



NYC EXISTING BUILDING CODE

Everything Alterations:

Level 1 (Chapter 8) and Level 2 (Chapter 9)

build safe | live safe

MODULE D

COPYRIGHT

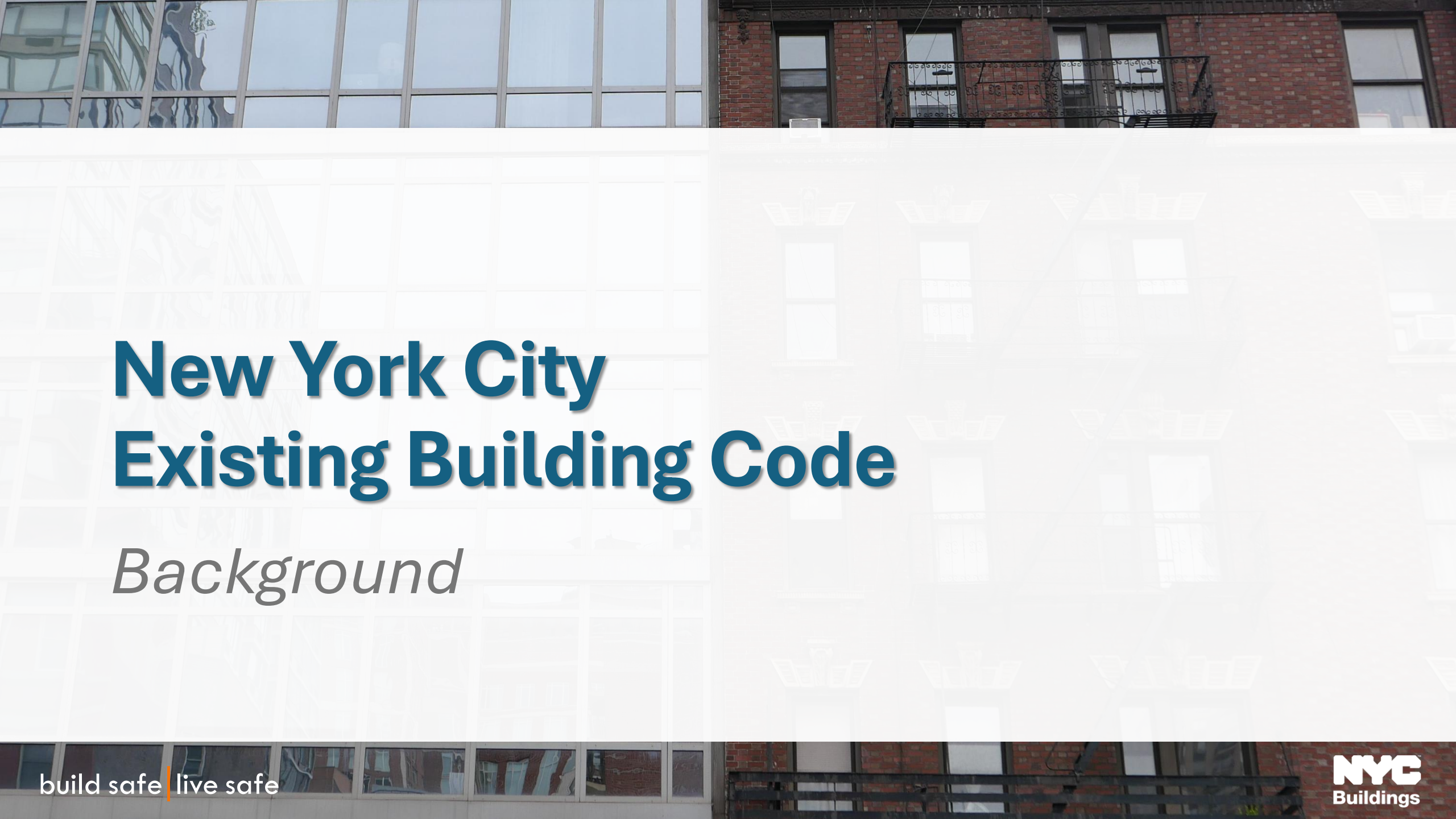
This presentation is protected by United States and International Copyright laws. Reproduction, distribution, display and use of the presentation without written permission of the speaker is prohibited.

© 2025 New York City Department of Buildings

DISCLAIMER

The information in this document is only a summary and overview and is not intended to substitute for the full text and meaning of any law, rule or regulation. The City disclaims any liability for errors that may be contained in this document and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this document and/or the information contained herein. The City reserves the right to take action at variance with this document. This document shall not be construed to create a substantive or procedural right or benefit enforceable by any person. The information contained in this document is current only as of the publication date of this document.

© 2025 New York City Department of Buildings



New York City Existing Building Code

Background

Origins of the EBC

- DOB has been working toward an Existing Building Code since the development of the 2008 Construction Codes.
 - Current regulatory scheme has numerous shortcomings:
 - Multiple layers of requirements (2022, 1968, 1938, memos, ppns, plus NYS MDL)
 - Current triggers for upgrades to existing buildings are not incremental
 - Some requirements commonly require submission and review of variance requests
 - In combination, these result in longer approval and permitting processes
- DOB's goals for the EBC include:
 - Simplifying the regulatory structure
 - Bridging the gap between current and past codes
 - Clearer direction for 80,000+ annually filed alteration applications
 - Utilize the International Existing Building Code
 - A new addition to the family of NYC Construction Codes, with revision cycles
 - Remove barriers to rehabilitation of existing buildings
 - Facilitating updates, while maintaining acceptable safety

Status of the EBC

Phase 1	✓ CHARRETTES
Phase 2	✓ RESEARCH
Phase 3	✓ CODE DRAFTING
Phase 4	✓ COMMITTEE WORK
Phase 5	CITY COUNCIL
	6/11/2025 ✓ INTRO 1321-2025
	10/9/2025 ✓ INTRO 1422-2025
	☐ HOUSING & BUILDINGS COMMITTEE HEARING
	☐ COUNCIL VOTE
	☐ ENACTMENT
	☐ EFFECTIVE DATE
Phase 6	IMPLEMENTATION, OUTREACH & TRAINING

INDUSTRY TRAINING PROGRAM

9/30/25 10-11:30	A module	All About the Existing Building Code: An Overview
10/9/25 10-11:30	B module	Beginning Chapters: Administration, General Requirements and Limited Alterations
10/16/25 10-11:30	C module	Charting the Compliance Path: Work Area Method and Levels of Alteration
10/22/25 10-11:30	D module	Everything Alterations: Level 1 (Chapter 8) and Level 2 (Chapter 9)
10/29/25 10-11:30	E module	Designing Structural Alterations: Chapter 7 and Related Appendices
11/5/25 10-11:30	F module	Future Changes: Occupancy, Additions, and Relocation of Buildings

Everything Alterations: Level 1 and Level 2

EBC APPLICABILITY MAP & CODE STRUCTURE

CHAPTER 8: ALTERATIONS LEVEL 1

CHAPTER 9: ALTERATIONS LEVEL 2

NEXT STEPS

QUESTIONS & ANSWERS

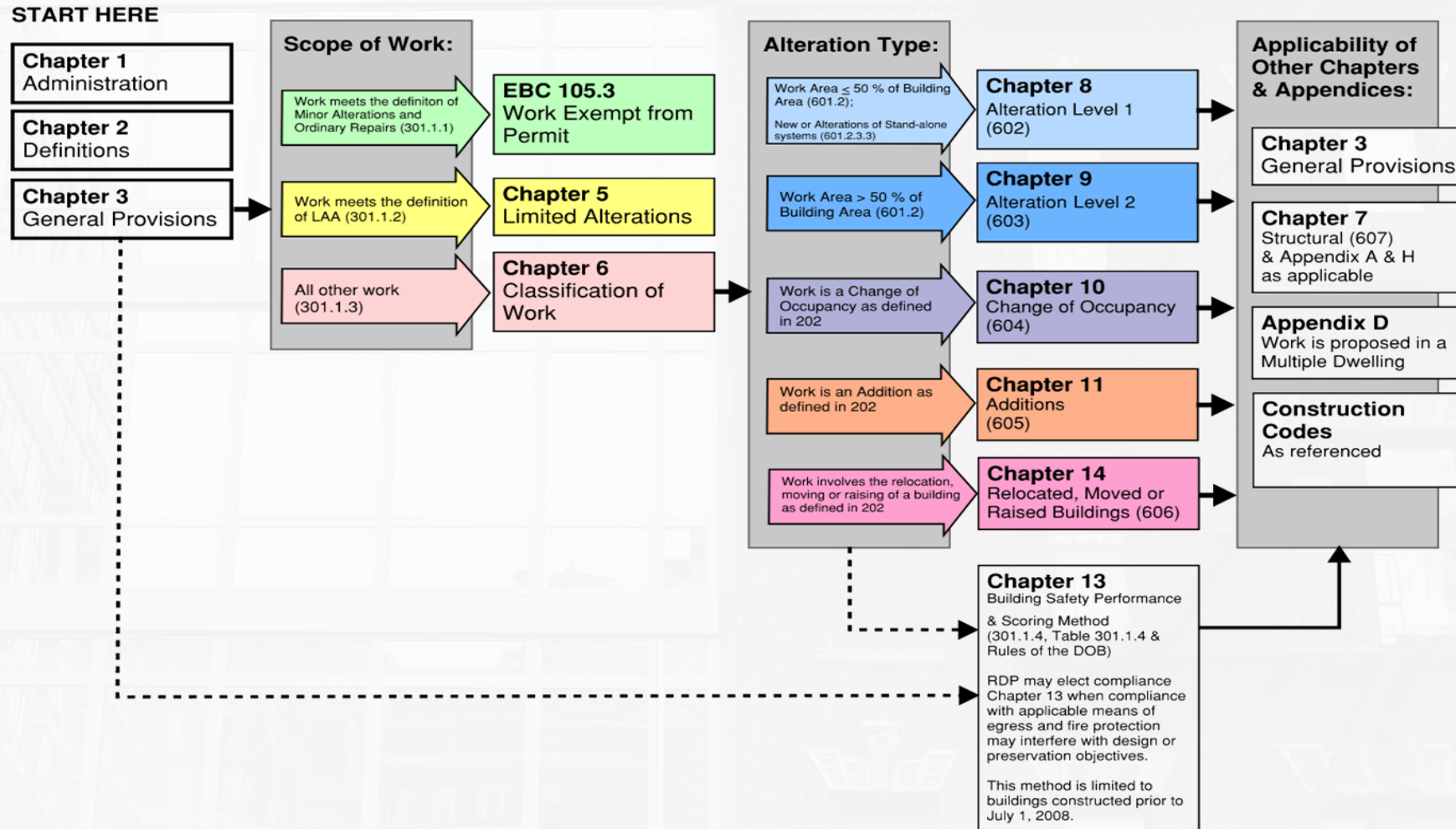
INFORMATION LEGEND

INDICATOR	DESCRIPTION
Prior	Prior Code ex. 1968 code; 1938 code, etc
Legislation	Current legislation ex. 2022 code; NYS MDL
Practice	Codifies current practice ex. Department Memos, Policy & Procedure Notices, etc
New	New
IEBC	IEBC 2015 edition of the International Existing Building Code



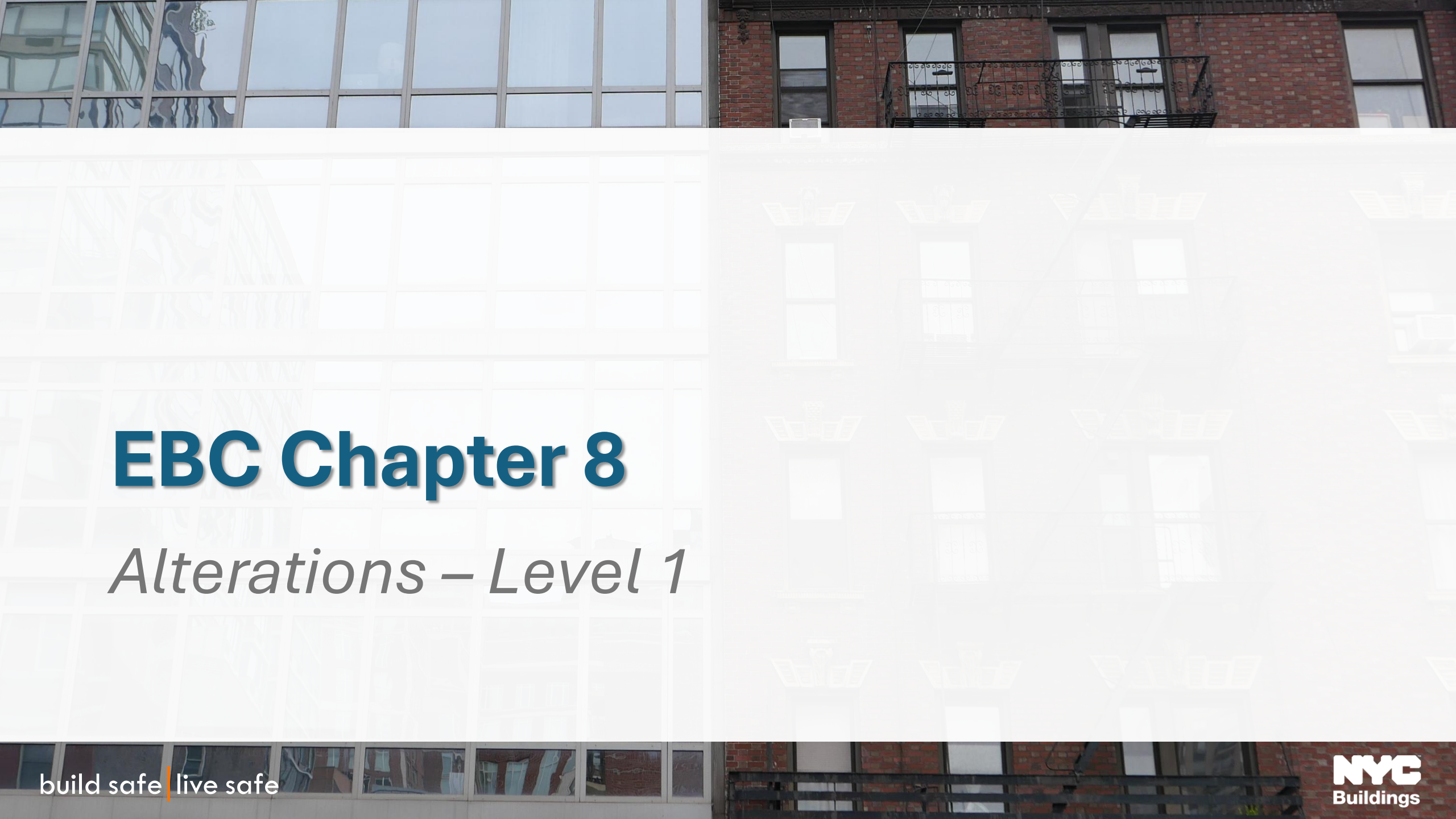
EBC Applicability Map

EBC Applicability Map



Code Structure

EBC Chapter	Building Systems									
	Fire Prot.	Egress	Access.	Struct.	Elec.	Mech.	Plumb.	Fuel Gas	Elevs.	Energy
3 General Req's	304	305	306	307	308	309	310	311	312	313
8 Alterations Level 1	804	805	806	807	808	809	810	811	812	813
9 Alterations Level 2	904	905	906	907	908	909	910	911	-	912
10 Change of Occupancy	1004	1005	1006	1007	1008	1009	1010	-	-	1011
11 Additions	1104	1105	1106	1103	1108	1108	1108	1108	1108	1107



EBC Chapter 8

Alterations – Level 1

Table of Contents

801	General
802	Reserved
803	Building Materials and Elements
804	Fire Protection
805	Means of Egress
806	Accessibility
807	Structural
808	Electrical
809	Mechanical
810	Plumbing
811	Fuel Gas Systems
812	Elevators and Conveying Systems
813	Energy Conservation
814	Interior Environment

Notable Provisions

■ Definition of Alteration – Level 1.

An alteration to a building where the work area does not exceed **50% of the building area**.

- The definition of a Level 1 alteration is based the percentage of building area. A Level 1 alteration may include alteration of more than 50% of a particular floor where the alteration does not exceed 50% of the building area.
- Installation of new, standalone mechanical, plumbing, fuel gas, fire protection and vertical transportation systems in existing buildings or alterations to such systems, other than limited alterations subject to Chapter 5, shall be classified as a Level 1 alteration, unless included as part of a Level 2 alteration.

Notable Provisions

■ Definition of Alteration – Level 1.

Work Area Calculation

Total building area: **8,000 sf**

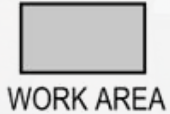
Work area: 100% of 3rd floor = 1,000 sf

Therefore, $1,000 \text{ sf} / 8,000 \text{ sf} = 12.5\% < 50\%$

Proposed alteration is a **Level 1 Alteration** that is required to comply with Chapter 8.

Because work area $> 50\%$ of the 3rd floor's square footage, supplemental requirements (803.2.3 "Stairway enclosure") also apply.

7th floor	1,000 sf
6th floor	1,000 sf
5th floor	1,000 sf
4th floor	1,000 sf
3rd floor	1,000 sf
2nd floor	1,000 sf
1st floor	1,000 sf
cellar	1,000 sf



Key Concepts

- The provisions of CH 3 and of CH 8 apply to Level 1 alterations.
- The provisions of CH 3 and CH 8 form the baseline for other types of alterations, as described in CH 9, 10, 11 and 14.
- Compliance with CH 8 provisions is limited to the work area, unless the Work Area exceeds 50% of a particular floor, where compliance may extend to the entire floor (See Supplemental Requirements).
- CH 8 includes special provisions for prior code buildings.
- CH 8 codifies many prior code buildings issues addressed by CCD-1s.
- Section 804 codifies BB # 2015-025, regarding alterations of FA systems.
- CH 8 introduces a provision for an Architectural Condition Assessment where the work area exceeds 50% of a particular floor.

Notable Provisions

■ Section 803 – Building Materials and Elements

Section 803.2 Shafts and vertical openings

- Existing shafts and vertical openings shall comply with the provisions of BC Chapter 7 with exceptions for prior code buildings.
- **803.2.1 Existing shafts and vertical openings in prior code buildings:** Addresses the minimum required fire rating for enclosures of existing shafts and vertical openings in prior code buildings within work areas by Occupancy Group.
- **803.2.2 Supplemental shaft and floor opening enclosure requirements:** Where the work area on any floor exceeds 50% of that floor area, enclosure requirements shall apply to vertical openings throughout the floor.
- **803.2.3 Supplemental stairway enclosure requirements in prior code buildings:** Where the work area on any floor exceeds 50% of that floor area, stairways serving the work area shall be enclosed in a 1 hr rated enclosure from the highest level of the work area and all floors below.

Notable Provisions

■ Section 803 – Building Materials and Elements

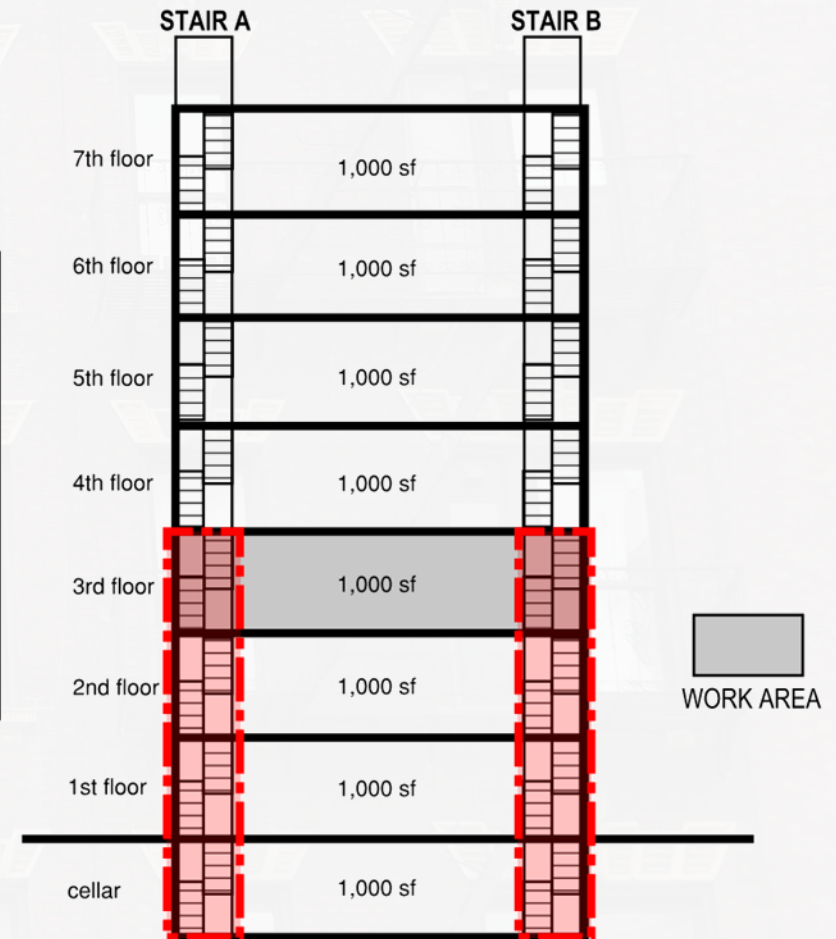
Section 803.2.3 Supplemental stairway enclosure requirements in prior code buildings.

803.2.3 Stairway Enclosure

Work area > 50% of 3rd floor

Stairways serving work area shall be enclosed in 1-hr fire rated enclosure from highest work area level and all floors below.

Applies to prior code buildings.



Notable Provisions

■ Section 803 – Building Materials and Elements

Section 803.3 Smoke compartments. Section addresses the creation of smoke compartments in I-2 occupancy (hospitals) where the work area is located on a floor containing sleeping rooms for more than 30 persons.

Section 803.4 Interior finish. Interior finishes in exits and corridors within the work area shall comply with BC Ch 8. Prior code buildings are given a relief where such compliance may not be feasible.

Section 803.5 Guards. Guards shall be provided in accordance with BC Ch 10 and Ch 16.

Notable Provisions

■ Section 803 – Building Materials and Elements

Section 803.6 Vaults and reinforced spaces. Section is carried over from BC Ch 9 to address requirements for protection of vaults.

Section 803.7 Windows in Occupancy Groups I-1, R-1, R-2 and R-3

- **803.7.1 Light and air requirements for replacement windows:** Replacement windows serving dwelling units in Group I-1, R-1, R-2 or R-3 shall not reduce the area of glazing or operable area below the requirements of BC Chapter 12, except as modified by EBC Appendix D.
- In R-3, windows installed within an existing frame to comply with the Energy Code may reduce window size.
- **803.7.2 Window guards in Group R-2:** Subject to requirements of EBC 303.7 and BC 1015.9.
- **803.7.3 Emergency escape and rescue openings:** Replacement windows in Group R-2 and R-3 occupancies shall comply with EBC 303.8.

Notable Provisions

■ Section 803 – Building Materials and Elements

Section 803.8 Window openings on lot line air shafts in Group R-2.

- In prior code buildings, where windows open onto a lot line air shaft within the work area and any part of such window is less than 3 feet from the lot line or less than 6 feet from another window on the adjacent building, such window shall be protected as follows:
 - (1) A fire window is provided;
 - (2) Where the building is equipped throughout with an automatic sprinkler system, a water curtain is provided; or
 - (3) The window is protected by a fire shutter.

New

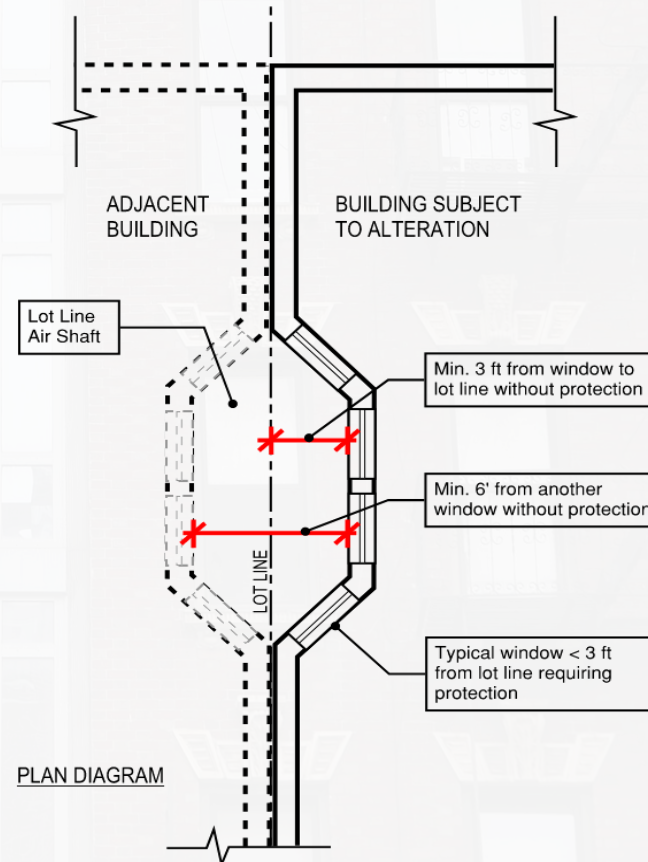
Notable Provisions

■ Section 803 – Building Materials and Elements

Section 803.8 Window openings on lot line air shafts in Group R-2.

803.8 Window Openings on Lot Line Air Shafts in Group R-2 prior code buildings

Protection required where any part of a window < 3 ft from a lot line or < 6 ft from a window in an adjacent building.



Notable Provisions

■ Section 803 – Building Materials and Elements

Section 803.10 Architectural condition assessment.

- Where the work area exceeds 50% of a particular floor, the design professional of record shall visually assess the condition of fire-resistant building elements and assemblies within the work area, and egress elements serving the work area on that same story.
- Where the assessment reveals unsafe conditions or deteriorated building elements, such elements shall be remediated.
- Assessment shall include:

Exit doors; shafts and vertical opening enclosures; exit stair enclosures; fire walls and fire-rated partitions; protection of lot line windows; fire escapes and access thereto.

Notable Provisions

■ Section 804 – Fire Protection

This section includes provisions for automatic sprinkler systems (804.2), standpipes (804.3), and fire alarm and detection systems (804.4).

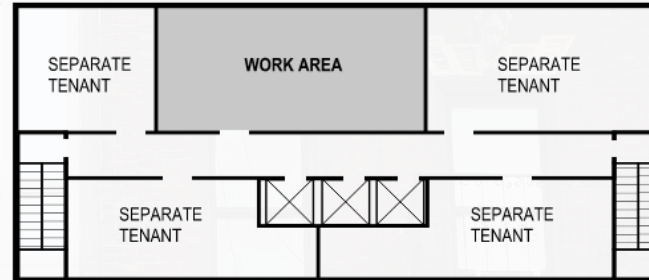
Section 804.2 Automatic sprinkler systems.

- **804.2.1 High-rise buildings**: In high-rise buildings, work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection in the entire Work Area where the floor has a sufficient sprinkler water supply.
- Where sufficient water supply is not provided for the design of a sprinkler system, work areas shall be protected by a partial coverage smoke detection system.
- Where the work area on any floor exceeds 50% of that floor area, automatic sprinkler protection shall be provided for the entire floor, except for occupied spaces under separate tenancy that are entirely outside the work area.

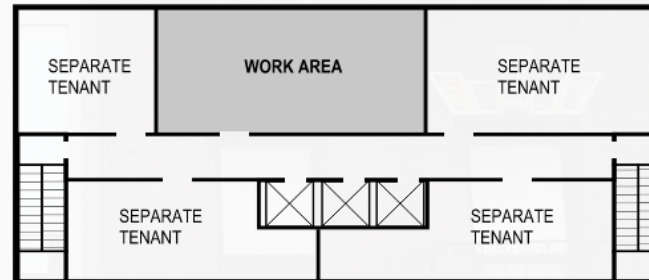
Notable Provisions

■ Section 804 – Fire Protection

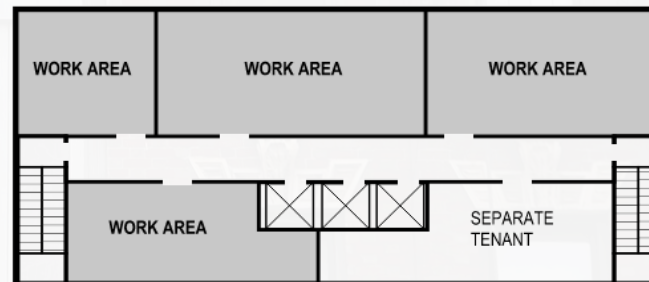
Work Areas that have exits or corridors shared by **> 1 tenant**



Work Areas that have exits or corridors serving an **occupant load > 30 persons**



Work Area > 50% of area of floor with exception for occupied spaces under separate tenancy outside the work area



Notable Provisions

■ Section 804 – Fire Protection

- **804.2.2 Occupancy Groups A, B, E, F-1, H, I, M, R-1, R-2, S-1 & S-2:** Work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection where:
 - (1) Sprinkler protection is required by the BC and,
 - (2) The work area exceeds 50% of that floor area and is located on a floor that has a sufficient sprinkler water supply.
- Where sufficient water supply is not provided for the design of a sprinkler system, Work areas shall be protected by a partial coverage smoke detection system.

Notable Provisions

■ Section 804 – Fire Protection

- **804.2.3 Sprinkler protection required:** Work areas located in above or below grade stories where such stories are required to be sprinklered in accordance with the BC shall be sprinklered where the building has a sufficient water supply without installation of a new fire pump.
 - **804.2.3.1 Supplemental automatic sprinkler system requirements:** Where the work area on any above or below grade story exceeds 50% of the area of that story, Section 804.2.3 shall apply to the entire story on which the work area is located.
- **804.2.8.2 Special provisions for prior code buildings:** Codifies commonly used CCD1s for prior code buildings regarding existing single compartment fire reserve tanks and existing insufficient water supply.

Notable Provisions

■ Section 804 – Fire Protection

Section 804.3 Standpipes

- Where the alteration work includes the addition or replacement of an entire exit stair shaft that is a required means of egress, the entire interior exit stair shaft shall be equipped with a standpipe in accordance with the BC.
- **804.3.1 Connection of fire pumps to emergency power system.** EBC Section 308.4 provides the requirements of connecting fire pumps to emergency power where the building contains an existing emergency power or may not contain an existing emergency power. See Module B for details.

Notable Provisions

■ Section 804 – Fire Protection

Section 804.3 Fire alarm and detection

- Provides specific requirements for Occupancy Groups E, I, and R-1.
- Provides requirements for smoke and carbon monoxide detection in Group R and I-1 occupancies.
- Provides requirements for the replacement of existing fire alarm systems in prior code buildings such as existing mini class E, advisory class E, and older FA systems in cabarets.
- Section 804.4.7 Codifies BB #2015-025 for alterations and replacements of existing Fire Alarm systems and components.

Notable Provisions

■ Section 805 – Means of Egress

Section 805.1 Scope

- Requirements of this section are limited to work areas that include exits or corridors shared by more than one tenant within the work area except that, where specified, they shall apply throughout the floor on which the work areas are located and beyond the work area (supplemental requirements).
- Means of egress shall be maintained for both single tenant and multi-tenant work areas per CH 3.
- Means of egress shall not be reduced.
- An existing building or structure that is not provided with means of egress as required by BC and this code shall be provided with means of egress or fire protection as directed by the commissioner.

Notable Provisions

■ Section 805 – Means of Egress

Section 805.3 Number of exits

- Single exit buildings – as permitted by BC or provisions for prior code buildings, largely adapted from the 1968 BC.
- Permits the use of existing or new fire escapes as one of the means of egress in prior code buildings, where permitted by EBC 305.5.16.
- Mezzanines shall be provided with two means of egress when the occupant load exceeds limits by Table 805.4.1.1

Section 805.4 Egress doorways

- Provide per BC with provisions for prior code buildings, largely adapted from the 1968 BC. Table details max. # of occupants with one exit access door by occupancy. Supplemental requirements apply where the work area exceeds 50% of the particular floor area.

Section 805.5 Openings in corridor walls

- Where the work area on any floor exceeds 50% of that floor area, the requirements of this section apply throughout the floor.

Notable Provisions

■ Section 805 – Means of Egress

Section 805.6 Dead end corridors

- In general, shall not exceed 20 ft.
- Dead ends in existing buildings that are protected throughout by sprinkler and fire alarm systems may comply with BC requirements.
- Provisions by occupancy for prior code buildings are adapted from the 1968 BC.

Section 805.7 Means of egress lighting & Section 805.8 Exit signs

- Required in work area per BC requirements.
- Exception that prior code places of assembly (theaters, etc.) under Article 13 of the 1938 BC with > 300 occupants shall be provided with lighting and exit signs in compliance with the requirements applicable when the building was erected.

Prior

New

IEBC

Notable Provisions

■ Section 805 – Means of Egress

Section 805.8 Exit signs

- Exit signage shall be provided in accordance with BC Ch 10.
- Exception is provided for 1938 code Places of Assembly existing signage.
- Where the work area on any floor exceeds 50% of that floor area, the requirements of this section apply throughout the floor.

Section 805.9 Handrails

- Requirements apply to handrails from the work area to and including the level of exit discharge.
- In prior code buildings, handrails in means of egress that are inadequate in strength or attachment shall be upgraded in accordance with CH 3.

Section 805.10 Refuge areas

- Capacity of refuge areas shall be maintained in Groups I-2, I-3, and ambulatory care.

Section 805.11 Guards

- Requirements apply to guards from the work area floor to, and including, the level of exit discharge but shall be confined to the egress path of any work area.

Notable Provisions

■ Section 805 – Means of Egress

Section 805.12 New egress stairs

- Where the work area includes the construction of a new egress stair in a new shaft, the new stair shall comply with BC CH 10. Existing stairs may be replaced within the existing shaft provided they comply with EBC 305.5.11, 305.5.13 and 305.5.15 for stair dimensions, riser/tread dimensions, handrails and guards.

Section 805.13 Escalators

- Replacement or alteration of existing escalators that were approved to be used as a second means of egress in prior code buildings shall be permitted in compliance with EBC 305.5.17.
- No new escalators shall be used as a component of a required means of egress.

Notable Provisions

■ Section 806 – Accessibility

Section 806.1 General

- **806.1.1 Extent of application:** An alteration shall not be required to provide a greater level of accessibility than that which would be required for new construction but shall not reduce accessibility of a facility.

Section 806.2 Compliance

- A facility that is altered shall comply with the applicable provisions of this section and BC Chapter 11 to the extent of the alteration, unless it is technically infeasible.
- Where compliance is technically infeasible, the applicant of record shall seek a commissioner's waiver.
- A facility that is constructed or altered to be accessible shall be maintained accessible during occupancy.
- Exception: an accessible means of egress is not required in existing facilities.

Notable Provisions

■ Section 806 – Accessibility

Section 806.2 Compliance (cont'd.)

Section 806.2 addresses accessibility requirements for various elements in Level 1 alterations. Examples include:

- **806.2.4 Limited Use / Limited Application elevators (LULA)**: Permitted to be a part of the required accessible route.
- **806.2.6 Ramps**: Where necessitated by space limitations, ramps steeper than 1:12 slope are permitted: steeper than 1:10 but not steeper than 1:8 for a max. rise of 3"; steeper than 1:12 but not steeper than 1:10 for a max. rise of 6".
- **806.2.8.1 Dwelling or sleeping units in Occ. Groups I-1, I-2, I-3 or R-1**: The requirements of BC Section 1107 only apply to the spaces being altered except where the units in the work area exceed more than 50% of the units in the building under single ownership, requirements of BC Section 1107 shall apply to all the units under that single ownership.

Notable Provisions

■ Section 806 – Accessibility

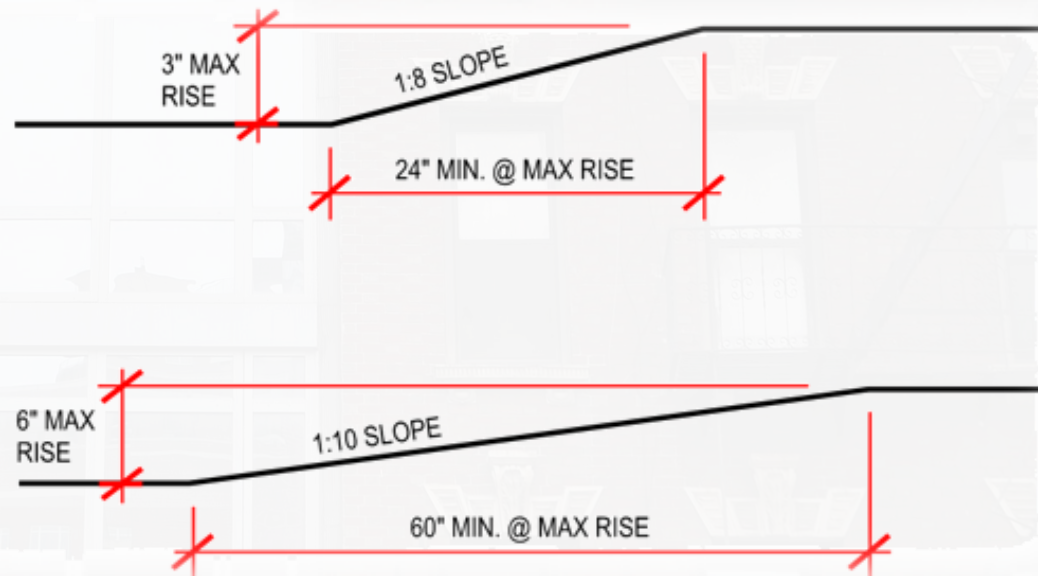
Section 806.2 Compliance (cont'd.)

Section 806.2 addresses accessibility requirements for various elements in Level 1 alterations. Examples include:

- **806.2.6 Ramps:** Where necessitated by space limitations, ramps steeper than 1:12 slope are permitted: steeper than 1:10 but not steeper than 1:8 for a max. rise of 3"; steeper than 1:12 but not steeper than 1:10 for a max. rise of 6".

806.2.6
Where necessitated by space limitations, ramps steeper than 1:12 permitted subject to maximum slope and rise dimensions.

(Diagrams not to scale).



Notable Provisions

■ Section 806 – Accessibility

Section 806.2 Compliance (cont'd.)

- **806.2.8.2 Dwelling or sleeping units in Occ. Group R-2:** The requirements of BC Section 1107 Dwelling and Sleeping Units apply only to the spaces being altered.
- **806.2.9 Toilet and bathing rooms:** Where it is technically infeasible to alter existing toilet and bathing rooms to be accessible, an accessible family or assisted-use toilet or bathing room is permitted, located on an accessible route, on the same floor and in the same area as the existing rooms.
- **806.2.10 Dressing, fitting and locker rooms:** Where it is technically infeasible to provide accessible dressing, fitting or locker rooms at the same location as similar types of rooms, one accessible room on the same level shall be provided.

Notable Provisions

■ Section 806 – Accessibility

Section 806.3 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, including entrances, shall be accessible. The accessible route to the primary function area shall include toilet facilities and drinking fountains serving the area of primary function.
- The costs of providing the accessible route are not required to exceed 25% of the costs of the alterations affecting the area of primary function.
- This section provides exceptions for certain conditions and prioritizes the cost of improvements along the path of travel within the 25% cost limit – accessible entrances, then accessible route, then toilet facilities and drinking fountains.

Notable Provisions

■ Section 807 – Structural

- Structural elements and systems within buildings undergoing Level 1 alterations shall comply with Chapter 7. See Module E.

■ Section 808 – Electrical

Section 808.1 New installations

- All newly installed electrical equipment and wiring relating to work done in any work area shall comply with all applicable requirements of the Electrical Code.

Section 808.2 Existing installations

- Existing wiring and equipment supplying the work area that is found to be defective shall be upgraded in Group A-1, A-2, A-5, H and I occupancies to meet the requirements of the NYC Electrical Code.
- The section provides examples of defective wiring, such as ungrounded and unbonded equipment, knob and tube, etc.

Notable Provisions

■ Section 808 – Electrical

Sections 808.3, 808.4 & 808.5

- Provides requirements for installation of receptacle and lighting outlets in Group R-2 and R-3 occupancies.
- Requires working and dedicated space for electrical equipment such as panelboards in Group R-2 and R-3 occupancies.
- Refers to NFPA 72 as modified by BC Appendix Q and the NYC Electrical Code for installation of smoke and carbon monoxide detectors in dwelling and sleeping units.

Notable Provisions

■ Section 809 – Mechanical

Sections 809.1 General

- Mechanical elements and systems within the work area undergoing Level 1 alteration or within rooms or spaces where work on a stand-alone system occurs shall comply with this section, the Mechanical Code as applicable and EBC 309.
- **Section 809.1.1:** An entire mechanical system shall comply with the Mechanical Code for new construction when (1) the work area exceeds 50% of the area served by that system; or (2) 50% of the capacity of terminal distribution elements connected to that system is altered or replaced.

Sections 809.2 Applicability of *New York City Mechanical Code*.

- Work not addressed by EBC Ch 1 or Ch 3, shall be governed by MC Ch 1 and 3, as applicable. Section addresses applicability of the NYC MC to Level 1 installations, by chapter, with exceptions for existing buildings. See EBC 809.3 through 809.15.

Notable Provisions

■ Section 810 – Plumbing

- Plumbing systems, piping and fixtures within the work area in buildings undergoing Level 1 alteration or within rooms or spaces where work on stand-alone systems shall comply with the Plumbing Code and EBC 310.
- Where concealed existing piping is exposed during a Level 1 alteration, such piping shall be insulated.

■ Sections 811 – Fuel Gas Systems

- Alterations made to fuel gas systems including piping, appliances and components shall comply with Section 311 and this section.
- Installation of fuel burning appliances in dwelling units shall require the installation of carbon monoxide detection in accordance with the BC.

Notable Provisions

■ Section 812 – Elevators and Conveying Systems

- Alterations made to existing elevators and conveying systems shall comply with BC CH 30 and ASME A17.1 as modified by Appendix K.
- EBC Table 812.1 defines the extent of Elevator Level 1 alteration work.

A17.1 Section	Name of A17.1 Section	A17.1 Sub-section	Name of A17.1 Sub-section
8.6.3	Replacements	8.6.3.10	Replacement of Hydraulic Jack, Plunger, Cylinder, Tanks, and Anticreep Leveling Device
8.6.3	Replacements	8.6.3.11	Replacement of Valves and Piping
8.7.2	Alterations to Electric Elevators	8.7.2.1	Hoistway Enclosures
8.7.2	Alterations to Electric Elevators	8.7.2.7	Machinery Spaces, Machine Rooms, Control Spaces, and Control Rooms
8.7.2	Alterations to Electric Elevators	8.7.2.8	Electrical Equipment, Wiring, Pipes, and Ducts in Hoistways and Machine Rooms
8.7.2	Alterations to Electric Elevators	8.7.2.9	Machinery and Sheave Beams, Supports, and Foundations

Notable Provisions

■ Section 813 – Energy Conservation

- Level 1 alterations are permitted without requiring the entire building or structure to comply with the energy requirements of the ECC. Level 1 alterations shall conform to the energy requirements of Chapters R5 or C5, Existing Buildings, of the ECC, as applicable.

■ Sections 814 – Interior Environment

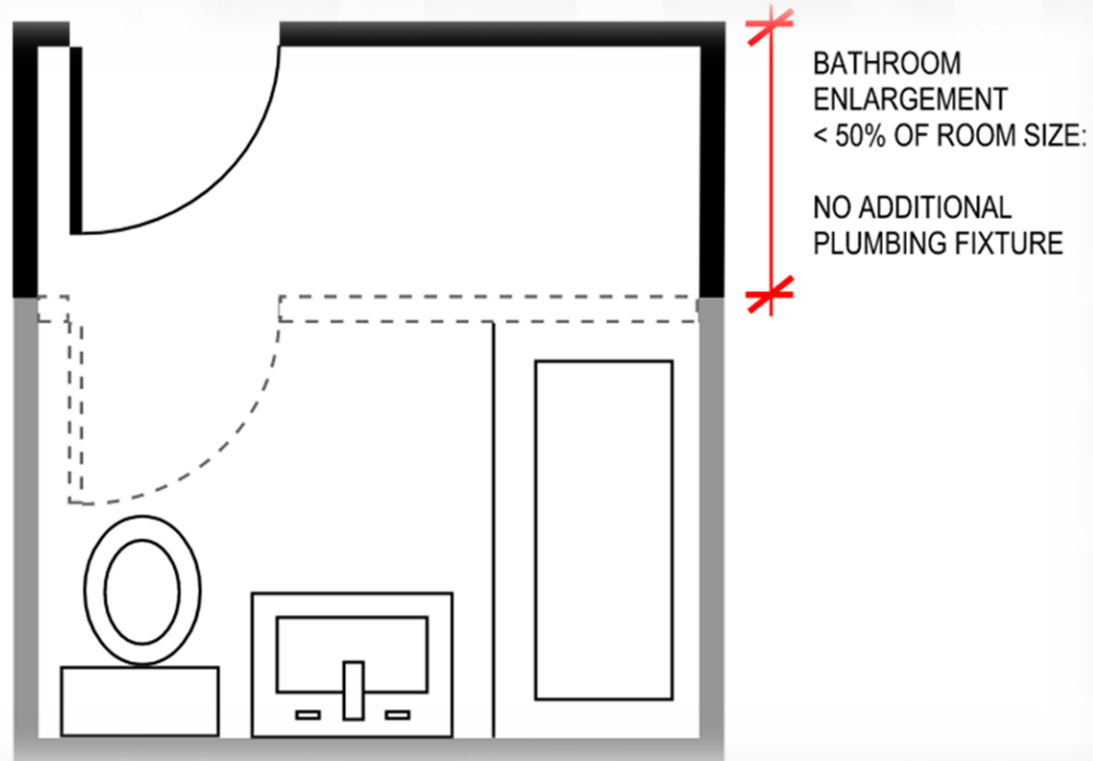
- For bathrooms, toilet rooms, kitchens and kitchenettes undergoing enlargement, natural or mechanical ventilation sized in accordance with the Mechanical Code shall be provided for the proposed floor area.
- Exception: bathrooms and toilet rooms enlarged to meet the accessibility requirements of the BC and that increase the room size by less than 50% of the existing floor area shall be permitted to maintain the existing means of ventilation provided no additional plumbing fixture is proposed.
- Exception: kitchens and kitchenettes enlarged to meet the accessibility requirements of the BC shall be permitted to maintain the existing means of ventilation provided no additional cooking appliance load is proposed.

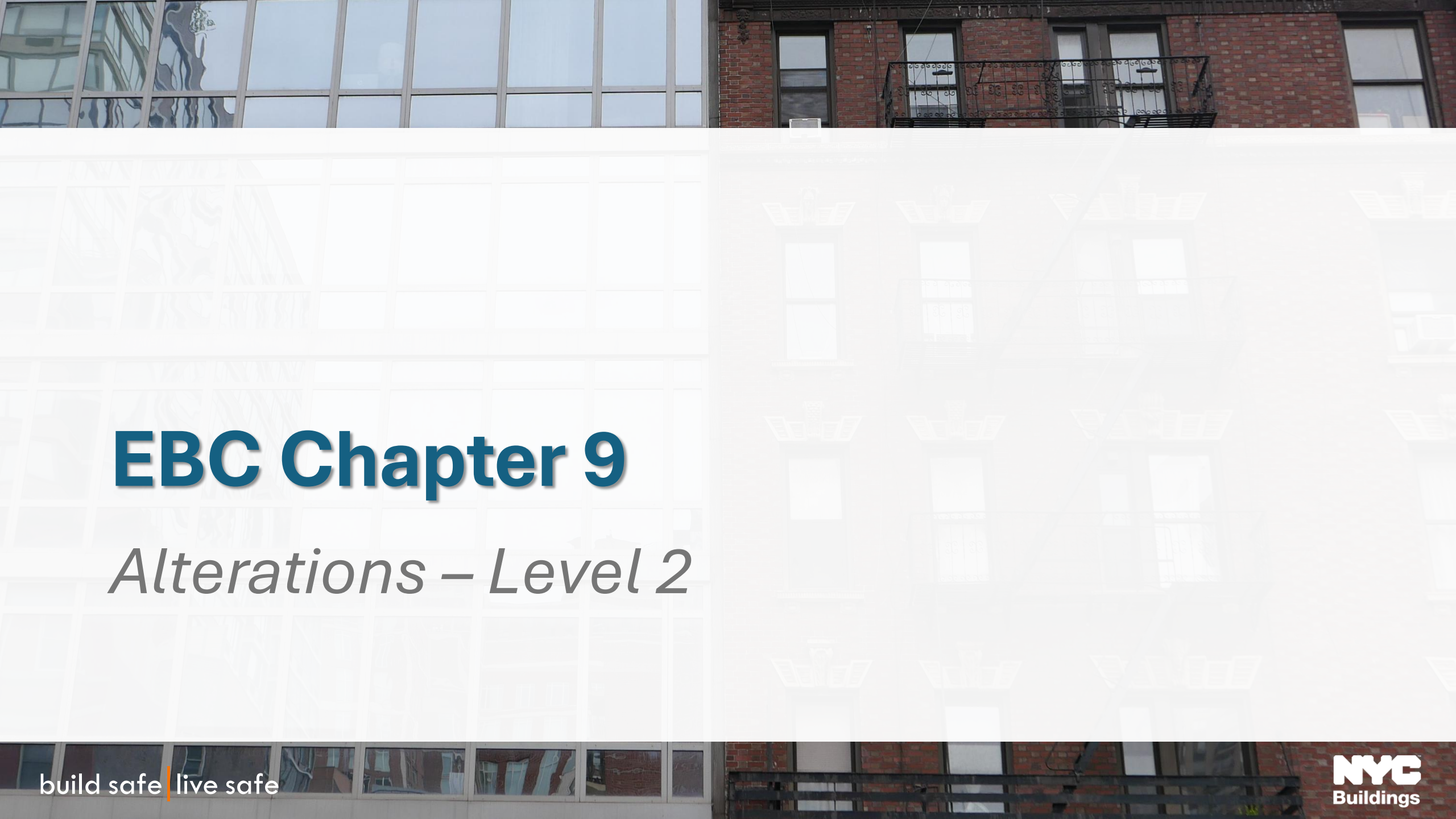
Notable Provisions

■ Sections 814 – Interior Environment

Sections 814.1 General Ventilation requirements for enlarged bathrooms, toilet rooms, kitchens, and kitchenettes.

814.1
Bathrooms & Toilet Rooms enlarged to meet accessibility requirements that increase room size < 50% of existing bathroom floor area may maintain existing means of ventilation, provided no additional plumbing fixtures are proposed.





EBC Chapter 9

Alterations – Level 2

Table of Contents

901	General
902	Special use and Occupancy
903	Building Materials and Elements
904	Fire Protection
905	Means of Egress
906	Accessibility
907	Structural
908	Electrical
909	Mechanical
910	Plumbing
911	Fuel Gas Systems
912	Energy Conservation

Notable Provisions

■ Definition of Alteration – Level 2.

An alteration to a building where the work area exceeds **50% of the building area**.

■ Key Concepts

- Comply with EBC CH 8 as a minimum level of code compliance except where CH 9 requires a higher standard for specific conditions.
- 110% Rule: Where a Level 2 alteration increases the existing floor surface area by more than 110%, such building shall comply with the BC as if hereafter erected.
- Includes applicability of life safety provisions of BC 403 for certain high-rise buildings where the building is subject to Alteration – Level 2.
- Where the work area exceeds 75% of building area, selected building elements and systems shall comply as hereafter erected and apply to the entire building.

Notable Provisions

- **Definition of Alteration – Level 2.**

An alteration to a building where the work area exceeds **50% of the building area**.

Work Area Calculation

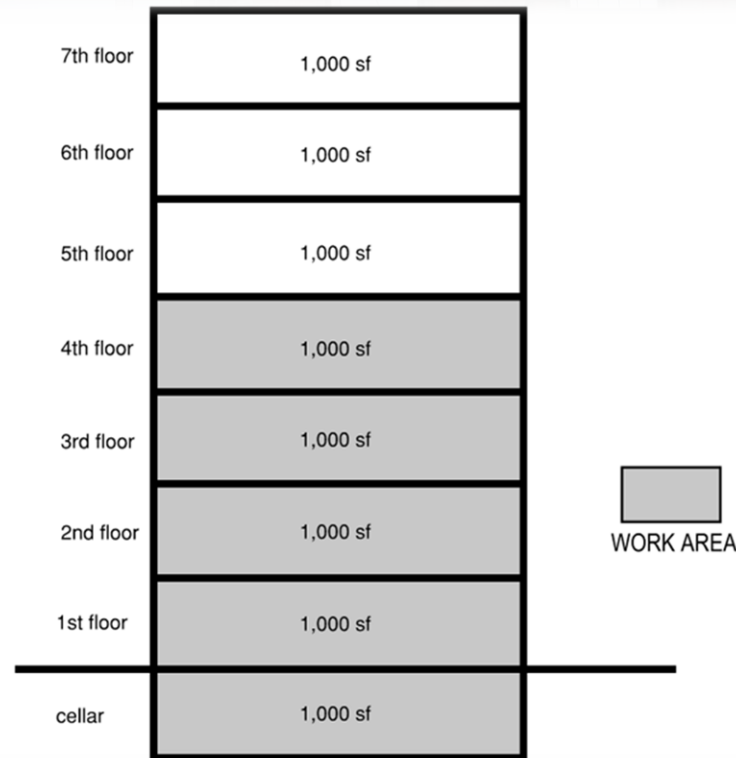
Total building area: **8,000 sf**

Work area: 100% of floors 1 to 4 & cellar = 5,000 sf

Therefore, $5,000 \text{ sf} / 8,000 \text{ sf} = 62.5\% > 50\%$

Proposed alteration is a **Level 2 Alteration** that is required to comply with Chapter 9.

Because work area $> 50\%$ on each of the floors being altered, supplemental requirements (803.2.3 "Stairway enclosure") also apply.



Notable Provisions

- **Definition of Alteration – Level 2.**

An alteration to a building where the work area exceeds **50% of the building area**.

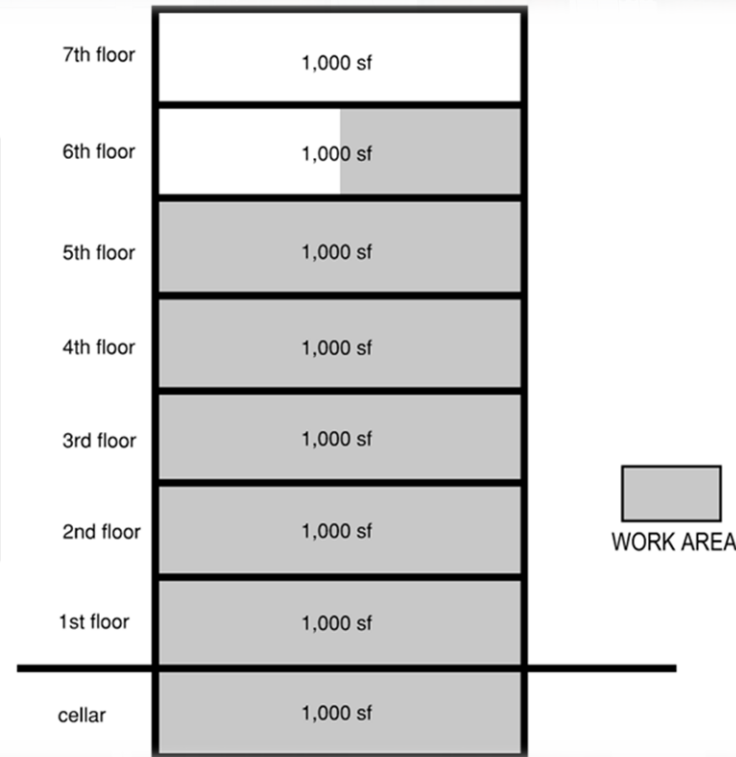
Work Area Calculation

Total building area: **8,000 sf**

Work area: 100% of floors 1 to 5 & cellar,
and 50% of 6th floor = 6,500 sf

Therefore,
 $6,500 \text{ sf} / 8,000 \text{ sf} = 81.25\% > 75\%$

**Selected building elements and systems
shall comply as if hereafter erected and
apply to the entire building.**



Notable Provisions

■ Section 902 – Special Use and Occupancy

Section 902.1 Uses and occupancies subject to Chapter 4 of the *New York City Building Code*.

- **902.1.1 High-rise buildings.** Level 2 alterations in high-rise buildings shall comply with this section and BC 403.
 - **902.1.1.3 Additional exit stairway:** In buildings exceeding 420 ft. height, where the work area exceeds 75% of the building area, the requirements for an additional exit stair apply (BC 403.5.2).
 - Exception: where at least 50% of general public use passenger elevators are used for occupant self-evacuation.
 - **902.1.1.4 Structural integrity of exit and elevator hoistway enclosures:** Where the work area includes stairs or elevator hoistway enclosures, the design professional of record shall determine compliance of the enclosures with structural integrity provisions of BC 403.2.3.
 - Provides requirements for upgrading exit and elevator hoistway enclosures.

Notable Provisions

- **902.1.1.5 Smokeproof exit enclosures**: In prior code buildings, where the work area exceeds 75% of the building area, smokeproof exit enclosures shall be provided for all exit stairways throughout the building.
- **902.1.1.6 Elevator lobbies in prior code buildings**: Elevator lobbies required by BC 403.6.3 shall be constructed on each floor being altered where the work area exceeds 50% of that floor.
- Where the work area exceeds 75% of the building area, elevator lobbies shall be constructed on all floors served by elevators.
- **902.1.1.6.1 Access to an exit stair not available**: Where the elevator lobby cannot provide access to an exit, a red telephone shall be installed near the elevator doors in the elevator lobby to communicate with the fire command station, building manager's office or a central service station when the building is not attended.
- **902.1.1.7 Emergency and standby systems**: Where the work area exceeds 75% of the building area, the building shall comply with BC Chapter 27.

Notable Provisions

■ Section 903 – Building Elements and Materials

Prior

New

IEBC

Section 903.1 Existing shafts and vertical openings: Existing shafts and vertical openings, including stairways, shall be enclosed and protected in accordance with the BC from the highest level within the work area, including the level of exit discharge and all floors below the level of exit discharge.

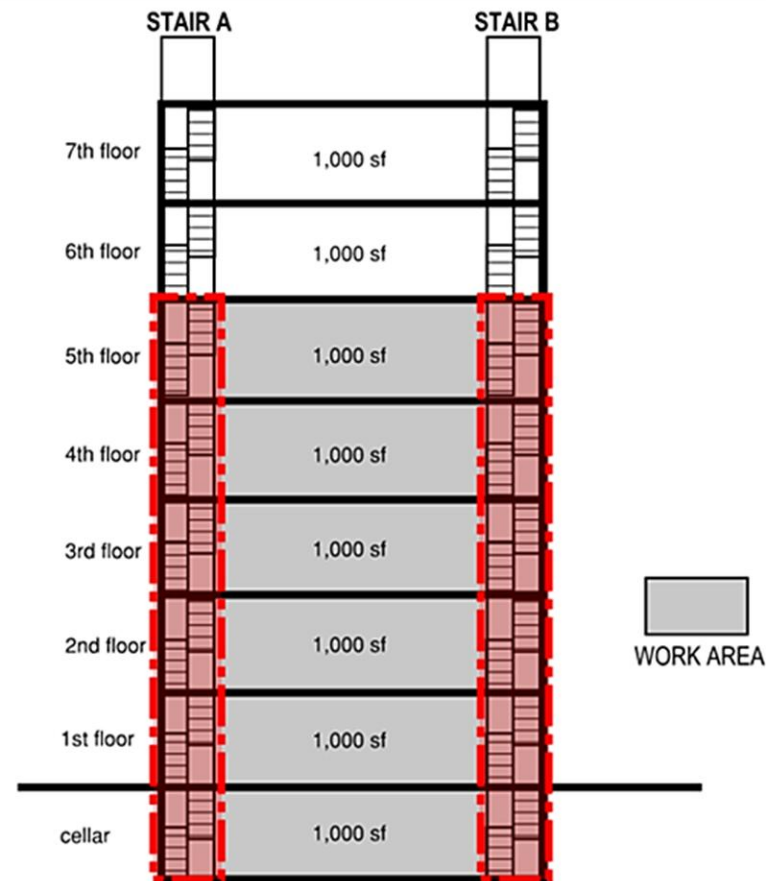
- In prior code buildings, existing shafts and vertical openings, including stairways, shall be enclosed and protected per EBC 803.2.1 from the highest level within the work area including the level of exit discharge and all floors below.

Notable Provisions

■ Section 903 – Building Elements and Materials

903.1 Existing Shafts & Vertical Openings

Existing shafts and vertical openings, including stairways, shall be enclosed and protected per the Building Code from the highest level within the work area and down to the level of exit discharge and all floors below.



Notable Provisions

- **Section 903 – Building Elements and Materials**
 - **903.2 Fire separations in Group R-3:** Establishes inspection and remediation requirements where the work area in attached one- or two-family dwellings results in the removal of wall or ceiling finishes exposing the existing fire separation. Such buildings were constructed under BC Appendix M or DOB memorandums or directives.



New

Notable Provisions

■ Section 903.4 – Protection of window openings on lot line air shafts in Group R-2 buildings.

- In prior code buildings, windows within the work area, opening on a lot line air shaft as defined in EBC 202, shall be protected in the manner described in EBC 803.8
- **Exception** is provided for windows outside the work area located in occupied tenant spaces.
- Where the work area exceeds 75% of building area, all windows opening on lot line air shafts shall be protected throughout the building.

Prior

New

Notable Provisions

■ Section 904 – Fire Protection

- The entire building shall comply with BC Chapter 9 as if hereafter erected where the work increases floor surface area of the building by more than 110% or the Level 2 alteration exceeds 75% of the building area.
- **904.2 Automatic sprinkler systems:** Shall be provided in the work area in accordance with EBC 804.2 regardless of the occupant load, the percentage of the work area per floor, and whether the work area includes exits or corridors serving more than one tenant.
- Special provisions for prior code high-rise buildings, rubbish and linen chutes and occupancies used for the manufacture, display or storage for upholstered furniture or mattresses.
- **904.4 Fire alarm and detection systems:** Fire alarm and detection systems shall be provided throughout the work area in accordance with BC 907 as required for new construction.

Notable Provisions

■ Section 905 – Means of Egress

- **905.1.1 & 905.1.2 Means of egress lighting and exit signs**: All interior exit stairways and ramps from the highest work area floor to the exit discharge shall be provided with artificial lighting and exit signs in accordance with the BC Ch 10.
- **905.2 Existing combustible stairs in prior code buildings**: Where the Level 2 work area in a prior code Occupancy Group R-1 or R-2 building exceeds 75% of the building area, existing exit stairs constructed of combustible materials shall be replaced with non-combustible construction, including stairs, landings, handrails and guards.
- Requirement modified for existing stair shafts that cannot meet the dimensional requirements of the BC.
- Replacement of stair may not be required in prior code buildings that are fully sprinklered and comply with the fire protection requirements of BC Chapter 9.

Notable Provisions

■ Section 906 – Accessibility

- **906.1.1 Applicability of BC Chapter 11 to the entire building:** Where a building is undergoing a Level 2 alteration, the entire building shall comply with the provisions of BC Chapter 11 as if hereafter erected.

■ Section 907 – Structural

- **907.2 Structural condition assessment:** Level 2 alterations require an initial structural condition assessment per EBC 704.3. Where the work includes a structural alteration, a detailed structural condition assessment per EBC 704.4 is also required.

■ Section 908 – Electrical

- **908.1.1 Compliance of the entire electrical system as new construction:** Where the Level 2 work area exceeds 75% of the building area, the entire electrical system shall comply with the provisions of the Electrical Code for new construction.

Notable Provisions

■ Section 909 – Mechanical

909.2 Applicability of the Mechanical Code: All existing mechanical systems within a Level 2 work area, including components, equipment and appliances, shall comply with the NYC MC, this section and EBC 809.2.

- **909.2.1 & 909.2.2 Ventilation and exhaust systems:** Ventilation and exhaust systems serving Level 2 work areas shall be newly installed or altered to comply with the MC for new construction.
- Where the Level 2 work area exceeds 75% of the building area, all ventilation, exhaust and duct systems shall be newly installed or altered to comply with the MC for new construction.

Notable Provisions

■ Section 910 – Plumbing / Section 911 – Fuel Gas

- **910.1.1 / 911.1.1 Compliance of the entire plumbing or fuel gas system as new construction:** Where the Level 2 work area exceeds 75% of the building area, the entire plumbing and/or fuel gas system shall comply with the provisions of the Plumbing Code and the Fuel Gas Code for new construction.
- **Exception.** Plumbing and fuel gas system components that found to be in code-compliant condition upon inspection and certification by a licensed master plumber shall be permitted to remain.

■ Section 911 – Energy Conservation

- Level 2 alterations to existing buildings or structures are permitted without requiring the entire building or structure to comply with the energy requirements of the Energy Conservation Code.
- Level 2 alterations shall conform to the energy requirements of Chapters R5 or C5 of the ECC, as applicable.



NYC EXISTING BUILDING CODE

Everything Alterations:

Level 1 (Chapter 8) and Level 2 (Chapter 9)

Course# S102225 Expires 10/8/28

build safe | live safe

Wendy Wan, RA

MODULE D

INDUSTRY TRAINING PROGRAM

9/30/25 10-11:30	A module	All About the Existing Building Code: An Overview
10/9/25 10-11:30	B module	Beginning Chapters: Administration, General Requirements and Limited Alterations
10/16/25 10-11:30	C module	Charting the Compliance Path: Work Area Method and Levels of Alteration
10/22/25 10-11:30	D module	Everything Alterations: Level 1 (Chapter 8) and Level 2 (Chapter 9)
10/29/25 10-11:30	E module	Designing Structural Alterations: Chapter 7 and Related Appendices
11/5/25 10-11:30	F module	Future Changes: Occupancy, Additions, and Relocation of Buildings

CONTACT US

■ WEBPAGE

- <https://www.nyc.gov/site/buildings/codes/existing-building-code.page>

■ EMAIL

- EBC@buildings.nyc.gov



The image shows a street-level view of two buildings. On the left is a modern building with a grid of large glass windows reflecting the sky and other buildings. On the right is a traditional red brick building with multiple stories, featuring small windows with decorative lintels and a black metal fire escape running vertically along its side. A large, white, stylized logo is centered over the image, spanning both buildings. The logo consists of the letters 'NYC' in a bold, blocky font, with a small 'TM' trademark symbol to the upper right of the 'C'. Below 'NYC' is the word 'Buildings' in a clean, white, sans-serif font.

NYCTM Buildings