent in addition to a SCM or SSM when the Site Safety Plan is approved on or after November 7, 2022.**
- **Exemption for 1, 2, 3 family projects expanded** from new building (NB) to all work provided the permit holder is licensed a General Contractor (GC)
 - *If the permit holder has any other status, a CS would have to be designated if the work is subject to BC 3301.13.3*
- **Effective** for 1, 3, 3 family projects whose application for construction document approval submitted is **on or after November 7, 2022.**
- 1-2-3 Family **2014 Code projects** subject to the provisions of BC 3301.13.3 **must maintain CS until signed off or released – regardless of Nov 7, 2022, effective date.**

CONSTRUCTION SUPERINTENDENT: JOBS NUMBER LIMIT FOR A CS

CS under the BC 2014

3301.13.6 Limitations on the designation of primary or alternate construction superintendents. An individual may only be designated as a primary or alternate construction superintendent for that number of jobs for which he or she can adequately perform all required duties. No individual may be designated as the primary construction superintendent on more than ten jobs.

CS under the BC 2022

3301.13.6 Limitations on the designation of primary or alternate construction superintendents. An individual may only be designated as a primary or alternate construction superintendent for that number of jobs for which he or she can adequately perform all required duties. No individual may be designated as the primary construction superintendent on more than ten jobs.

Exceptions:

- 1. If one of the jobs for which the construction superintendent is designated as a primary construction superintendent is on a building that meets the definition of a major building, the individual may only be designated as the primary construction superintendent for that job and may not serve as the primary construction superintendent for any other job.**

2. Notwithstanding Exception 1, **beginning June 1, 2022**, no individual may be designated as the primary construction superintendent for **more than five jobs**.
3. Notwithstanding Exception 1, **beginning January 1, 2024**, or a later date established by the department, provided that such date is not later than January 1, 2025, no individual may be designated as the primary construction superintendent for **more than three jobs**.
4. Notwithstanding Exception 1, **beginning January 1, 2026**, or a later date established by the department, provided that such date is not later than January 1, 2027, no individual may be designated as the primary construction superintendent for **more than one job**.
5. **A construction superintendent designated as the primary construction superintendent at a job site may serve as a non-primary construction superintendent at another job site, provided there is no work requiring the presence of such individual occurring at the job site for which the individual has been designated as the primary construction superintendent.**
6. Subject to the approval of the commissioner, a construction superintendent may serve as the primary construction superintendent for multiple non-major building jobs located on the same lot or on contiguous lots.

- Regardless of other limits, if the CS is designated for a major building job, the CS cannot be designated for any other job
- Designated number of jobs for a CS is being reduced over the next four years
 - **As of June 1, 2022**, CS may be designated for up to **5 jobs**
 - **Beginning January 1, 2024**, CS may be designated for **3 jobs**
 - **Beginning January 1, 2026**, CS may be designated for **1 job only**
- As of **June 1, 2022**, Construction Superintendents designated on more than 5 jobs may be subject to disciplinary action
- Provisions made for a CD who is sick or absent from that job
- Only when there is no work requiring presence of CS at their designated sites
- An exception is provided to for non-major building jobs on the same lot or contiguous lots
- Subject to CCD1 approval (of the commissioner), a CS can be designated for more than 5 jobs, 3 jobs, and 1 job, respectively.

CONSTRUCTION SUPERINTENDENT: COMPETENT PERSON

3301.13.12 Competent person. *The construction superintendent must designate a competent person for each job site for which the construction superintendent is responsible and ensure such competent person is present at the designated job site at all times active work occurs **when the construction superintendent is not at the site**. The designation of a competent person does not alter or diminish any obligation imposed upon the construction superintendent. The competent person must carry out orders issued by the construction superintendent; be able to identify unsanitary, hazardous or dangerous conditions; take prompt corrective measures to eliminate such conditions; immediately report to the construction superintendent **incidents** at the job site or any damage to adjoining property caused by construction or demolition activity at the job site; and be able to effectively communicate workplace instructions and safety directions to all workers at the site.*

Exception: *Beginning January 1, 2026 or a later date established by the department, provided that such date is not later than January 1, 2027, where Section 3301.13.6 requires the construction superintendent to be dedicated to one job, the designation of a competent person is not authorized. In the event the primary construction superintendent cannot be present at the job site while active work is occurring, an alternate*

construction superintendent shall act on behalf of the primary construction superintendent in accordance with Section 3301.13.5.

- At present, the CS does not have to at the site full time
- **For non-major building jobs**, the CS must visit each site they are responsible for each day while work is occurring
- **For major building jobs**, the CS can only be designated for that job, but can leave the site as their duties dictate
- During the times CS is not at the site, a competent person can be designated in their stead
- The Competent Person allowance will sunset in 2026
- When the Competent Person allowance sunsets, a CS will only be allowed to be designated to one site (this will be the case for both major and non-major buildings)
- When the Competent Person allowance sunsets, the CS must be at the site full-time work is occurring. If the CS leaves while work is ongoing, another CS will have to sign in and serve in his/her place

SITE SAFETY OVERSIGHT – 2022 CODE CHANGES

DUTIES OF THE CS/SSM/SSC AT MAJOR BUILDINGS

- The 2022 Code makes no changes to the duties of a Construction Superintendent for a non-major building job.
- Given the 2022 Code will require both a CS and a SSM/SSC at a major building site, under the 2022 Code the duties of the CS and SSM/SSC are divvied up at sites where both are required
- The presence of a CS does not alleviate the responsibilities of an SSM/SSC, and vice versa

DUTY	CS	SSM/SSC
Maintain s safe site	✓	
Ensure compliance with approved documents	✓	
Maintain CS log	✓	
Perform site safety inspections		✓
Maintain site safety log		✓
Maintain permit log		✓
Notify DOB of conditions in BC 3310.8.2.1		✓
Notify DOB of incidents/damage to adjoining property		✓

What is an **approved document? Approved documents consist of:**

- Construction documents
- Site safety plans
- Tenant or occupant protection plans
- Shop drawings and specifications
- Manufacturer instructions accepted by RDP
- Other documents that set forth the location and entire nature and extent of the work proposed

DUTIES OF THE CS AT MAJOR BUILDINGS

3301.13.7 Duties of construction superintendents. *The duties of a construction superintendent shall include:*

1. *Acting in a reasonable and responsible manner to maintain a safe job site and ensure compliance with this chapter and any rules promulgated thereunder at each job site for which the construction superintendent is responsible;*
2. *To the extent that a registered design professional or special inspection agency is not responsible, the construction superintendent must ensure compliance with the approved documents at each job site for which the construction superintendent is responsible*

- The Construction Superintendent is the ***captain of the ship***
- The CS is responsible for maintaining a safe job site and ensuring compliance with BC 33 and its rules
- The CS is responsible for ensuring that compliance with approved documents

3301.13.9 Correcting unsafe conditions. *In the event the construction superintendent discovers **work or conditions at a job site** for which he or she is responsible that are **not being conducted in accordance with sound construction/demolition practices, not in compliance with approved documents, or not in compliance with this chapter and any rules promulgated thereunder**, the construction superintendent must take all appropriate action to correct the unsafe work or condition, including but not limited to **immediately notifying the person or persons responsible for creating the unsafe work or condition, and ordering the person or persons to correct the unsafe work or condition, to cease operations, or to leave the job site**. Where unsafe work or an unsafe condition relates to **an item which a registered design professional or special inspection agency is responsible for implementing or verifying**, the construction superintendent must also notify the responsible registered design professional or special inspection agency of the unsafe work or condition. **All such unsafe conditions, work, notices, orders, and corrective action must be recorded in the log required by Section 3301.13.13.***

- The Construction Superintendent must take action when he/she discovers certain work or conditions as the job site
- “Discovering” these conditions can be through personal and direct observation
- “Discovering” can also be indirectly through notification and chain of command
- The Construction Superintendent is empowered by law to notify and order person(s) performing such work, or crating an unsafe condition, to correct such work/condition, to cease operations, and, if necessary, to leave the site
- Certain unsafe work/conditions must be reported to the RDP or SIA
- All unsafe work/conditions discovered by the CS, plus notices, orders, and corrective actions taken, must be recorded in the CS log

DUTIES OF THE SSM/SSC AT MAJOR BUILDINGS

3310.8 Site safety manager’s and coordinator’s duties. *The site safety manager or coordinator shall **monitor compliance with the site safety plan, the tenant or occupant protection plan, and the requirements of this chapter and any rules promulgated thereunder** by performing the duties required by Sections 3310.8.1 through 3310.8.5 and by performing all other safety duties assigned by the owner or general contractor to meet legal requirements.*

- Role of the Site Safety Manager/Coordinator is to monitor
- 2022 BC clarifies monitoring duties for compliance with BC 33 and **1 RCNY 33XX series of rules.**
- 2022 BC clarifies monitoring includes for compliance with the site safety plan
- 2022 BC adds requirement to monitor for compliance with the tenant or occupant protection plan
- Specific duties of the SSC/SSM also include:
 - Performing site safety inspections
 - Maintaining the site safety log
 - Maintaining the permit log
 - Notifying the personnel of violating conditions
 - Reporting certain violating conditions to DOB

WEEKLY SAFETY MEETINGS

- The **2014 Code** requires the **Site Safety Manager/Coordinator** to conduct a **weekly safety meeting** at major building sites.
- For **2022 Code projects**, this responsibility shifts to the **Construction Superintendent**.
- For 2022 Code projects, the Site Safety Manager/Coordinator is to attend the meeting and remain a vital participant in the meeting.

NOTIFICATION OF VIOLATIONS

3310.8.2 Notification of violations. *In the event the site safety manager or coordinator discovers a violation of this chapter or any rules promulgated thereunder, the site safety plan, or the tenant or occupant protection plan, he or she shall immediately notify the person or persons responsible for creating the violation, whether these persons are employed by the general contractor or by subcontractors. If the site safety manager or coordinator is unable to obtain the cooperation of these persons in correcting the violation, he or she shall immediately inform the direct supervisor of the person or company responsible for creating the violation and request that the supervisor order the necessary corrective action. If such supervisor is not present at the site or is otherwise unavailable, or if informing the direct supervisor does not result in the violation being corrected, the site safety manager or coordinator shall notify the construction superintendent, or if the job does not require a construction superintendent, any other supervisory personnel of the permit holder or any other responsible manager or officer of the permit holder. All such violations and corrective work shall be recorded in the daily log.*

- For 2022 Code projects, the Site Safety Manager/Coordinator is to notify personnel of violations of BC 33 and its rules, and of violations of the site safety plan and tenant or occupant protection plans
- For 2022 Code projects, the 2022 Code requires the SSM/SSC to notify the Construction Superintendent if the SSM/SSC is unable to get violating personnel to correct the condition

DOB NOTIFICATION

3310.8.2.1.2 Notification of construction superintendent. *For a job that requires a construction superintendent, upon notification of the above conditions to the department, the site safety manager or coordinator shall notify the construction superintendent of the condition and that notification has been made to the department.*

- The SSM/SSC is required to immediately notify DOB of certain conditions (unsafe crane operation, problem with the standpipe, etc.)
- The 2022 Code adds a new provision that requires the SSM/SS to notify the CS after first reporting the condition to DOB and to notify the CS that they have made said notification to DOB

SITE SAFETY INSPECTIONS

SITE SAFETY INSPECTIONS: GENERAL

- Site Safety Inspections must be performed by a Site Safety Manager or Coordinator
- Site Safety Inspections cannot be independently conducted by an apprentice/trainee, competent person, etc.
- A primary SSM/SSC must be designated for a major building site safety project (on PW2)
- However, the Code does not expect that one, single person to be able to physically perform all required site safety inspection, especially in a larger building

SITE SAFETY INSPECTIONS: DELEGATING SITE SAFETY INSPECTIONS

3310.8.3.2 Enumerated inspections. *The following inspections shall be performed by the site safety manager or coordinator, or by one or more individuals designated by the site safety manager or coordinator and certified as a site safety manager or coordinator in accordance with Chapter 4 of Title 28 of the Administrative Code...*

3310.8.3.3 Delegation. *Nothing in this code shall be read to prohibit the site safety manager from delegating enumerated inspections to an individual certified as a site safety coordinator at a site where a primary site safety manager is required...*

- 2022 Code clarifies that a Site Safety Coordinator can perform site safety inspection at *any* major building, regardless of height or size
- **A Site Safety Coordinator can only be designated as the primary SSM/SSC if the building is less than 15 stories or 200 feet in height and has building footprint of 100,000 square feet or less**
- However, while the designated Site Safety Manager retains ultimate responsibility at a project that 15+ stories/200+ feet in height or 100,000+ square feet in footprint, **the SSM can delegate some or all of the required site safety inspections to one or more SSM/SSCs**

SITE SAFETY INSPECTIONS: SPOT CHECKS

3310.8.3.1 Spot checks. *The safety manager or coordinator shall personally perform spot checks of the site on a regular basis throughout the day for compliance with the site safety plan, the tenant or occupant protection plan, the requirements of this chapter, and any rules promulgated thereunder.*

- 2022 Code requires the SSM/SSC designated as the primary SSM/SSC to perform **spot checks** throughout the day.

- **If the primary SSM/SSC is performing all the daily site safety inspections, the completion of the daily site safety inspections shall be taken as satisfying the requirement to perform spot checks, and no additional checks are required.**
- **However, if the primary SSM/SSC has delegated some or all of the site safety inspections to others, the primary SSM/SSC must perform separate spot checks.**
- In other words, the primary SSM/SSC must still walk the site throughout the day –even if not to the level that would be required to complete all the mandated site safety inspections.
- 2022 Code does not provide specifics on what needs to be checked during a spot check
- Leaves it up to discretion of primary SSM/SSC
- Among other things, spot checks can be used to:
 - Verify delegated inspections are being conducted
 - Keep tabs on areas where critical/complex operations are underway
 - Follow up on areas where violations/problems have occurred
- If the designated primary SSM/SSC is out (sick, vacation, temporarily away from the site), the alternate SSM/SSC who fills in must take responsibility for performing the spot checks

LOGS

LOGS: GENERAL

- **Both the Construction Superintendent and the Site Safety Manager/Coordinator must maintain separate logs:**
 - Construction Superintendent Log (CS)
 - Site Safety Log (SSM/SSC)
 - Permit Log (SSM/SSC)

LOGS: CS TO REVIEW & SIGN SITE SAFETY LOG

3310.8.4.3 Review and signature by the construction superintendent. *Prior to the start of the subsequent work day, the previous day’s entries in the site safety log shall be reviewed by the construction superintendent, and an entry shall be made in the site safety log, signed and dated by the construction superintendent, that he or she has reviewed all of the previous day’s entries.*

- For major building jobs that require a CS, the 2022 Code will require the site safety log to be reviewed prior to the start of the subsequent workday by the CS.
- The CS must sign and date the site safety log to indicate they reviewed all the previous day’s entries
- Site safety inspections and spot checks must be recorded in the site safety log
- Site safety inspections and spot checks must be recorded in the log by the end of the day
- Inspection entries should CLEARLY identify and show whom performed the inspection and when
- Inspection entries need to be signed by the SSM/SSC who performed the inspection.
- The entirety of the log entries for the day needs to be signed and dated by the designated primary SSM/SSC (or the alternate SSM/SSC filling in for that day).

LOGS: RECORDING “BUILDING TOP OFF” DATE IN THE SITE SAFETY LOG

3310.8.4 Site safety log. *A site safety log shall be maintained and kept at the site. The log, or where there is more than one log, the logs in total, shall, at a minimum, contain the following information: ...12. Date when the building is topped off.*

- The 2022 Code adds a new requirement for the date the building is topped off (structurally) to be recorded in the Site Safety Log.
- Separate provisions in the code require the hoist to be brought up to the top of the building within two weeks of topping off
- This entry will serve as evidence for when the that two-week clock began

RELEASE FROM JOB

RELEASE FROM A SITE SAFETY JOB

- The SSM/SSC and the CS can be released from the job once it reaches a substantial level of completion
- The 2022 Code does not make any changes to the release of the SSM/SSC
- The 2022 Code will allow the CS to make the request to DOB to be released from the job once it is substantially complete
 - Presently, this request must come from an RDP
 - The 2022 Code is turning the CS from a **registration** into a **license**
 - CS who make false or inaccurate requests will be subject to discipline; including possible suspension or revocation of their license
- A job is substantially completed when:
 - All exterior work is completed, and structure is permanently enclosed, including windows.
 - All exterior temporary construction equipment (scaffolding, cranes, hoisting equipment, sidewalk shed, etc.) has been removed from site.
 - All roof/setback work is completed.
 - All structural work is completed, including earthwork.
 - All interior shafts (elevator, stair, utility, etc.) are permanently enclosed
 - All required permanent egress is completed.

LICENSING REQUIREMENTS

LICENSING REQUIREMENTS: SSM/SSC LICENSING PATHWAYS

CURRENT EXPERIENCE	SSM	SSC
PE/RA	3 years on major buildings	2 years on major buildings
Certified Safety Professional	3 years on major buildings	2 years on major buildings
SSC	3 years on major buildings	N/A
Concrete Safety Manager	4 years on major buildings	3 years on major buildings
Construction Health & Safety Technician	4 years on major buildings	3 years on major buildings
Construction/Demolition Supervisory Experience	5 years as a supervisor on major buildings	4 years as a supervisor on major buildings
Code Enforcement Official	8 years, 4 years in inspection of major buildings under construction	5 years, 2.5 years in inspection of major buildings under construction
18-month On-the-Job Training Program	18 months on major buildings	N/A
NYS Apprenticeship Program for Site Safety Manager	Successful completion	N/A

NOTE: New pathways in the 2022 Code **in red**.

LICENSING REQUIREMENTS: CS LICENSING PATHWAYS

- DOB is perusing rulemaking to allow an SSM/SSC to hold a dual license as a CS
- A window will be provided this summer and early autumn for SSM/SSCs to apply to become a CS
- More information will be provided to industry in the summer
- Window will close November 6
- Under the 2022 Code (November 7 and beyond), applicants for a Construction Superintendent license will have to possess either:
 - At least three (3) years of experience, within the five (5) years prior to application, serving as a full-time project supervisor with on-site responsibility over the construction or demolition of buildings in the city of New York; or
 - At least five (5) years of experience, within the eight (8) years prior to application, serving as a full-time project supervisor with on-site responsibility over the construction or demolition of buildings in the United States.

2022 NYC Construction Codes Overview:

Underpinnings & Geotechnical Peer Review

Chapter 18 Soils & Foundations

Chapter 33 Safeguards During Construction & Demolition

Updates to Chapter 18 Soils & Foundations

- BC 1803.5** Alternative Investigative Methods
- BC 1803.6** Geotechnical Reports
- BC 1811.7** Structural Steel Piles
- BC 1812** Cast-in-Place Concrete Piles
- BC 1815** Permanent Prestressed Rock and Soil Anchors
- BC 1817** Underpinning and Alternate Methods of Support of Buildings and Adjacent Property
- BC 1818** Geotechnical Peer Review

1803.5.2 | Alternative Investigative Methods

- Revised quantity of alternative investigation methods – more for economy of subsurface investigation
- **Cone penetrometer testing (CPT) now permitted as an “as of right”**
- **CPTs may replace borings on a one to one (1:1) basis, but in no case shall there be fewer than half the required standard borings and no less than two standard borings**
 - *NOTE: 2014 Code; 1.5 CPT's could replace 1 boring*
- Will ease need for CCD1s by accepting an already established and recognized technology

1803.6 | Geotechnical Reports

- Previously, **geotechnical reports were only required to be submitted to the Department under certain conditions**
- With this revision, **a geotechnical report shall be prepared and submitted to the Department for all sites except some 1- and 2-family homes**
- **Geotechnical reports are required for 1- and 2-family homes where underpinning or dewatering is required or where the property falls in the special flood hazard area**

1803.6.1 Information required in geotechnical reports

The report shall include the foundation system shown on the drawings submitted to the department. The report is required to comply with the following **new requirements**:

- **Base Flood Elevation (BFE) and Design Flood Elevation (DFE)** clearly shown
- **Soil stiffness parameters** for design of the foundations
- Foundation type and design criteria: **mapped spectral response accelerations (SS and S1); site class; spectral response coefficients (SDS and SD1)**
- Design **lateral earth pressures on foundation walls and other retaining walls**
- **Recommendations for the evaluation of adjacent properties** potentially impacted by the proposed construction

- **Where dewatering required, recommendations for the maximum permissible drawdown** outside the site
- for permanent prestressed rock and soil anchor reports
- Soil and rock parameters to be used to determine the safe slope of temporary excavations

1811.7 | Structural Steel Piles

1811.7.1.1 Structural steel pipe piles to be welded

- Requirements for high strength steel (Mill Secondary) pipe ordinarily utilized in deep foundation construction
- Provisions for carbon equivalency and sulfur content to aid assurance of welding suitability
- Requirements for welding and high strength pipe consistent with those employed by AASHTO for micropiles

1811.7.1.2 High strength pipe

- Clarity on current market practice and ensures required testing
- High strength pipe meeting the strength requirements of API Specification 5L (X80) and API Specification 5CT (N80) permitted for use as structural steel pipe piles.
- All such pile and casing shall meet the minimum requirements of ASTM A252 Grade 3
- Mill certificates shall be provided. Where not available, a minimum of 2 tests per 1,000 lineal feet of pipe or part thereof shall be performed. Testing procedures shall meet the requirements as set forth in Section 18 of ASTM A252
- Welding shall be in accordance with Section 1811.7.1.1. In addition, where welded splices are used, they shall be complete joint penetration welds. Reinforcing steel shall not be welded to high strength pipe.

1812 | Cast-in-Place Concrete Piles

New requirements for concrete sampling and testing in accordance with BC Chapter 19

Grout Sampling & Testing

- Samples shall be collected, and testing shall be performed for the lesser of the following conditions:
 - Each element installed
 - Each batch of site-mixed grout, or
 - Each load of ready-mixed grout used
- Compressive strength tests shall be performed using cylinders of < 3 inches
- Grout tested in according with ASTM C39
- Minimum of 6 samples prepared for each test group
- Specific gravity testing shall be performed using the API Recommended Practice 13B-1 or ASTM C138

1812.3 Drilled, Drilled Displacement, or Augered Uncased Piles

- **1812.3.2 Dimensions**

- Minimum diameter of drilled, displacement piles shall be 8 inches, and for augered uncased pile the minimum diameter shall be 12 inches
- **1812.3.3 Installation**
 - Insert steel liner where shafts for drilled piles are formed through unstable soils and concrete is placed in an open-drilled hole
 - Maintain level of concrete above bottom of liner at sufficient height where steel line is withdrawn during concreting (to offset hydrostatic or lateral soil pressure)
 - Where drilled displacement piles are used, auger segments shall be installed with both a vertical force and torque such that the soil is displaced laterally. Fill void created with grout or concrete

1815 | Permanent Prestressed Rock and Soil Anchors

1815.2 Additional geotechnical investigation and report

- Suitable anchor types and capacities
- Suitable center-to-center spacing
- Minimum unbonded and bonded lengths
- The effects of groundwater or voids
- Installation procedures
- Load test requirements
- Durability of anchor materials
- Lock-off & lift-off load requirements
- Reductions for group action
- Protection of adjacent structures

1815.3 Special inspection

The installation and testing of prestressed rock and soil anchors shall be subject to special inspection in accordance with the requirements of Section 1704.9

1817 | UNDERPINNING & ALTERNATE METHODS OF SUPPORT OF BUILDINGS & ADJACENT PROPERTY

OVERVIEW: Where proposed work may create a disturbance, an engineer shall evaluate the need for and methods to maintain the stability and integrity of the building(s), utilities or soil adjacent to the area of work. Building code revisions clarify specific parameters for evaluation and report creation.

The **GOAL** of the code revisions is ensuring that **sufficient investigation shall be performed to ensure that proposed buildings, alterations, and foundation systems align with existing conditions.**

1817.2 MINIMUM REQUIREMENTS FOR UNDERDEVELOPED ADJACENT PROPERTY

Minimum requirements for construction documentation of adjacent empty lots, court yards, front yards, or rear yards:

- Existing grade of the adjacent property

- Plans, cross-sections, and elevations showing:
 - Subsurface conditions
 - Surcharge loading
 - The proposed method of support
 - Sequence of construction
 - Required material properties
- Details and criteria for monitoring
 - Thresholds for movements
 - Dewatering
 - Elevation of the water table
 - Maximum permissible drawdown outside of the project site

1817.3 EVALUATION OF ADJACENT BUILDINGS FOR SUITABLE METHOD OF SUPPORT [MOS]

- At the time of foundation plan approval, an engineer shall submit an evaluation report assessing the condition of the existing building and the subsurface conditions of the construction site and adjacent property
- The report shall also identify acceptable method(s) of support, including underpinning or alternate methods of support, for the building
 - **1817.3.1 Assessment of the building and the subsurface conditions**
 - Assessment shall be based on:
 - Visual observations
 - Calculations
 - Review of the geotechnical report
 - Review of other available documentation
 - An evaluation of the vertical and lateral load path of the building as it related to the location of the proposed underpinning
 - Calculations of the loads at the foundations to be underpinned
 - Type and condition of elements to be supported or potentially affected
 - A survey of deviations from the plumb or horizontal position of the building
 - Identification of conspicuous structural defects:
 - Bowing
 - Significant cracking
 - Structural degradation
 - Unusual slenderness
 - A determination of acceptable thresholds for maximum vertical and lateral movement, maximum permissible vibrations, the required monitoring, the protocols for exceedances, and foundation elements to be supported by the work
 - A determination of the type and condition of the foundation elements to be supported or potentially affected by the work
 - A test pit at each substantial change in foundation type to provide:
 - A description of the construction materials and condition of the footing
 - The bottom elevations of the wall(s) and/or footing(s)

- The classification of the soil or rock the foundation bears upon
 - Photographs and sketches the test pit
- Allowable bearing pressure the existing foundation(s)
- Potential reductions to the allowable bearing pressure to the proposed excavation
- The pressures that will presented on the proposed underpinning or MOS [method of support]
 - Earth, wind, surcharge
- An analysis of potential effect of the subsurface conditions:
 - High water table and need for dewatering
 - Loose soils
 - Potentially running soil
 - Presence of boulders
- Allowable bearing pressure of the soils supporting the underpinning
- The anticipated settlement during soil and foundation work
- **1817.3.2 Condition of rubble foundation elements**
 - Investigate the condition of the rubble foundation
- **1817.3.3 Additional requirements for unreinforced masonry buildings**
 - Where the building being supported is of unreinforced masonry construction, the lateral stability of the masonry walls and their ability to resist the loads imposed shall be verified
EXCEPTION: If not possible to verify the lateral stability, lateral support shall be provided at the floor levels of the adjacent building prior to the installation of underpinning.
- **1817.3.5 Evaluation report**
 - Specifies the content of the evaluation report to be filed
 - Summary of the assessments required to performed
 - Statement of what methods of support are acceptable given the assessed conditions
- **1817.3.6 Responsibility for the report**
 - Specifies the party responsible for the evaluation report and the methodology for relying on the work and judgment of additional engineers

1817.5 DESIGN REQUIREMENTS

- **1817.5.1 New construction**
 - Materials and design in accordance with this Code
- **1817.5.2 Incorporation of the evaluation report**
 - The design shall incorporate the findings of the evaluation. If the evaluation report did not conclusively demonstrate the suitability such method of support shall not be used
- **1817.5.3 Deviations from the evaluation report**
 - The engineer designing the MOS may be an engineer other than the engineer who submitted the evaluation report
 - If the engineer designing the MOS does not accept the evaluation report or finds it insufficient, a new evaluation report shall be submitted

- If a different MOS is proposed for use (other than as provided for in the evaluation report), an additional evaluation report shall be submitted (along with the construction documents for the design of the proposed method of support)
- **1817.5.4.1 Loads from the existing building**
 - Loads and load combinations shall be computed in accordance with Chapter 16 or where permitted for loads of Prior Codes for Prior Code buildings
- **1817.5.4.1.1 Unconfirmed load path**
 - Where the evaluation is unable to visually confirm the load path from the existing building, pit-pier underpinning where all horizontal loads are transferred directly to a raker or tension anchor bracing system that braces every pit-pier is permissible
EXCEPTION: Raker-bracing or tension anchors need not be installed where the underpinning system, analyzed as a retaining wall that supports the soil and water behind it, has satisfactory bearing pressures and is stable. This exception is not applicable for URM (unreinforced masonry) in which access to verify the lateral stability of masonry walls was not performed
- **1817.5.4.2 Soil and water pressures**
 - The design shall include at rest soil pressures, water pressures, and any surcharge pressures
- **1817.5.5 Anticipated deflection**
 - A calculation shall be performed for the anticipated deflection of the method of support system and its effect on the supported building
- **1817.5.6 Factor of safety**
 - Methods of support shall provide a minimum factor of safety of 1.5 for sliding and overturning for all loads and all anticipated interim conditions
- **1817.5.7 Sequence**
 - The design of the method of the support shall account for the means methods of installation, sequence of operations, and all the load transfers and associated support conditions for all phases of the work

1817.6 MINIMUM DESIGN REQUIREMENTS FOR CONSTRUCTION DOCUMENTS

- Type of adjacent foundations
- Bearing elevation(s) soil classification
- Top and bottom of deep foundation elements
- Elevations of all floor levels at grade and below
- Plans, cross-sections, and elevations views as necessary
- Details for monitoring
- Design of the method of support including bracing
- A step-b-step procedure describing the installation of the support
- The elevation of the water table, need for dewatering, etc.
- A load table/diagram indicating total gravity and lateral load in underpinning piers or alternate method of support

1817.7 ADDITIONAL REQUIREMENTS FOR PIT-PIER UNDERPINNING

When the method of support selected is pit-pier underpinning, the design shall meet certain minimum criteria:

- After installation, the approach pit shall be back filled
- The site excavation should not expose more than 1/3 of the total height of a pit-pier, unless:
 - A pit-pier bracing system design by the engineer is installed
 - The calculated capacity of the individual pit-pier to resist lateral loading at a greater depth is identified on the drawings
- Pit-piers shall be preloaded by wedging, use of permanent jacks, etc.
- Voids between the bottom of the foundation and the top of the pit-pier shall be filled with dry-pack
- The need for jacking shall be determined by the engineer responsible for the underpinning design
- Width of pit-piers shall not exceed 4 feet
- Shear transfer shall be designated and installed between adjacent pit-piers
- Bottom of pit-pier elevation shall be a minimum of 1 foot below the bottom of the future adjacent excavation

Pit-pier excavation is subject to several additional requirements:

- Excavation shall be performed using handheld tools
- Clear distance between open pits shall be determined by the evaluation report and shall not be < 12 feet
- Lagging boards installed as the excavation proceeds to limit soil loss
- Backpacking of any voids shall be performed at each excavation lift
- Pit excavation shall not proceed below the water table
- Where construction requires adjacent pits to be excavated to differing depths, the deeper pit-pier shall be constructed first
- Where multi-tier pit-pier underpinning is utilized, upper piers shall be braced prior to the excavation of the lower pier
- When tension anchors are utilized, design must account for effects of vertical and horizontal force components

1817.8 ADDITIONAL REQUIREMENTS FOR DEEP FOUNDATION ELEMENTS USED IN UNDERPINNING

Where the method of support includes deep foundation systems such as pile supported underpinning or tie anchors, several requirements shall be met related to:

- Pile design
- Load testing
- Eccentric pile loads
- Spanning between piles
- Piles used as excavation support elements

1817.9 MONITORING

- Adjacent structures and properties shall be monitored in accordance with a plan prepared by the engineer:
 - **Scope of the monitoring program**
 - **Location and type of the instruments**
 - **Frequency and duration of readings and reporting**
 - **Maximum allowable time to report readings (timely report)**
 - **Reporting requirements**
 - **Permissible movement and vibration criteria**
- Take into account buildings or property to be monitored and its conditions
- Address exceedances
- Notifying the Commissioner
- Where a building is subject to underpinning, the monitoring plan shall be determined by the engineer

1817.10 SPECIAL INSPECTION

Special inspection for underpinning shall be conducted in accordance with BC Chapter 17

- **1704.20.3** Underpinning
- **1704.20.3.1** New foundations
 - *In addition to the special inspection for structural stability, any new foundations elements installed as part of the underpinning operations shall be subject special inspection as a permanent installation*
- **1704.20.6** Inspection program
- **1704.20.7** Design documents
- **1704.20.8** Inspection during construction operations
- **1704.20.9** Records of special inspections
- **1704.20.10** Special requirements for work in occupied multiple dwellings

1818 | Geotechnical Peer Review

1818.2 WHERE REQUIRED

- As per **BC Section 1617** Structural Peer Review
- Structures of Occupancy Category III or IV where the Seismic site is classified as Site Class F
- Performance based foundation design is utilized
- If required by the Commissioner

1818.3 GEOTECHNICAL PEER REVIEW QUALIFICATIONS

- Qualified independent geotechnical engineer who has been retained by or on behalf of the owner

1818.4.1 SCOPE

- Review the plans and specifications submitted with the permit application for general compliance with the foundation design provisions of this Code

1818.5 GEOTECHNICAL PEER REVIEW REPORT

- The reviewing engineer shall submit a report stating that the geotechnical design shown on the plans, reports and specifications generally conforms to the requirements of this Code
- Need not be submitted concurrently with the structural peer review report

1818.6 RESPONSIBILITY

- The engineer of record for the foundation design shall retain sole responsibility for the geotechnical design
- The geotechnical peer reviewer’s report states an opinion regarding the design by the engineer of record for the foundation design
- Geotechnical peer reviewer is not responsible for the accuracy of the subsurface investigation data or the conclusions of the structural peer review reports
- When revisions to the design are made, the engineer of record for the foundation design must indicate that a new review is required

Updates to Chapter 33 Safeguards During Construction or Demolition

BC 3304.4.1 | Support of Excavation

- The sides of all excavations, including rock faces and soil slopes, must be supported by means of sheeting, shoring, bracing, sloping, benching, or other retaining structures or bracing systems required to support the excavation face or foundation work before permanent supports are provided
- Creating the general duty to support excavations in all cases
- The section today only requires protection if the excavation is 5 feet or deeper
- Added prescriptive requirements that are worked into the design requirements and revised to avoid conflict with OSHA requirements

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BC Chapter 7: Fire & Smoke Protection Features

BC CHAPTER 9: FIRE PROTECTION SYSTEMS

BC 903 CHANGES TO SPRINKLER SYSTEMS REQUIREMENTS

BC 903.2.1.6 Assembly occupancies on roofs.

Assembly occupancies on roofs. Where an occupied roof has an assembly occupancy with an occupant load exceeding 100 for Group A-2 and 300 for other Group A occupancies, all floors between the occupied roof and the level of exit discharge shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

EXCEPTION: Open parking garages of Type I or Type II construction.

- This **new requirement**, based on IBC, adds continuous sprinkler protection along the exit path from all Assembly Occupancy Roofs to the Level of Exit Discharge.

BC 903.2.1.7 Multiple fire areas.

Multiple fire areas. An automatic sprinkler system shall be provided where multiple fire areas of Group A-1, A-2, A-3, or A-4 occupancies share exit or exit access components and the combined occupant load of these fire areas is 300 or more.

- This **new section** requires additional sprinkler protection along the shared common egress paths of multiple fire area in certain assembly occupancies.

BC 903.2.2.1 Ambulatory healthcare facilities.

Ambulatory health care facilities. An automatic sprinkler system shall be installed throughout all fire areas containing a Group B ambulatory health care facility occupancy. In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor where such care is provided as well as all floors below, and all floors between the level of ambulatory care and the nearest level of exit discharge, including the level of exit discharge.

- This **new text**, based on IBC, requires sprinklers to be throughout an entire floor if an Occupancy Group B Ambulatory Care Facility is located on any part of such floor
- In addition, continuous sprinkler coverage is now required between the ambulatory care facility and the level of exit discharge.

BC 903.2.3 Group E (Educational).

Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

*1. Throughout all Group E fire areas greater than **12,000 square feet in area**.*

- As required for increased safety, this **section has been modified** to lower the square footage threshold for sprinklers in Group E occupancies (**previously 20,000 square feet** per 2014 BC).

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BC 903.2.4 Group F (Factory).

*Group F. An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy where any one of the following conditions exists: ... 5. **Where a Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet.***

- This **new requirement** was added to increase safety in occupancy Group F (factory) facilities with upholstered furniture or mattresses, which are potentially highly flammable products.

BC 903.2.6 Group I (Institutional).

Group I. An automatic sprinkler system shall be provided in Group I occupancies. An automatic sprinkler system shall be installed throughout buildings with a main use or dominant occupancy of Group I.

EXCEPTIONS:

- *An automatic sprinkler system installed in accordance with Section 903.3.1.2 or 903.3.1.3 shall be allowed in Group I-1 facilities if located in an I-1 occupancy building or a residential building, provided such building is six stories or less in height.*
- ***An automatic sprinkler system is not required where Group I-4 daycare facilities are at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door.***
- *In buildings where Group I-4 daycare is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the level of exit discharge, and all floors below the level of exit discharge other than areas classified as an open parking garage.*

- Two **additional exceptions**, regarding sprinkler coverage of I-4 daycare facilities, were added.

BC 903.2.7 Group M (Mercantile).

*Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists: ... **A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet***

- This **new requirement** was added to increase safety in occupancy Group M (retail) facilities with upholstered furniture or mattresses, which are potentially highly flammable products.

BC 903.2.9 Group S-1 (Moderate Hazard Storage).

Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where any one of the following conditions exists: ...

- ***5. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet.***
- *6. A Group S-1 occupancy **used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet.***

- Item 5 is a **new requirement** that was added to increase safety in Occupancy Group S-1 (storage) facilities with stored commercial vehicles, which are potentially highly flammable.

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- Item 6 is a **new requirement** that was added to increase safety in Occupancy Group S-1 (storage) facilities with upholstered furniture or mattresses, which are potentially highly flammable products.

BC 903.2.9.3 High-piled storage (S-1).

High-piled storage. An automatic sprinkler system shall be provided in accordance with the New York City Fire Code in all buildings or portions thereof in Group S-1 occupancies where the storage of merchandise is in high-piled or rack storage arrays.

BC 903.2.10.4 High-piled storage (S-2).

High-piled storage. An automatic sprinkler system shall be provided in all buildings or portions thereof of Group S-2 occupancies in accordance with the New York City Fire Code.

- New sections** that explicitly call out FDNY Fire Code requirements for automatic sprinkler system requirements with high-piled storage and **expands on previous NFPA sprinkler system requirements** regarding high-piled storage.

BC 903.2.13 Type IV Construction with CLT or SCL.

Type IV construction with cross-laminated timber (CLT) or structural composite lumber (SCL). Automatic sprinkler systems in accordance with NFPA 13 shall be required throughout buildings utilizing Type IV construction with CLT or SCL as follows: 1. In all occupancies where the building is more than three stories above grade plane. 2. In Group B occupancies, where a floor exceeds 28,500 square feet.

- SCL and CLT materials are now allowed.** As a result, this section was added to address such materials and mandate that a sprinkler system be provided in accordance with NFPA 13

BC 903.3.3.1.1.1 Exempt locations protected by other means.

Exempt locations protected by other means. When approved by the Fire Department, automatic sprinklers shall not be required in the following: ... Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008.

- This **section added** that, **subject to FDNY approval (LNO)**, automatic sprinklers shall not be required in machine rooms, machinery spaces, control rooms and control spaces, when such rooms/spaces are associated with occupant evacuation elevators

BC 903.3.3.1.2.2 Exempt locations protected by other means.

Open-ended corridors. [When applying NFPA 13R,] sprinkler protection and freeze protection shall be provided in open-ended corridors and associated exterior stairways and ramps as specified in Section 1027.6, Exception 3.

- This **section coordinates with 2022 BC 1027.6, Exception 3** and adds sprinkler and freeze protection requirements for open-ended corridors, i.e., corridors exposed to outside environment.

BC 903.3.2 Quick-response and residential sprinklers.



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*Quick-response and residential sprinklers. Where automatic sprinkler systems are required by this Code, **quick-response or residential automatic sprinklers shall be installed in all of the following areas** in accordance with Section 903.3.1 and their listings:*

- Throughout **all spaces within a smoke compartment containing care recipient sleeping units** in Group I-2 in accordance with this Code.
- Throughout **all spaces within a smoke compartment containing treatment rooms in ambulatory care facilities.**
- **Dwelling units and sleeping units** in Group I-1 and R occupancies.
- **Light-hazard occupancies** as defined in NFPA.

- This section adds a **new requirement** for **quick response and residential type sprinklers in treatment rooms in ambulatory care facilities and sleeping units** in Group I-2 and R occupancies.

BC 903.3.8 Limited area sprinkler systems (tapped off of domestic water line).

Limited area sprinkler systems. Limited area sprinkler systems shall be in accordance with the standards listed in Section 903.3.1 except as provided in Sections 903.3.8.1 through 903.3.8.5.

903.3.8.1 Number of sprinklers.

Number of sprinklers. Limited area sprinkler systems shall not exceed six sprinklers in any single fire area.

- This **section reduces the number of sprinkler heads** for limited area sprinkler systems, i.e., **those sprinkler systems tapped-off of domestic water lines.**
- **Reduction of sprinkler count from 20 to 6** aligns with IBC; R-3 construction will utilize NFPA 13D sprinkler requirements.

BC 904 CHANGES TO ALTERNATIVE AUTOMATIC FIRE-EXINGUISHING SYSTEMS REQUIREMENTS

904.3.2 Actuation.

Actuation. Automatic fire-extinguishing systems shall be automatically actuated and provided with a manual means of actuation in accordance with Section 904.12.1. Where more than one hazard could be simultaneously involved in fire due to their proximity, all hazards shall be protected by a single system designed to protect all hazards that could become involved.

EXCEPTION: Multiple systems shall be permitted to be installed if they are designed to operate simultaneously.

- Multiple fire hazards must be protected by a common fire protection system
- **New Alternative** added to allow multiple systems to operate simultaneously.

904.11 Automatic water mist systems.

*Automatic water mist systems. Automatic **water mist systems** shall be permitted in applications that are consistent with the applicable listing or approvals and **shall comply with Sections 904.11.1 through 904.11.3.***

- This **section was modified** by adding additional subsections to explain the following requirements:
 - **Automatic activation**
 - **System Monitoring, associated alarms, controls and control valves**

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- **Water supply; and**
- **Testing, maintenance, and operation in accordance with NYC FC**
- Based on IBC Sections 904.11 through 904.11.3 relating to automatic water mist systems

904.12 Automatic fire-extinguishing systems.

...Only automatic fire-extinguishing systems of the following types shall be installed in accordance with the New York City Fire Code: 1. Foam water sprinkler system or foam water spray systems. 2. Wet-chemical extinguishing systems...

Automatic sprinkler systems, dry-chemical fire-extinguishing systems, and carbon dioxide fire-extinguishing systems shall not be installed to protect commercial cooking equipment and exhaust systems.

- This section was modified to align with Fire Code
- **Eliminates use of CO2 systems in commercial cooking areas.**
- Clarifies which fire protection systems are not permissible to protect commercial kitchen range hoods.

904.13 Domestic cooking systems in Group I-2.

Domestic cooking systems in Group I-2. In Group I-2 occupancies where cooking facilities are installed in accordance with Section 407.2.6 of this code, the domestic cooking hood provided over the cooktop or range shall be equipped with an automatic fire-extinguishing system of a type recognized for protection of domestic cooking equipment. Pre-engineered automatic extinguishing systems shall be tested in accordance with UL 300A and listed and labeled for the intended application. The system shall be installed in accordance with this code, its listing and the manufacturer’s instructions.

904.13.1 Manual system operation and interconnection.

Manual system operation and interconnection. Manual actuation and system interconnection for the hood suppression system shall be installed in accordance with Sections 904.12.1 and 904.12.2, respectively.

904.13.2 Portable fire extinguishers for domestic cooking equipment in Group I-2.

Portable fire extinguishers for domestic cooking equipment in Group I-2. A portable fire extinguisher complying with Section 906 shall be installed within a 30-foot (9144 mm) distance of travel from domestic cooking appliances.

- **New section** clarifies use of domestic cooking equipment in Occupancy Group I-2 facilities (nursing-homes and assisted-living facilities).

BC 913 CHANGES TO STANDPIPE SYSTEM REQUIREMENTS

905.3.8 Rooftop gardens, landscaped roofs, and green roofs.

Rooftop gardens, landscaped roofs, and green roofs. Buildings with a rooftop garden, landscaped roof, green roof, or roof used for any purpose other than weather protection or maintenance that are equipped with a standpipe system shall extend the standpipe system to the roof level on which the rooftop garden, landscaped roof, green roof, or roof used for any purpose other than weather protection or maintenance is located.

- **New section** added to ensure protection of all roofs that have an additional purpose beyond weather protection and maintenance, i.e., rooftop gardens and green roofs

905.3.9 High-piled stock or rack storage.

High-piled stock or rack storage. Where exit passageways are required [extending from interior stair to exit discharge] in accordance with Chapter 10 of this Code, a standpipe system shall be provided in accordance with the New York City Fire Code in all buildings containing high-piled stock or rack storage.

- This **added Code section** explicitly describes standpipe requirements for high-piled storage where exit passageways are present and refers to additional Fire Code requirements.

905.4 Location of Class I standpipe hose connections.

Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations: ... 7. In any staircase where the change in elevation between floor landings is more than 25 feet (7620 mm), in addition to the hose connections required by Item 1, a hose connection shall be installed at the first intermediate stair landing below the higher floor level.

- **New Requirement** - Item #7 added to increase quantity of locations of Class I standpipe hose connections, thereby increasing building safety.

905.6 Location of Class III standpipe hose connections.

Location of Class III standpipe hose connections. Class III standpipe systems shall have 2½-inch (63.5 mm) hose connections located as required for Class I standpipes in Section 905.4. At each hose connection, there shall be a hose station. The hose stations shall be equipped with a minimum of 125 feet (38 100 mm) but not more than a maximum of 150 feet (45 720 mm) of 1½-inch (38.1 mm) fire hose connected to an adjustable fog nozzle. The hose shall be attached to the 2½-inch (63.5 mm) hose connection by a 2½-inch (63.5 mm) by 1½-inch (38.1 mm) non-swivel reducing coupling. The hose shall be mounted on a rack and may be located in a cabinet, in accordance with Section 905.7. A pressure restricting device shall be installed when required by NFPA 14. Such pressure restricting device and reducing coupling shall be installed in such a manner that they are readily removable by the Fire Department

- This **section was modified** to provide a **more detailed description of Class III standpipe hose connections.**
- Pressure Restricting Devices must all be readily removable by FDNY

905.7.1 Cabinet equipment identification.

Cabinet equipment identification. Cabinets shall be identified in an approved manner by a permanently attached sign with white letters not less than 2 inches (50.8 mm) high and a red background color, indicating the equipment contained therein.

EXCEPTIONS: 1. Doors not large enough to accommodate a written sign with 2-inch lettering shall be marked with a permanently attached pictogram indicating the equipment contained therein, in addition to corresponding smaller white lettering on a red background adjacent to such pictogram.

- **New requirement** provides identification requirements for small fire protection equipment cabinets and associated doors.



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BC 907 CHANGES TO FIRE ALARM SYSTEM REQUIREMENTS

907.2.3 A manual and automatic fire alarm system shall be installed in Group E occupancies.

A manual and automatic fire alarm system shall be installed in Group E occupancies. An emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E occupancies.

EXCEPTION: Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies **with occupant loads of 100 or less, provided that activation of the manual and automatic fire alarm system initiates an approved occupant notification signal in accordance with Section 907.5.**

- **One-way voice communication is now required for all Group E (Education) occupancies with cumulative occupant loads greater than 100 persons.**

907.2.9 Group R-2.

Group R-2. A fire alarm system without alarm notification appliances and smoke alarms shall be installed in accordance with this section in Group R-2 occupancies, other than student apartments, where such occupancy satisfies any one of the following conditions:

1. Any dwelling unit is located three or more stories above the lowest level of exit discharge, including dwelling units in penthouses of any area;
2. Any dwelling unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit; or
3. The building contains more than 16 dwelling units. Actuation of smoke detectors shall not initiate a signal to alarm notification appliances. The activation of any detector required by this section shall initiate a signal at a central station or a constantly attended location.

Smoke detectors shall be located as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room.
2. In air distribution systems in accordance with Section 606 of the New York City Mechanical Code.
3. In elevator machine rooms and in elevator lobbies

- **Revised section** now mandates, regardless of square footage, that smoke detection is provided in mechanical equipment, electrical transformer, telephone equipment or similar rooms. Previous 2014 Code had a square foot minimum requirement which is eliminated.

907.2.10 Group S.

Group S. A manual and automatic fire alarm system shall be installed in Group S occupancies where any one of the following conditions exists:

1. Group S fire area has an occupant load of 300 occupants or more;
2. The combined occupant load of all Group S fire areas on all floors, including mezzanines, is 300 or more.

907.2.10.1 Large area buildings.

Group S occupancies having a total gross area exceeding 500,000 square feet located in buildings, where the highest occupied floor is 75 feet or less above the lowest level of Fire Department vehicle access, shall be provided with automatic smoke detection connected to an automatic fire alarm system in accordance with Section

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907.2.13.1 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2 that initiates a total evacuation signal.

- **New Requirement:** A fire alarm system is now required in Group S (storage) occupancies if such occupancy fire area has an occupant load of 300 persons or more. Regardless of occupant load, if the Group S occupancy has a total gross area exceeding 500,000 square feet, then a high-rise type of fire alarm system including voice communication is required.

907.2.12 Special amusement buildings.

An automatic smoke detection system shall be provided in special amusement buildings in accordance with Sections 907.2.12.1 through 907.2.12.3.

EXCEPTION: *In areas where ambient conditions will cause a smoke detection system to alarm, an approved alternative type of automatic detector shall be installed.*

907.2.12.1 Alarm.

Alarm. Actuation of a single smoke detector, automatic sprinkler system or other automatic fire detection system shall initiate a pre-signal system in accordance with NFPA 72 at a constantly attended location from which the Fire Department shall be notified, and live voice evacuation instructions shall be initiated using an emergency voice/alarm communications system in accordance with Section 907.5.2.2.

- **Clarification:** Coordinated with Fire Code Requirements.
- **Only persons with FDNY issued Certificates of Fitness are allowed to make live voice evacuation instructions.** Pre-recorded announcements are not permitted

907.3.1 Duct smoke detectors.

Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is required by Section 907.2. Activation of a duct smoke detector shall initiate a visible and audible alarm signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the New York City Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

ALARM SIGNAL. *A signal indicating an emergency requiring immediate action, such as a signal indicative of fire*
SUPERVISORY SIGNAL. *A signal indicating the need for action in connection with the supervision of guard tours, fire suppression systems or equipment, fire alarm systems, or the maintenance features of related systems.*

- **Modified Requirement:** New Duct Detectors must now report as an alarm signal at the fire alarm control panel (FACP), which then activates the FDNY approved central station triggering a response from FDNY.
- In 2014 BC duct detectors had the option of reporting at FACP as either a supervisory or alarm signal. This option is now eliminated.

907.5.2.2.4 Emergency voice alarm communication captions.

Where stadiums, arenas and grandstands provide audible public announcements, the emergency/voice alarm communication system shall be captioned. Emergency captions shall be approved by the Fire Department.

- **Modified Requirement:** This section modifies requirement of emergency captions for public announcements in stadiums, arenas, etc. Coordinated with BC 1108.2.7.3 (Accessibility)

BC 909 CHANGES TO SMOKE CONTROL SYSTEMS REQUIREMENTS

909.4.7 Smoke control system interaction.

Smoke control system interaction. The design shall consider the interaction effects of the operation of multiple smoke control systems for all design scenarios.

- **New section added to advise designers to consider the possibility of different scenarios for activation of multiple smoke control systems**, and their impact on efficient and effective smoke removal. For example, the interaction between the smoke control systems relevant to elevator pressurization, stairway pressurization, and an atrium within the building needs to be analyzed.

909.5.3 Opening protection.

Opening protection. Openings in smoke barriers shall be protected by automatic-closing devices actuated by the required controls for the mechanical smoke control system. Door openings shall be protected by fire door assemblies complying with Section 716.5.3.

EXCEPTIONS:

...3. In Group I-1, Group I-2, and Group B ambulatory care facilities, where a pair of opposite-swinging doors are installed across a corridor in accordance with Section 909.5.3.1, the doors shall not be required to be protected in accordance with Section 716. The doors shall be close-fitting within operational tolerances and shall not have a center mullion, louvers, grilles, or door undercuts in excess of 3/4 inch (19.1 mm). The doors shall have head and jamb stops and astragals or rabbets at meeting edges. If allowed by the door manufacturer's listing, positive-latching devices are not required.

4. In Group I-1, Group I-2 and Group B ambulatory care facilities, where such doors are special-purpose horizontal sliding, accordion or folding door assemblies installed in accordance with Section 1010.1.4.3 and are automatic closing by smoke detection in accordance with Section 716.5.9.3.

909.5.3.1 Group I-2 and Group B ambulatory care facilities.

In Group I-2 and Group B ambulatory care facilities, where doors are installed across a corridor, the doors shall be automatic closing by smoke detection in accordance with Section 716.5.9.3 and shall have a vision panel with fire protection-rated glazing materials in fire protection-rated frames, the area of which shall not exceed that tested.

- This **section clarified** to require that all “doors” in the fire barriers be “fire door assemblies.”
- However, there are exceptions. Per modified Exception #3, such opening protection is now also not needed in Occupancy Group I-1, and Occupancy Group B Ambulatory Care Facilities.
- However, a pair of opposite-swinging doors must be installed across a corridor in accordance specific specifications provided in this exception and Section 909.5.3.1
- **New Exception #4 added to allow, as an alternate to such opening protection, special purpose doors (horizontal sliding, accordion, etc.) that are automatic closing by smoke detection** provided sections 1010.1.4.3 and 716.5.9.3 are also applied.

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- Where doors in such facilities are installed across a corridor. **The code requires such doors to automatically close by activated smoke detector and have fire rated vision panels.**

909.6.3 Pressurized stairways and elevator hoistways.

Pressurized stairways and elevator hoistways. Where stairways or elevator hoistways are pressurized, such pressurization systems shall comply with Section 909 of this code as smoke control systems, in addition to the requirements of Sections 909.20 and 909.21 of this code and the New York City Fire Code.

- **New section** coordinates with 2022 BC Sections 909.20 (Smokeproof Enclosures), 909.21 (Alternate to Elevator Hoistway Pressurization) and the NYC Fire Code

909.11.1 Standby power equipment room.

*Equipment room. The standby power source shall be located in a room separate from the normal power transformers and switch gears and ventilated directly to and from the exterior. **The room shall be enclosed with not less than 2-hour fire barriers constructed in accordance with Section 707, or with not less than 2-hour fire-resistance-rated horizontal assemblies constructed in accordance with Section 711, or both.***

- **New section** consistent with revisions to 2022 MC 513
- Increases fire resistance rating of separate Standby Generator Room to 2 hours

909.21 Elevator hoistway pressurization alternative.

Elevator hoistway pressurization alternative. Where elevator hoistway pressurization is provided in lieu of required enclosed elevator lobbies, the pressurization system shall comply with Sections 909.21.1 through 909.21.11.

909.21.6 Activation of pressurization system.

*Activation of pressurization system. **The elevator pressurization system shall be activated upon activation of either the building fire alarm system or the elevator landing smoke detectors. Where both a building fire alarm system and elevator landing smoke detectors are present, each shall be independently capable of activating the pressurization system.***

- **New section** and its subsections clarify and expand requirements for hoistway pressurization, when used as alternative to enclosed (fire rated & smokeproof) elevator lobbies
- Based on IBC
- Clarifies requirements for activation of pressurization systems serving elevator hoistways
- In general, tall buildings require longer evacuation times and deploy many methods for mitigating the transmission of smoke to maintain a tenable environment for evacuation purposes.
- One method is elevator shaft pressurization, which prevents smoke migration from a fire.
- Such hoistway's elevator is a possible means of egress for occupants with accessibility needs, who may not be able to safely use the stairwells

BC 910 CHANGES TO SMOKE & HEAT OR MECH. SMOKE REMOVAL SYSTEMS REQUIREMENTS

This section modifies requirements of emergency captions for public announcements in stadiums, arenas, etc. Coordinated with BC 1108.2.7.3 (Accessibility)

910.1 Smoke and heat removal. General.

General. Where required by this Code, smoke and heat vents or mechanical smoke removal systems shall conform to the requirements of this section.

910.2 Smoke and heat removal. Where required.

Where required. Smoke and heat vents or a mechanical smoke removal system shall be installed as required by Sections 910.2.1 and 910.2.2.

EXCEPTION:

1. *Frozen-food warehouses used solely for storage of Class I and II commodities where protected by an automatic sprinkler system in accordance with Section 903.3.1.1.*
2. *Smoke and heat removal shall not be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers.*
3. ***Smoke and heat removal shall not be required in areas of buildings equipped with control mode special application sprinklers with a response time index of 50 (m-s)^{1/2} or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers.***

BC 910.2.1 Group F-1 or S-1

Group F-1 or S-1. Smoke and heat vents installed in accordance with Section 910.3 or a mechanical smoke removal system installed in accordance with Section 910.4 shall be installed in buildings and portions thereof used as a Group F-1 or S-1 occupancy having more than 50,000 square feet (4645.2 m²) of undivided area. In occupied portions of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed.

BC 910.2.2 High-piled combustible storage.

High-piled combustible storage. Smoke and heat removal for buildings and portions thereof containing high-piled combustible storage shall be installed in accordance with the New York City Fire Code and Section 413 of this code. Installation shall also be in conformance with Section 910.3 in unsprinklered buildings and portions thereof. In buildings and portions thereof containing high-piled combustible storage equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, a smoke and heat removal system shall be installed in accordance with Section 910.3 or 910.4. In occupied portions of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed.

- 2022 BC “Mechanical Smoke Removal Systems” replaces previous use of 2014 BC “draft curtains”
- New BC 910.2 Exception #3 - recognizes alternative automatic fast response type sprinklers in lieu of smoke and heat vents in certain situations
- New requirement for fully sprinklered factory and storage occupancy buildings
- Only a smoke removal system is allowed on those stories where the upper surface is NOT a roof assembly

910.3 Smoke and heat vents.

Smoke and heat vents. The design and installation of smoke and heat vents [and draft curtains] shall be in accordance with Sections 910.3.1 through 910.3.3.

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- Draft curtains were eliminated because of their possible adverse impact on the operation of smoke and heat removal systems.
- 2014 BC Table 910.3 was deleted and replaced with 2022 BC 910.3 subsection text containing equations on smoke & heat vent sizing

910.4 Mechanical smoke removal systems.

Mechanical smoke removal systems. Mechanical smoke removal systems shall be designed and installed in accordance with Sections 910.4.1 through 910.4.7.

- **Modifies requirements** for smoke removal systems, including sprinkler requirements, exhaust fan construction, size, and location of make-up air locations, and FDNY approved manual control location

910.5 Maintenance.

Maintenance. Smoke and heat vents and mechanical smoke removal systems shall be maintained in accordance with the New York City Fire Code.

- **New section** clarifies that maintenance coordination with the Fire Code (“FC”) is necessary, such as FC sections 909, 107, and 910

BC 911 CHANGES TO FIRE COMMAND CENTER REQUIREMENTS

911.2 Secondary fire command center.

Secondary fire command center. Where required in locations described in Appendix G (Flood Requirements) of this Code, a secondary fire command center shall be provided subject to the approval of the Fire Department. Design and installation requirements shall be in accordance with NFPA 72. This is to assure that the fire alarm system is in proper working order in the event of a flood in the building which renders the main FCC to be inoperable.

- **Upgrades previous 2014 BC Appendix G requirements (Indicator Panel)**
- Relocates code requirement to 2022 BC 911.2
- When building is in a flood zone, a secondary (back-up) FCC is required; such FCC’s design is per NFPA 72, which is reviewed and approved by FDNY

BC 913 CHANGES TO FIRE PUMP REQUIREMENTS

913.2.1 Protection of fire pump rooms.

Protection of fire pump rooms. Fire pumps shall be located in rooms that are separated from all other areas of the building by 2-hour fire barriers constructed in accordance with Section 707 or 2-hour horizontal assemblies constructed in accordance with Section [712] 711, or both.

EXCEPTION: ...3. [Fire-rated] separation is not required for a fire pump, other than an automatic standpipe fire pump, where such fire pump is located in a mechanical equipment room, as defined by the New York City

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Mechanical Code, enclosed by 2-hour fire barriers constructed in accordance with Section 707 or 2-hour horizontal assemblies constructed in accordance with Section 711, or both. Refrigerants, gas piping, gas consumption devices, gas meters or any other gas equipment and fuel storage or fuel consuming appliances shall not be installed in any space housing a fire pump.

- **Exception 3 is modified to allow fire pumps, other than standpipe fire pumps, to be located in the same fire-rated room as other mechanical equipment.**
- However, fire pumps are not allowed in the same room as refrigerant, gas or fuel storage, fuel consuming appliances, high voltage electrical equipment, etc.

913.2.2.2 Circuits supplying fire pump rooms.

Circuits supplying fire pump rooms. Cables used for survivability of circuits supplying fire pumps shall be in accordance with the New York City Electrical Code. Electrical circuit protective systems shall be installed in accordance with their listing requirements, and the New York City Electrical Code.

- This **new section** modifies requirements for circuit survivability (Circuit Integrity Cabling “CI”) pertaining to fire pumps.
- NYC Electrical Code Article 695 has three different methods for wiring fire pumps, one of these is “CI-Circuit Integrity.”
- Coordinated with BC Appendix Q (NFPA 20)

913.5 Acceptance test (fire pump).

Acceptance test. Acceptance testing shall be done in accordance with the requirements of Section 1705.30 of this Code, the New York City Fire Code and NFPA 20. Refurbished or repaired fire pumps shall be tested in accordance with Section 1705.30 of this code, the New York City Fire Code and NFPA 20. All such tests shall be scheduled to include a department representative as a witness, if required.

- **Coordinates acceptance testing with 2020 BC 1705.30 Special Inspection** and NFPA 20 requirements
- DOB Representative must be present during such tests.

BC 916 CHANGES TO FDNY IN-BUILDING AUX. RADIO COMMUNICATIONS SYSTEM (ARCS)

916.3 ARCS Where required.

Where required. ARCS, which shall be in accordance with this section, shall be required in the following:

1. High-rise buildings constructed in accordance with Section 403.
2. Underground buildings constructed in accordance with Section 405.
3. Buildings having a total gross area exceeding 250,000 square feet (23 225.8 m²).

EXCEPTIONS:

1. **Group R-2 buildings that meet all of the following requirements: a. The highest occupied floor is less than 125 feet above the lowest level of Fire Department vehicle access; b. The building has no more than 1 story below grade; and c. The floor area of the building does not exceed 250,000 square feet.**
2. Where it is determined by the Fire Department that a radio communication system is not required.

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- **New section** 916.3 added to identify required installations and added areas where enhanced in-building radio communications are required as determined by FDNY more clearly.
- **Exceptions** were added for R-2 buildings which met several conditions or when FDNY determined that ARCS is not required.
- The first **new exception only requires ARCS in group R-2 buildings that are greater than 125', with only 1-story below grade and does not exceed 250,000SF.**
- This represents **the trade off with requiring one-way voice communication at 75' in Group R-2 buildings** and clarifies where ARCS would still be needed, i.e., where the building has more than 1 story below grade.

BC 917 CHANGES TO POST-FIRE SMOKE PURGE SYSTEMS REQUIREMENTS

917.2 .4 Interior exit stairways or ramps or exit passageways in occupancies other than R-2.

Interior exit stairways or ramps or exit passageways in occupancies other than Group R-2. Interior exit stairways or ramps or exit passageways shall not be used as a portion of the post-fire smoke purge system in occupancies other than Group R-2. Doors in interior exit stairways or ramps or exit passageways shall not be permitted to be used as a portion of the post-fire smoke purge system. Air transfer and duct openings associated with the post-fire smoke purge system shall not be permitted in the interior exit stairway or ramp or exit passageway.

- This **new section** clarifies that **in all non-R-2 occupancies, exit enclosures (exit stairs, exit passageways, etc.) cannot be used as a path for smoke removal when the post-fire smoke purge system is being operated by the fire department.**

BC 918 CHANGES TO GAS DETECTION SYSTEMS REQUIREMENTS

918.1 Gas detection systems.

Gas detection systems, including systems designed to detect flammable, toxic, asphyxiants and other gases, required by the New York City Construction Codes or the New York City Fire Code, shall comply with Sections 918.2 through 918.10 of this Code.

- **New section** BC 918 covers various types of gas detection systems.
- It codifies the design and testing requirements for such systems and includes, sensor locations, emergency power requirements, gas sampling, activation thresholds, alarms, shutoffs, and Fire Department connections.
- **In particular, the need for detection of leaks in hydrogen fuel gas rooms is now required** because of other new sections in the NYC Construction Codes that deal with hydrogen fuel gas.

BC APPENDIX Q: MODIFIED NATIONAL STANDARDS FOR AUTOMATIC SPRINKLER, STANDPIPE, FIRE PUMP, FIRE ALARM, AND SMOKE CONTROL SYSTEMS

BC APPENDIX Q

- **Q101 was modified to include NFPA 92, Standard for the Installation of Smoke Control Systems (2018 Edition).**
- **Q102, Q103, Q104, Q105, Q106 and Q107 modified to reference 2016 editions of NFPA 13, 13R, 13D, 14, 20 and 72**

Q102 MODIFICATIONS TO NFPA 13

Q102 modifies the NFPA 13 Standard for the Installation of Sprinkler Systems (2016 Edition)

Highlight of NYC Amendments

- Use of nitrogen and other approved gases in dry pipe systems are included – Q102 amendments of the 2016 NFPA 13 were added to address gas supplies, which are now common in other jurisdictions.
- Included 2016 NFPA 13 requirements for interior glazing seeking a fire rating through the use of sprinkler protection, which were modified by Q102 to align with different types of glazing situations, specifically in reference to exterior lot line sprinkler protection.
- Additional text was added to facilitate the installation of pre-action piping
- Added text to address new signage requirements for identifying existing sprinkler systems

Q103 MODIFICATIONS TO NFPA 13D

Q103 modifies updated NFPA 13D Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes (2016 Edition).

Q104 MODIFICATIONS TO NFPA 13R

Q104 modifies updated NFPA 13R Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies (2016 Edition)

Highlight of NYC Amendments to 2016 NFPA 13R

- Clarifies building height, with respect to number of stories and measured height in feet, need to determine when a building must comply with this standard.
- Includes new NFPA 13R requirements for interior glazing seeking a fire rating through the use of sprinkler protection, which were modified by Q104 to align with different types of glazing situations, such as the fire rating of glazed exterior lot line walls with sprinkler protection

Q105 MODIFICATIONS TO NFPA 14

Q105 modifies the updated NFPA 14 Standard for the Installation of Standpipe and Hose Systems, 2016 Edition.

Highlights of NYC Amendments

- Clarifies that pressure reducing valves on fire hose outlets, or when located downstream of hose valves, are NOT permitted, which aligns with FDNY standard operating procedures
- Clarifies that the maximum pressure on a standpipe may be imposed by the FDNY when supplying through a Fire Department Connection (“FDC”), which aligns with the 2019 edition of NFPA 14.
- Hydrostatic test pressure requirements for acceptance were clarified. **In particular, FDNY may need to impose higher test pressures on the system than the system water supply pressure.**
- **Definitions were added to clearly differentiate “Pressure Restricting Devices” from “Pressure Regulating Devices” and “Pressure Reducing Valves** (no amendment to NFPA 14-2016)
 - Pressure Restricting Devices are at the FDCs
 - Addition of the phrase “..., **except for pressure-restricting devices supplying hose outlets**” at the end of Sections 5.5.2.1 and 5.5.2.2 for clarity
- Deleted and replaced Section 7.2.4. ‘Master Pressure Reducing Valve (“PRV”) stations’ that are downstream of fire pumps are not permitted in NYC. However, under certain conditions, PRVs could be used, but only if approved by the Building Department Commissioner, likely in consultation with the FDNY.

Q106 MODIFICATIONS TO NFPA 20

Q106 now modifies the updated NFPA 20 Standard for the Installation of Stationary Pumps for Fire Protection, 2016 Edition.

Highlights of NYC Amendments

- Added section 4.6.2.1.2 - Prevents possible contamination of potable water if draining a fire pump system; in particular, prevents draining back into a combination standpipe/domestic water tank during fire pump acceptance testing.
- Revised section 5.4 and added section 14.2.1.3 to clarify fire pump testing
- Section 10.5.4 was added to clarify that fire pump shutdown shall be performed manually by trained authorized personnel

Q107 MODIFICATIONS TO NFPA 72

Q107 now modifies the updated NFPA 72 National Fire Alarm & Signaling Code, , 2016 Edition.

Highlights of NYC Amendments

- **New Chapter 7 “Documentation” added** –Consists mostly of material contained in section 10.18 of 1RCNY 3616-04, which described NYC amendments to NFPA 72.

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- **Section 10.6.7.2.1 added** - Addresses **secondary power for two-way radio communication enhancement systems**, to differentiate these requirements more accurately from those of the more general fire alarm system.
- **Section 12.3.6.2.1 added** –Discusses **new technology used for Class-N Circuits**; FDNY approval for Class-N circuits will now be through their TM-4 process.
- **Section 14.4.9 added** - **ARCS to be inspected and operationally tested** in accordance with FDNY operations and rules, thereby also aligning with BC 916.1.2.
- **Sections 17.5.3.2.1 & 17.5.3.2.2 added** –Addresses **partial & selective coverage smoke detection**. Defines “Partial Coverage,” which is used throughout BC 907
- **Section 17.10.2.4 now includes** text from its previous Annex A –Clarifies that an **engineering evaluation is required to locate gas detection sensors**, which is in coordination with new BC 918.
- **Section 21.9.1 added** –Clarifies that **electrically locked egress doors, if allowed by other sections of the Code, must be connected fire alarm system**.
- **Section 23.8.1.1.3 added** –Updates Event/Non-Event modes of operation for pre-signal systems in accordance with FDNY Bulletins & Variances.
- **Sections 24.5 & 24.6 added** –In-Building Mass Notification Systems or Wide-Area Mass Notification Systems shall not be installed unless approved by FDNY.
- **Section 26.6.3 added** –Single path transmission, for supervising central office communications, is prohibited.
- **Section 26.6.4.1.4 added** to update the means of transmission required for central office connection with new technologies.
- **Section 17.10.2.4 added** as part of the Hydrogen Fuel Gas package (taken from the Annex and added to clarify the engineering analysis required for gas detection systems).

Q108 MODIFICATIONS TO NFPA 92

Q108 was modified to include NFPA 92, Standard for the Installation of Smoke Control Systems (2018 Edition).

Highlights of Changes

- The term “smoke barrier” was deleted from NFPA 92 and replaced with “smoke partition” in all instances.
- The definition of “smoke partition” in the NYC Building Code aligns with the definition of “smoke barrier” in NFPA 92.
- This change will assist in avoiding confusion and will not inadvertently require 1-hour smoke barriers in instances where they are not required by the Building Code.

BC CHAPTER 27: ELECTRICAL

2702 EMERGENCY AND STANDBY POWER SYSTEMS

2702.1 Installation

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Installation. Emergency power systems and standby power systems shall be installed in accordance with the New York City Electrical Code, NFPA 110 and NFPA 111.

- This **section was modified** to clarify that when referring to emergency and standby power systems, the 2014 BC word **emergency** was replaced by **emergency power systems**.

2702.1.1 Fuel supply

*Fuel supply. Systems relying on fuel supplies shall have an on-premises fuel supply sufficient for not less than 6-hour full-demand operation of the system. However, **natural gas from the public utility street main shall be permitted as the sole fuel supply for (i) emergency power systems serving Group R-2 occupancies, (ii) emergency power systems where permitted by Appendix G of this code, and (iii) standby power systems, provided that an outside gas cut-off valve separate from other gas services is installed in accordance with Section E.6 of Appendix E of the New York City Fuel Gas Code.***

- This section was **modified to allow natural gas as the sole fuel supply for emergency power systems, where permitted by Appendix G of the Building Code (flood zones).**

2702.1.2.3 Multiple generators

*Multiple generators. **Multiple generators** supplying emergency power system loads only or supplying emergency power system equipment in combination with optional standby power loads as a common system **may be located in the same room**. Such generators may also share a common room, fuel supply and other common equipment and systems.*

- **Text was added** to clarify that multiple generators can share a common room when supplying power systems.

2702.1.7 Automatic transfer devices and power system feeders

Automatic transfer devices, emergency generators and emergency or standby power system feeders shall comply with Sections 2702.1.7.1 through 2702.1.7.2.1.

2702.1.7.1 Prohibited location

Prohibited location. All automatic transfer devices and power system feeders that serve emergency and required standby power system equipment shall not be located in the same room as the emergency power system equipment or the main or primary electrical service equipment. Where emergency and standby transfer devices are installed in accordance with Articles 700 and 701 of the New York City Electrical Code, automatic transfer devices for optional standby power systems shall not be installed in the same room.

- This section has **added text** to clarify that automatic transfer devices for optional standby system shall not be located within the same room with emergency/standby equipment, including emergency automatic transfer switches.

2702.2.1.1 [Group A occupancies in] Prior code buildings

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[Group A occupancies in] Prior code buildings. In [Group A occupancies in] Prior code buildings, where a stationary generator is not otherwise required, the power source for emergency power to the voice/alarm communication system may be served by a gas generator or an uninterruptable power source (UPS) in accordance with the New York City Electrical Code.

- In the past UPS was not allowed to be used in lieu of generators for emergency power.
- However, this **new section** allows, in this scenario **[Group A occupancies in Prior code buildings]**, **voice/alarm communication systems to be supplied from a UPS, or from a gas-powered generator for emergency power.**

2702.2.13 Covered and open mall buildings.

Covered and open mall buildings. Emergency power shall be provided for voice/alarm communication systems in covered and open mall buildings in accordance with Section 402.7.4.

- This new section requires Emergency Power in both, Open and Covered Malls.
- **Standby Power is no longer allowed in Covered Malls.**

2702.2.17 Elevators.

Elevators. Standby power for elevators, including elevators provided to accommodate ambulance stretchers pursuant to Section 3002.4, shall be provided as set forth in Section 3003.1.

- **Eliminates previous 2014 BC text:** “Controls, elevator cab lights, ventilation, and associated equipment required for elevator operation be connected to emergency power.”
- **Requirement for elevator cab lights to be connected to emergency power is now in Section 2702.2.20.1 for Occupancy Groups B, E and R-1.**
- In addition, per referenced Section 3003.1.4, **where standby power is connected to elevators, machine room ventilation/air conditioning shall also be connected to the standby power source.**

2702.2.21 Continuously operation HVAC systems.

Continuously operating HVAC systems. Standby power systems shall be provided for fans or fan systems being designed in accordance with Section 607.5 of the New York City Mechanical Code and Section 717 of this Code.

- If an air handling system is installed/designed to provide return air under fire condition (i.e. continuous operation), such air handling system must be served by standby power.
- This **new section** coordinates with **MC 607.5.2.2, Exception 4**, which states that in Public Corridors: ***Smoke dampers shall not be required in ducts where the air continues to move and the air-handling system installed is arranged to prevent recirculation of exhaust or return air under fire emergency conditions or loss of normal power by provision of standby power in accordance with Chapter 27 of the New York City Building Code.***

2702.2.22 Gas detection systems.

Gas detection systems. Emergency power systems shall be provided for gas detection systems in accordance with Section 918.5.

- This **new section** requires that **gas detection system be connected to emergency power systems.**

2702.4 Required loads for optional and standby power.

Required loads for optional and standby power. In addition to any other loads, optional standby power systems shall be capable of providing power to the following standby and emergency power loads upon failure of the normal power supply:

1. *Emergency lighting;*
2. *Fire alarm systems; and*
3. *Elevators as follows:*
 - 3.1. *For Group R-2 occupancies in buildings greater than 125 feet (38 100 mm) in height, ...; o*
 - 3.2. *For all other buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access,*

....

EXCEPTION: *Backup power systems that provide backup power for non-accessory public telecommunications equipment, such as rooftop telecommunications antennas, cooling equipment, routers, etc., need not provide power to the standby and emergency power loads listed in this section.*

2702.4.1 Additional optional standby power systems.

Additional optional standby power systems. Where a functioning emergency power system or required standby power system is in place and provides power to all required emergency or required standby power loads, any additional optional standby power system need not supply power to such emergency or required standby power loads.

2702.4.2 Compliance with NFPA 110 and UL 2200.

Compliance with NFPA 110 and UL 2200. Where an optional standby power system is required to supply emergency or required standby power loads, such power system shall comply with the UL 2200 listing and NFPA 110.

2702.4.3 Special inspection.

Special inspection. Where an optional standby power system is required to supply emergency or required standby power loads, such power system shall be subject to special inspection in accordance with Section 1704.31 and the rules of the Department.

- **New Exception** clarifies that **Backup Power Systems which serve non-accessory public telecommunication equipment, such as rooftop antennas, does not need to power the additional loads that are listed in this section, based on intent of previously issued [BB 2015-002](#).**
- **BC 2702.4.1** clarifies requirements for optional standby power systems, based on previously issued BB 2015-002 (Section C)
- **BC 2702.4.2** clarifies requirements for optional standby power systems, based on previously issued BB 2015-002 (Section D)
- **BC 2702.4.3** clarifies requirements for optional standby power systems, based on previously issued BB 2015-002 (Section E)



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BC CHAPTER 7: FIRE & SMOKE PROTECTION FEATURES

BC 702.1 DEFINITIONS

702.1 Definitions

All definitions were relocated and consolidated in BC Chapter 2. New terms were added as noted below:

NEW TERMS	DEFINITION
Fire-rated glazing	Glazing with either a fire protection rating or a fire-resistance rating.
Joint	The opening in or between adjacent assemblies that is created due to building tolerances or is designed to allow independent movement of the building in any plane caused by thermal, seismic, wind or any other loading.
L-rating	The air leakage rating of a through-penetration firestop system or a fire-resistant joint system when tested in accordance with UL 1479 or UL 2079, respectively.
Membrane-Penetration Firestop System	An assemblage consisting of a fire-resistance rated floor-ceiling, roof-ceiling, or wall assembly, one or more penetrating items installed into or passing through the breach in one side of the assembly and the materials or devices, or both, installed to resist the spread of fire into the assembly for a prescribed period of time.
Splice	The result of a factory and/or field method of joining or connecting two or more lengths of a fire-resistant joint system into a continuous entity

704.14 Fire retardant or intumescent coatings on mass timber.

Fire retardant or intumescent coatings on mass timber. Fire retardant or intumescent coatings shall not be used to achieve the required fire-resistance rating on structural elements composed of heavy timber members including, but not limited to, glued-laminated members, cross laminated timber (CLT) or structural composite lumber (SCL).

- **New requirement** which prohibits the use of fire retardant or intumescent coating to achieve the required fire resistance rating on mass timber elements.

718.2.6 Architectural trim.

Architectural trim. Fireblocking shall be installed within concealed spaces of exterior wall coverings and other exterior architectural elements where permitted to be of combustible construction as specified in Section 1406 or where erected with combustible frames, at maximum intervals of 20 feet so that there will be no open space exceeding 100 square feet. Where wood furring strips are used, they shall be of approved wood of natural decay resistance or preservative treated wood. If non-continuous, such elements shall have closed ends, with at least 4 inches (101.6 mm) of separation between sections. For the purposes of this section, fenestration products, and flashing of fenestration products and water-resistive barrier flashing and accessories at other locations, including through wall flashings and attachment accessories, shall not be considered combustible construction.

...

EXCEPTIONS:

1. Fireblocking of cornices is not required in single-family dwellings. Fireblocking of cornices of a two-family dwelling is required only at the line of dwelling unit separation.
2. Fireblocking shall not be required where the exterior wall covering does not contain plastic or foam plastic insulation, is installed on noncombustible framing and the exterior wall covering is one of the following materials:
 - 2.1. Aluminum siding having a minimum thickness of 0.019 inch (0.5 mm).
 - 2.2. Corrosion-resistant steel siding not less than 0.016 inch (0.4 mm) at any point.
 - **2.3. Walls in which the water-resistive barrier is the only combustible component, and the exterior wall has a wall covering of brick, concrete, stone, terra cotta, stucco or steel with minimum thicknesses in accordance with Table 1405.2.**
3. Exterior wall coverings containing plastics, metal composite materials (MCM) or high-pressure decorative exterior-grade compact laminates (HPL) panels shall comply with Section 718.2.6.1.

- As part of larger text changes for combustible exterior wall coverings
- **New text added** to clarify that minor, non-contiguous, combustible components are not considered combustible construction.
- **Exceptions 2 and 3 modified to exempt fire-blocking when used with non-combustible exterior wall coverings** and direct combustible exterior wall coverings to BC 718.2.6.1.

718.2.6.1 Exterior wall coverings containing plastics, metal composite materials (MCM) or high-pressure decorative exterior-grade compact laminates (HPL) panels.

Exterior wall coverings containing plastics, metal composite materials (MCM) or high-pressure decorative exterior-grade compact laminates (HPL) panels. Exterior wall coverings containing plastics complying with Chapter 26, metal composite materials (MCM) or high-pressure decorative exterior-grade compact laminates (HPL), shall be fireblocked.

718.2.6.1.1 Locations.

Locations. Noncombustible fire-blocking materials shall be required at all of the following locations to cut off concealed spaces within the exterior wall covering:

1. Around wall openings.
2. In alignment with the slab edge, for a height of not less than 8 inches (203.2 mm), and at maximum intervals of 20 feet (6096 mm) vertically.
3. Between different occupancy groups, horizontally or vertically, as applicable.

718.2.6.1.2 Foam plastic insulation.

Foam plastic insulation. Foam plastic insulation in the exterior wall covering shall be interrupted with noncombustible materials approved for fire blocking at locations specified in Section 718.2.6.1.1.

EXCEPTIONS:

1. **One-story buildings complying with Section 2603.4.1.4.**
2. **Fireblocking shall not be required at each floor level and interrupt the foam plastic insulation provided the foam plastic insulation has a flame spread index of not more than 25 as determined in accordance with ASTM E 84 or UL 723 and comply with the following conditions:**
 - 2.1. Concrete and masonry veneer. Fireblocking material shall not be required at each floor level for concrete or masonry veneer installed less than 75 feet (22 860 mm) above grade as part of an exterior wall covering containing foam plastic insulation, with or without air space, and installed on masonry or concrete backup walls.

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- 2.2. Exterior insulation and finish systems (EIFS). Fireblocking material shall not be required at each floor level for EIFS containing foam plastic insulation installed less than 75 feet (22 860 mm) above grade and installed on masonry or concrete backup walls.
- 3. **Detached one- and two-family dwellings.** Fireblocking of foam plastic insulation shall not be required at each floor level in detached one-and two-family dwellings of Type V construction that do not exceed three stories or 40 feet (12 192 mm) in height above grade plane.

- As part of larger text changes for combustible exterior wall coverings
- **New text added to require fire blocking** when using combustible exterior wall coverings at specific locations.
- **New text added to require that foam plastic insulation used in combustible exterior wall coverings to be interrupted with non-combustible materials**, i.e. fire-blocking. **Exceptions provided** for 1-story buildings and detached 1-/2-family buildings. Also, where concrete/masonry veneer or EIFS is installed on masonry or concrete back-up walls and the building is a non-high rise building, fire-blocking at floor slabs is not required.

RELOCATION OF SECTIONS THROUGH BC CHAPTER 7 FROM 2014 BC TO 2022 BC

2014		2022	
SECTION	TITLE	SECTION	TITLE
708	Shaft Enclosures	708	Fire Partitions
709	Fire Partitions	709	Smoke Barriers
710	Smoke Barriers	710	Smoke Partitions
711	Smoke Partitions	711	Horizontal Assemblies
712	Horizontal Assemblies	712	Vertical Openings (NEW)
713	Penetrations	713	Shaft Enclosures
714	Fire-Resistant Joint Systems	714	Penetrations
715	Opening Protectives	715	Fire-Resistant Joint Systems
716	Ducts and Transfer Openings	715	Opening Protectives
717	Concealed Spaces	717	Duct and Air Transfer Openings
718	Fire-Resistance Requirements for Plaster	718	Concealed Spaces
719	Thermal and Sound Insulating Materials	719	Fire-Resistance Requirements for Plaster
720	Prescriptive Fire Resistance	720	Thermal and Sound Insulation Materials
721	Calculated Fire Resistance	721	Prescriptive Fire Resistance



2022 NYC Construction Code Overview: Fire Protection Code Revisions

BC Chapter 9: Fire Protection Systems
 BC Appendix Q: Modified National Standards for Fire Protection Systems
 BC Section 2702: Emergency & Standby Power Systems
 BC Chapter 7: Fire & Smoke Protection Features

RELOCATION OF SUBSECTIONS IN HORIZATION ASSEMBLIES (2022)

2014		2022	
SECTION	TITLE	SECTION	TITLE
712.2	Materials	711.2.1	Materials
712.3	Fire-resistance rating	711.2.4	Fire-resistance rating
712.3.1	Ceiling panels	711.2.5	Ceiling panels
712.3.2	Access doors	712.2.13.2	Access doors
712.3.3	Unusable space	711.2.6 & 711.2.7	Assigned to new sections Crawl Spaces & Attic Spaces
712.4	Continuity	711.2 & 711.3.2	Continuity
712.5	Penetrations	Deleted	
712.6	Joints	712.1.5.1	Joints in or between horizontal assemblies
712.7	Ducts and air transfer openings	712.1.6	Ducts and air transfer openings
712.8	Floor fire door assemblies	Deleted	
712.9	Smoke barrier	Deleted	

RELOCATION OF SUBSECTIONS IN VERTICAL OPENINGS (2022)

2014		2022	
SECTION	TITLE	SECTION	TITLE
708.2	Exception 1	712.1.2	Individual dwelling unit
	Exception 2	712.1.3	Escalator openings
	Exception 2.1	712.1.3.1	Opening Size
	Exception 2.2	712.1.3.2	Automatic Shutter
	Exception 4	712.1.6	Ducts and air transfer openings
	Exception 5	712.1.7	Atriums
	Exception 6	712.1.8	Masonry Chimney
	Exceptions 7-7.7	712.1.9	Two-story Openings
	Exception 8	712.1.10.1	Automobile Ramps
	Exception 14	712.1.10.2	Elevators
	Exception 13	712.1.10.3	Duct Systems
	Exception 14	712.1.11	Mezzanine
	Exception 15	712.1.14	Group I-3
	Exception 16	712.1.16	Openings otherwise permitted
712.8	Floor fire door assemblies	712.1.13.1	Horizontal fire door assemblies
712.3.2	Access doors	712.1.13.2	Access doors
712.4	Continuity	712.1.15	Skylights



2022 NYC Construction Code Overview: Fire Protection Code Revisions
 BC Chapter 9: Fire Protection Systems
 BC Appendix Q: Modified National Standards for Fire Protection Systems
 BC Section 2702: Emergency & Standby Power Systems
 BC Chapter 7: Fire & Smoke Protection Features

RELOCATION OF SUBSECTIONS IN SHAFT ENCLOSURES (2022)

2014		2022	
SECTION	TITLE	SECTION	TITLE
708.1	General	713.1	General
708.1	Shaft enclosure required	713.2	Construction
708.3	Materials	713.3	Materials
708.4	Fire-resistance rating	713.4	Fire-resistance rating
708.7.1	Prohibited openings	713.7.1	Prohibited openings
708.8	Penetrations	713.8	Penetrations
708.8.1	Prohibited penetrations	713.8.1	Prohibited penetrations
708.8.9	Joints	713.9	Joints
708.10	Ducts and air transfer openings	713.10	Ducts and air transfer openings
708.11	Enclosure at the bottom	713.11	Enclosure at the bottom
708.12	Enclosure at the top	713.12	Enclosure at the top
708.12.1	Smoke venting of stair and other closed shafts	713.12.1	Smoke venting of stair and other closed shafts
708.13	Refuse and laundry chutes	713.13	Waste and linen chutes, including discharge rooms, and incinerator rooms.
708.13.1	Refuse and laundry chute enclosures	713.13.1	Waste and linen
708.13.2	Materials	713.13.2	Materials
708.13.3	Refuse and laundry chute access rooms	713.13.3	Waste and linen chute access room
708.13.4	Termination room	713.13.4	Chute discharge room
708.13.5	Incinerator room	713.13.5	Incinerator room
708.13.6	Automatic fire sprinkler system	713.6	Automatic fire sprinkler system
708.14	Elevator, dumbwaiter, and other hoistways	713.14	Elevator, dumbwaiter and other hoistways

2022 NYC Construction Codes Overview:

Electrification & Energy Code Updates

Local Law 154 of 2021: NYC Building Electrification Law

NY Energy Law §11-102: Historic Buildings

2020 NYCECC & Service Water Heating Efficiency Requirements

NYC BUILDING ELECTRIFICATION LAW

Title 24: NYC Air Pollution Control Code, administered by DEP

§ 24-177.1 Prohibited emissions

- a. Buildings shall be subject to the emission limits set forth in this section in accordance with section 28-506.1.
- b. No person shall permit the combustion of any substance that emits 25 kilograms or more of carbon dioxide per million British thermal units of energy, as determined by the United States energy information administration, within such building.
- c. Notwithstanding the prohibition in subdivision b, combustion of a substance that emits 25 kilograms of carbon dioxide per million British thermal units of energy or more shall be permitted for use within such a building where the combustion of such substance occurs in connection with a device that contains no connection to a building's gas supply line or fuel oil piping system, is used on an intermittent basis, and is not used to supply a building with heat or hot water.
- d. This section may be enforced by the department or the department of buildings.

Title 28: NYC Construction Codes, administered by DOB

§ 28-506.1 Prohibited Emissions in New Buildings.

Prohibited Emissions in New Buildings. **New buildings shall be subject to the emissions limits set forth in section 24-177.1.** The commissioner shall not approve an application for the approval of construction documents, nor issue any permit in connection therewith, for a new building that does not comply with section 24-177.1.

Exceptions:

1. **A building that is seven stories or more** where an application for the approval of construction documents is submitted on or before **July 1, 2027**.
2. **A building that is less than seven stories** where an application for the approval of construction documents is submitted on or before **December 31, 2023**.
3. **A building, other than a building, that is classified as group R-3, where such emissions are in connection with the provision of hot water** and an application for the approval of construction documents is submitted on or before **July 1, 2027**.
4. **A building that is less than seven stories** where the building owner demonstrates in accordance with rules promulgated by the department that 50 percent or more of the dwelling units in such building are subject to a regulatory agreement, restrictive declaration, or similar instrument with a federal, state, or local governmental entity or instrumentality **for the creation or preservation of affordable housing**, and an application for the approval of construction documents is submitted before **December 31, 2025**.
5. **A building that is seven stories or more** where the building owner demonstrates in accordance with rules promulgated by the department that 50 percent or more of the dwelling units in such building are subject to a regulatory agreement, restrictive declaration, or similar instrument with a federal, state, or local governmental entity or instrumentality **for the creation or preservation of affordable housing**, and an application for the approval of construction documents is submitted before **December 31, 2027**.
6. **A building that will be primarily used by a utility regulated by the public service commission** for the generation of electric power or steam.
7. **A building within a facility operated by the department of environmental protection that treats sewage or food waste.**
8. **An application filed by or on behalf of the school construction authority** submitted before **December 31, 2024**.

9. **A building** where it would not be required to comply with section 24-177.1 because the combustion of a substance that emits 25 kg or more of carbon dioxide per million British thermal units of energy is necessary **for a manufacturing use or purpose, or for the operation of a laboratory, laundromat, hospital, crematorium, commercial kitchen** as defined in section 602 of the New York city fire code, or where used for emergency or standby power, or other use allowed by rule of the department, to the extent necessary for, and in the space occupied by such use or purpose.

- **Intro.2317 Carbon Limits for Fuel-combustion**, signed by Mayor de Blasio and enacted as **Local Law 154 of 2021**
- Portions of the law are contained in two sections of the City Administrative Code:
 - **Title 24** (NYC Air Pollution Control Code, administered by DEP) sets the limit and the fines
 - **Title 28** (NYC Construction Codes, administered by DOB) sets scope
- **Prohibits on-site combustion of fuels that emit more than 25kg CO2/MMBTU**
- **Applies to New Construction** (including alterations required to meet NB requirements)
 - Be aware of Section 101.4.5 of the Administrative Code, which covers alterations that must be filed as New Buildings (see Buildings Bulletin 2016-012), aka **ALT-CO New Building with Elements to Remain**

EXCEPTIONS

- Buildings used by a regulated utility for energy generation
- Buildings operated by DEP for treatment of sewage or food waste
- Buildings in which fossil fuels are necessary for a manufacturing use or purpose:
 - Laboratories
 - Laundromats
 - Hospitals and Crematoria
 - Commercial Kitchens
 - For emergency or standby power

LOCAL LAW 154: EFFECTIVE DATES OF COMPLIANCE

JAN 1, 2024

- **1- & 2-Family (R-3) Dwellings**
- **All other buildings < 7 Stories**
- **Service water heating remains exempt**

DEC 31, 2024

- **NYS School Construction Authority**

DEC 31, 2025

- **Affordable housing < 7 stories**
- **Service water heating remains exempt**

JULY 2, 2027

- **All buildings ≥ 7 stories**
- **All service water heating**

DEC 31, 2027

- **All affordable housing ≥ 7 stories**

NOTE: Local Law 154 of 2021 also requires studies to be completed by June 1, 2023 for:

- Heat pump feasibility Study in low-rise and high-rise buildings
- Grid Reliability and Resiliency Study

NY ENERGY LAW §11-102: HISTORIC BUILDINGS

NY ENERGY LAW §11-102: Historic building.

Historic building. Any building that is one or more of the following: (a) listed, or certified as eligible for listing, on the national register of historic places or on the state register of historic places, (b) designated as historic under an applicable state or **local law**, or (c) certified as a contributing resource within a national register-listed, state register-listed, or **locally designated historic district**.

- Definition of historic building now includes locally designated historic buildings or as designated as contributing to a locally designated historic district.
- **Historic buildings now include all NYC Landmarks**

NY ENERGY LAW §11-102

The state fire prevention and building code council, in consultation with the commissioner of the department of parks, recreation and historic preservation, is **authorized to adopt exemptions to such uniform standards and requirements for historic buildings as defined in section 11-102 of this article, to the extent that the uniform standards and requirements would threaten, degrade, or destroy the historic form, fabric, or function of such historic buildings**.

- The **blanket exemption for historic building has been removed**. Revisions clarify that a building is exempt “to the extent that the uniform standards and requirements would threaten, degrade, or destroy the historic form, fabric, or function of such historic buildings.”
- **State Building Code Council and Commissioner of the Department of Parks, Recreation and Historic Preservation to determine applicable exemptions**
- **NYC is awaiting guidance from NY Department of State**

2020 NYCECC & SERVICE WATER HEATING EFFICIENCY REQUIREMENTS

SERVICE WATER HEATING EFFICIENCY

- Beginning June 12, 2017, **the Department of Energy has replaced High Efficiency (EF) to a new industry standard for measuring energy efficiency in water heaters called Uniform Energy Factor (UEF)**.
- **2020 NYCECC Chapter C4 does not reflect these efficiencies**
 - See US Code of Federal Regulations 10CFR Part 430.32