Final Draft Proposed Changes to the 2020 Existing Building Code of New York State
Issued July 2024

This document is being developed for the purpose of posting a notice of rule in development for the New York State Fire Prevention and Building Code Council (Code Council) and the New York State Department of State. The purpose is to show the final draft proposed changes to the current version of the 2020 Existing Building Code of New York State (2020 EBCNYS). Separate documents will exist for each of the current NYS specific code books. This document **is not intended to include** all of the proposed code language; it only contains those sections of code that are proposed to be new or modified. Please note that unaltered portions of the 2020 code books are not included within this document and should be considered to remain the same for this code update.

This document is the final draft of the notice of rule in development being released for comment from the public and the Code Council. Accordingly, the Yellow highlighted text included in earlier versions to denote the changes from earlier versions of the documents has been removed.

Please note:

- Chapter 1's are included as a separate document for all of the code books
- This document does not include grammatical, punctuation, and simple word clarifications that do not change the intent or meaning of a provision.
- Where a change is made by NYS, rather than an ICC level change, "[NY]" is added to the section numbers; however, grammatical and punctuation changes made by NYS that do not change the intent or meaning of a provision are not denoted by [NY]. Similarly, updates made by NYS to cross-referenced sections or sections where the only change is to the referenced code book (i.e. ~~International Plumbing Code~~ Plumbing Code of New York State are not denoted by [NY]).
- Changes to the existing text are denoted in the following manner:
  - Text insertions: TEXT
  - Text deletions: ~~TEXT~~
- Cross-referenced code sections may not be accurate and/or may change based on existing and future modifications. Code sections are based on the anticipated 2024 ICC code section.
- Where multiple code change proposals are listed together, it represents multiple ICC code changes that dealt with the same code sections and were therefore consolidated.
- Some code changes involve complex tables, lists, or lengthy sections in which a small change was made to only a portion of the section. In those instances, the entire section, table, list, etc. that was unchanged may not be included below. A note has been added to indicate when that happens (i.e. "Items 1 through 13 remain unchanged").
- Reference to Chapter 11 of the Residential Code of New York State for energy provisions will be corrected in the notice of proposed rule making documents to reference the corresponding provision from the Energy Conservation Construction Code of New York State.

Chapter 2 Definitions

[NY] 201.1 Scope. Unless otherwise expressly stated, the ~~following~~ words and terms provided in italics shall, for the purposes of this code, have the meanings indicated in this chapter or as defined within the chapter or appendix where the word or term is found, except as provided in Sections 201.3 and 201.4.

[NY] 201.2 Interchangeability. Words and terms used in the present tense include the future; words and terms stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural includes the singular.

[NY] 201.3 ~~Terms~~ Words and terms defined in other codes. Where italicized words and terms are not defined in this code and are defined in the *Building Code of New York State, Energy Conservation Construction Code of New York State, Fire Code of New York State, Fuel Gas Code of New York State, Mechanical Code of New York State, or Plumbing Code of New York State*, such terms shall have the meanings ascribed to them in those codes.

[NY] 201.4 ~~Terms~~ Words and terms not defined. Where words and terms are not italicized or are italicized but not defined through the methods authorized in this section, such words and terms shall have the meanings defined in applicable referenced standards, statutes, or regulations or shall have the ordinarily accepted meanings such as the context implies.

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided or staff has accepted responsibility for care recipients already incapable.

[A] APPROVED. Acceptable to the ~~*building*~~ *code official*.

[A] APPROVED AGENCY. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the code official.

[A] CHANGE OF OCCUPANCY. ~~A change in the use of a building or a portion of a building that results in any of the following:~~ Any of the following shall be considered as a change of occupancy where the current International Building Code requires a greater degree of safety, accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

1. ~~A change of occupancy classification.~~ Any change in the occupancy classification of a building or structure.
2. ~~A change from one group to another group within an occupancy classification.~~ Any change in the purpose of, or a change in the level of activity within, a building or structure.
3. ~~Any change in use within a group for which there is a change in application of the requirements of this code.~~ A change of use.

[A] CHANGE OF USE. A change in the use of a building or a portion of a building, within the same group classification, for which there is a change in application of the code requirements.

[NY] ~~BUILDING~~ CODE OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

[BS] DANGEROUS. Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous:

1. The building or structure has collapsed, has partially collapsed, has moved off its foundation or lacks the necessary support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgement of any portion, member, appurtenance or ornamentation of the building or structure under ~~service loads~~ permanent, routine or frequent loads; under actual loads already in effect; or under snow, wind, rain, flood, earthquake aftershock, or other environmental loads when such loads are imminent.

[BS] DISPROPORTIONATE EARTHQUAKE DAMAGE. A condition of earthquake-related damage where both of the following occur:

1. The 0.3-second spectral acceleration at the building site for the earthquake in question, as estimated by one of the following, is less than ~~40~~ 30 percent of the mapped acceleration parameter Ss:

1.1. The ~~the~~ United States Geological Survey's algorithm for the data point closest to the site.

1.2. As determined from peer-reviewed seismograph records from the site or from locations closer to the site than the algorithm-provided data points.~~, for the earthquake in question is less than 40 percent of the mapped acceleration parameter SS~~.

2. The vertical elements of the lateral force-resisting system have suffered damage such that the lateral load-carrying capacity of any story in any horizontal direction has been reduced by more than 10 percent from its ~~predamage~~ pre-earthquake condition**.**

[BE] EMERGENCY ESCAPE AND RESCUE OPENING. An operable exterior window, door or other similar device that provides for a means of escape and access for rescue in the event of an emergency.

[BF] EXTERIOR WALL COVERING. A material or assembly of materials applied on the exterior side of exterior walls for the purpose of providing a weather-resisting barrier, insulation or for aesthetics, including but not limited to, veneers, siding, exterior insulation and finish systems, architectural trim and embellishments, such as cornices, soffits, facias, gutters and leaders.

[BF] EXTERIOR WALL ENVELOPE. A system or assembly of exterior wall components, including exterior wall finish materials, that provides protection of the building structural members, including framing and sheathing materials, and conditioned interior space from the detrimental effects of the exterior environment.

[NY] FLOOD HAZARD AREA. The greater of the following two areas:

1. The area within a flood plain subject to a ~~1~~ 0.2-percent or greater chance of flooding in any year.
2. The area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.

GYPSUM BOARD. A type of gypsum panel product consisting of a noncombustible core primarily of gypsum with paper surfacing.

GYPSUM PANEL PRODUCT. The general name for a family of sheet products consisting essentially of gypsum complying with the standards specified in Table 2506.2 and Table 2507.2, and Chapter 35 of the International Building Code.

GYPSUM SHEATHING. Gypsum panel products specifically manufactured with enhanced water resistance for use as a substrate for exterior surface materials.

GYPSUM WALLBOARD. A gypsum board used primarily as an interior surfacing for building structures.

~~**[BS] GROUND FLOOR**. Any floor whose elevation is immediately accessible from an adjacent grade by vehicles or pedestrians. The ground floor portion of the structure does not include any floor that is completely below adjacent grades.~~

[NY] HISTORIC BUILDING. An existing building ~~or structure~~ that is ~~one or more~~ any of the following:

1. Listed, or certified as eligible for listing, ~~by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places~~ in the National Register of Historic Places or in the New York State Register of Historic Places.
2. Designated as historic under an applicable state or local law.
3. Certified as a contributing resource within a National Register-listed, ~~or a state-designated~~ State Register-listed, or locally designated historic district.

LISTED. Equipment, materials, products or services included in a list published by an organization acceptable to the *code official* and concerned with evaluation of products or services that maintains periodic inspection of production of *listed* equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Terms that are used to identify *listed* equipment, products or materials include "listed," "certified," "classified" or other terms as determined appropriate by the listing organization.

LOWEST FLOOR. The lowest floor of the lowest enclosed area, including basement, but excluding any unfinished or flood-resistant enclosure, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

OCCUPIABLE ROOF. An exterior space on a roof that is designed for human occupancy, other than maintenance or repair, and which is equipped with a means of egress system meeting the requirements of this code.

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

PHOTOVOLTAIC PANEL SYSTEM. A system that incorporates discrete photovoltaic panels, that converts solar radiation into electricity, including rack support systems.

[NY] RECONFIGURATION OF SPACE. A reconfiguration of space includes a change of a space from nonhabitable to habitable, the installation or removal of walls, or partitions, or any other division of space, or the *change in use* of a space in which the new use could be considered an increase in hazard as determined by the authority having jurisdiction.

~~**REHABILITATION.** Any work, as described by the categories of work defined herein, undertaken in an existing building.~~

~~**[BS] SEISMIC FORCES.** The loads, forces and requirements prescribed herein, related to the response of the building to earthquake motions, to be used in the analysis and design of the structure and its components. Seismic forces are considered either full or reduced, as provided in Chapter 3.~~

STORM SHELTER. A building, structure or portions thereof, constructed in accordance with ICC 500, designated for use during hurricanes, tornadoes or other severe windstorms.

[BS] SUBSTANTIAL STRUCTURAL DAMAGE. A condition where any of the following apply:

1. The vertical elements of the lateral force-resisting system have suffered damage such that the lateral load-carrying capacity of any story in any horizontal direction has been reduced by more than 33 percent from its predamage condition.
2. The capacity of any vertical component carrying gravity load, or any group of such components, that has a tributary area more than 30 percent of the total area of the structure's floor(s) and roof(s) has been reduced more than 20 percent from its predamage condition, and the remaining capacity of such affected elements, with respect to all dead and live loads, is less than 75 percent of that required by the *International Building Code* for new buildings of similar structure, purpose and location.
3. The capacity of any structural component carrying snow load, or any group of such components, that supports more than 30 percent of the roof area of similar construction has been reduced more than 20 percent from its predamage condition, and the remaining capacity with respect to dead, live and snow loads is less than 75 percent of that required by the *International Building Code* for new buildings of similar structure, purpose and location.

For purposes of this definition, work done to implement repairs shall not be considered damage that reduces structural capacity.

Chapter 3 Provisions for All Compliance Methods

SECTION 301 ~~ADMINISTRATION~~ SCOPE

301.1 ~~General~~ Applicability. The *repair*, *alteration*, *change of occupancy*, *addition* or relocation of all *existing buildings* shall comply with Section 301.2, 301.3 or 301.4. The provisions of Sections 302 through 309 shall apply to all *alterations*, *repairs*, *additions*, relocation of structures and *changes of occupancy* regardless of compliance method.

301.1.1 Bleachers, folding and telescopic seating, and grandstands. Existing bleachers, folding and telescopic seating and grandstands shall comply with ICC 300.

301.3 Alteration, addition or change of occupancy. The *alteration*, *addition* or *change of occupancy* of all *existing buildings* shall comply with one of the methods listed in Section 301.3.1, 301.3.2 or 301.3.3 as selected by the applicant. Sections 301.3.1 through 301.3.3 shall not be applied in combination with each other.

Exception: Subject to the approval of the *code official*, *alterations* complying with the laws in existence at the time the building or the affected portion of the building was built shall be considered in compliance with the provisions of this code. New structural members added as part of the *alteration* shall comply with the *International Building Code*. This exception shall not apply to the following: ~~*alterations* that constitute~~

1. *Alterations* for accessibility required by Section 306.
2. *Alterations* that constitute *substantial improvement* in *flood hazard areas*, which shall comply with Sections 503.2, 701.3 or 1301.3.3.
3. ~~This exception shall not apply to the structural~~ Structural provisions of Section 304, Chapter 5 or to the structural provisions of Sections 706, 805 and 906.

~~**301.5 Compliance with accessibility.** Accessibility requirements for existing buildings shall comply with the 2009 edition of ICC A117.1.~~

~~**302.1 Applicability.** The provisions of Section 302 apply to all alterations, repairs, additions, relocations of structures and changes of occupancy regardless of compliance method.~~

302.2.1 Additional codes in health care. In existing Group I-2 occupancies, ambulatory health care *facilities*, outpatient clinics and hyperbaric *facilities*, *alterations*, *repairs*, *additions* and *changes of occupancy* to, or relocation of, *existing buildings* and structures shall also comply with NFPA 99.

SECTION 303 STORM SHELTERS

303.1 General. This section applies to the design and construction of storm shelters for the purpose of providing protection during tornados, hurricanes and other severe windstorms. Community storm shelters shall be evaluated, maintained and repaired in accordance with this section and ICC 500.

303.1.1 Construction. Storm shelters shall be constructed in accordance with Section 423 of the International Building Code and ICC 500 and shall be designated as hurricane shelters, tornado shelters, or combined hurricane and tornado shelters.

> **Exception:** Storm shelters added to critical emergency operations facilities or Group E occupancies are not required to comply with the travel distance in Section 423.4.2 or 423.5.2 of the *International Building Code*.

~~**1106.1.2**~~**303.2.2 Location.** Storm shelters shall be located within the buildings they serve, or shall be located where the maximum distance of travel from not fewer than one exterior door of each building to a door of the shelter serving that building does not exceed 1,000 feet (305 m).

~~**1106.1**~~ **303.3 Addition to a Group E occupancy.** Where an addition is added to an existing Group E occupancy located in an area where the shelter design wind speed for tornados is 250 mph (402.3 km/h) in accordance with Figure 304.2(1) of ICC 500 and the occupant load in the addition is 50 or more, the addition shall have a storm shelter constructed in accordance with ICC 500.

Exceptions:

1. Group E day care facilities .
2. Group E occupancies accessory to places of religious worship.
3. Additions meeting the requirements for shelter design in ICC 500.

~~**1106.1.1**~~ **303.2.1** ~~**Required**~~ **Design occupant capacity**. The required design occupant capacity of the storm shelter shall include all buildings on the site, and shall be the ~~greater of the following:~~

~~1. The~~ total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.

~~2. The occupant load of any indoor assembly space that is associated with the Group E occupancy.~~

Exceptions:

~~1. Where an addition is being added on an existing Group E site, and where the addition is not of sufficient size to accommodate the required occupant capacity of the storm shelter for all of the buildings on-site, the storm shelter shall at a minimum accommodate the required capacity for the addition.~~

~~2. Where approved by the code official, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing storm shelters on the site.~~

1. Where an *addition* is being added on an existing Group E site, and where the *addition* is not of sufficient size to accommodate the required design occupant capacity of the storm shelter for all of the buildings on-site, the storm shelter shall at a minimum accommodate the required capacity for the *addition*.
2. Where *approved* by the *code official*, the required design occupant capacity of the shelter shall be permitted to be reduced by the design occupant capacity of any existing storm shelters on the site.

303.3 ~~303.2.2~~ Occupancy classification. The occupancy classification for storm shelters shall be determined in accordance with Section 423.3 of the *International Building Code*.

[BS] 304.3 Seismic evaluation and design procedures. Where required, seismic evaluation or design shall ~~be based on~~ comply with the procedures and criteria in this section, regardless of which compliance method is used. The scope of the required evaluation or design shall be as indicated in applicable provisions of Chapters 4 through 12.

[BS] 304.3.1 ~~Compliance with full~~ Full seismic ~~forces~~ criteria. ~~Where compliance requires the use of full seismic forces, the criteria shall be in accordance with one of the following~~ Where required, seismic evaluation or design shall comply with one of the following methodologies, which shall not be applied in combination with each other:

1. ~~One-hundred percent of the values in~~ Section 1613 of the *International Building Code*. Where the existing seismic force-resisting system is a type that can be designated as "Ordinary," values of R, Ω_0 and C_d used for analysis in accordance with Chapter 16 of the International Building Code shall be those specified for structural systems classified as "Ordinary" in accordance with Table 12.2-1 of ASCE 7, unless it can be demonstrated that the structural system will provide performance equivalent to that of a "Detailed," "Intermediate" or "Special" system.
2. ASCE 41, using a Tier 3 procedure and both levels of the two-level performance objective in Table 304.3.1 for the applicable *risk category*.

[BS] TABLE 304.3.1 PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH FULL SEISMIC ~~FORCES~~ CRITERIA

RISK CATEGORY (Based on IBC Table 1604.5)	STRUCTURAL PERFORMANCE LEVEL FOR USEWITH BSE-1N EARTHQUAKE HAZARD LEVEL	STRUCTURAL PERFORMANCE LEVEL FOR USEWITH BSE-2N EARTHQUAKE HAZARD LEVEL
I	Life Safety (S-3)	Collapse Prevention (S-5)
II	Life Safety (S-3)	Collapse Prevention (S-5)
III	Damage Control (S-2)	Limited Safety (S-4)
IV	Immediate Occupancy (S-1)	Life Safety (S-3)

[BS] 304.3.2 ~~Compliance with reduced~~ Reduced seismic ~~forces~~ criteria. ~~Where seismic evaluation and design is permitted to use reduced seismic forces, the criteria used shall be in accordance with one of the following~~ Where required, seismic evaluation or design shall comply with one of the following methodologies, which shall not be applied in combination with each other::

1. ~~The~~ Section 1613 of the *International Building Code* using 75 percent of the prescribed forces. Values of R, Ω_0 and C_d used for analysis shall be as specified in Section 304.3.1 of this code.
2. Applicable chapters of Appendix A of this code, for structures ~~Structures~~ or portions of structures ~~that comply with the requirements of the applicable chapter in Appendix A as~~ specified in Items 2.1 through 2.4 ~~and~~ subject to the limitations of the respective chapter ~~Appendix A chapters shall be deemed to comply with this section.~~

   2.1. Chapter A1 for ~~The seismic evaluation and design of~~ unreinforced masonry bearing wall buildings ~~in~~ assigned to *Risk Category* I or II ~~are permitted to be based on the procedures specified in Appendix Chapter A1~~.

   2.2. Chapter A2 for ~~Seismic evaluation and design of~~ the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms ~~in~~ assigned to *Risk Category* I or II ~~are permitted to be based on the procedures specified in Chapter A2~~.

2.3. Chapter A3 for ~~Seismic evaluation and design of~~ cripple walls and sill plate anchorage in residential buildings of light-frame wood construction ~~in~~ assigned to *Risk Category* I or II ~~are permitted to be based on the procedures specified in Chapter A3.~~

2.4. Chapter A4 for ~~Seismic evaluation and design of~~ soft, weak or open-front wall conditions in multiple-unit residential buildings of wood construction in assigned to *Risk Category* I or II are permitted to be based on the procedures specified in Chapter A4.

3. ASCE 41, using the performance objective in Table 304.3.2 for the applicable *risk category*.

[BS] TABLE 304.3.2 PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH REDUCED SEISMIC ~~FORCES~~ CRITERIA

RISK CATEGORY (Based on IBC Table 1604.5)	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-1E EARTHQUAKE HAZARD LEVEL	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-2E EARTHQUAKE HAZARD LEVEL
I	Life Safety (S-3). See Note a	Collapse Prevention (S-5)
II	Life Safety (S-3). See Note a	Collapse Prevention (S-5)
III	Damage Control (S-2). See Note a	Limited Safety (S-4). See Note b
IV	Immediate Occupancy (S-1)	Life Safety (S-3). See Note c

a. For Risk Categories I, II and III, the Tier 1 and Tier 2 procedures need not be considered for the BSE-1E earthquake hazard level.

b. For Risk Category III, the Tier 1 screening checklists shall be based on the Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on *MS*-factors that are the average of the values for Collapse Prevention and Life Safety.

c. For Risk Category IV, the Tier 1 screening checklists shall be based on Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on *MS*-factors for Life Safety.

[NY] 306.1 Scope. The provisions of Sections 306.1 through ~~306.7.16~~ 306.7.19 apply to maintenance and *repair*, *change of occupancy*, *additions* and *alterations* to *existing buildings*, including those identified as *historic buildings*.

306.2 ~~305.2~~ General ~~Maintenance of facilities~~. A facility that is constructed or altered to be accessible shall be maintained accessible during occupancy. Required accessible means of egress shall be maintained during construction, demolition, remodeling or *alterations* and *additions* to any building.

Exception: Existing means of egress need not be maintained where *approved* temporary means of egress and accessible means of egress systems and facilities are provided.

306.2.1 Prohibited reduction in accessibility. An *alteration* or addition that decreases or has the effect of decreasing accessibility of a building, *facility* or element, thereof, below the requirements for new construction at the time of the *alteration* or addition is prohibited. The number of accessible elements need not exceed that required for new construction at the time of *alteration* or addition.

[NY] 306.3 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and the alteration and existing building provisions in ICC A117.1, as applicable.

Exception: Buildings and facilities shall not be required to meet the enhanced classroom acoustics provisions in ICC A117.1.

306.4 ~~305.3~~ Extent of application. An *alteration* of an existing *facility* shall not impose a requirement for greater accessibility than that which would be required for new construction. ~~*Alterations* shall not reduce or have the effect of reducing accessibility of a *facility* or portion of a *facility*.~~

306.5 ~~305.4~~ **Change of occupancy.** Where an *existing* ~~*Existing*~~ *building*~~s that undergo~~ undergoes a *change of occupancy* ~~change of group or occupancy~~ that includes *alterations*, such *alterations* shall comply with ~~this section~~ Section 306.7.

> ~~**Exception:** Type B dwelling or sleeping units required by Section 1108 of the International Building Code are not required to be provided in existing buildings and facilities undergoing a change of occupancy in conjunction with alterations where the work area is 50 percent or less of the aggregate area of the building.~~

~~**305.4.1 Partial change of occupancy**. Where a portion of the building is changed to a new occupancy classification, any alterations shall comply with Sections 305.6, 305.7 and 305.8.~~

~~**305.4.2 Complete change of occupancy**. Where an entire building undergoes a change of occupancy, it shall comply with Section 305.4.1 and shall have all of the following accessible features:~~

1. ~~Not fewer than one accessible building entrance.~~
2. ~~Not fewer than one accessible route from an accessible building entrance to primary function areas.~~
3. ~~Signage complying with Section 1111 of the International Building Code.~~
4. ~~Accessible parking, where parking is being provided.~~
5. ~~Not fewer than one accessible passenger loading zone, where loading zones are provided.~~
6. ~~Not fewer than one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.~~

~~Where it is technically infeasible to comply with the new construction standards for any of these requirements for a change of group or occupancy, Items 1 through 6 shall conform to the requirements to the maximum extent technically feasible.~~

> ~~**Exception:** The accessible features listed in Items 1 through 6 are not required for an accessible route to Type B units.~~

306.6 Additions. Where additions contain dwelling or sleeping units, the accessibility requirements shall apply only to the quantity of the dwelling or sleeping units in the addition. Provisions for new construction shall apply to *additions*. An *addition* that affects the accessibility to, or contains an area of, a *primary function* shall comply with the requirements in Section 306.7.1.

306.6.1 Accessible Means of Egress. Not less than one accessible means of egress from the addition shall be provided where required by Section 1009.1 of the International Building Code. An additional accessible means of egress shall be provided when an additional means of egress is required due to the addition. Where an accessible means of egress serving the addition is within the existing building, the following are required:

1. An accessible route from the addition to the existing building shall be provided.
2. The accessible means of egress in the existing building shall comply with Section 306.7.1.

306.6.1.1 Additions for Elevators. Where an addition is being constructed exclusively to accommodate the installation of an elevator or elevators to improve accessibility, an accessible means of egress in accordance with Section 1009.1 of the International Building Code is not required where all of the following conditions are provided:

1. Two-way communication is provided at all elevator landings that are part of the addition in accordance with Section 1009.8 of the International Building Code.
2. Each elevator landing is on floor level with access to a horizontal exit or to a stairway with a width of not less than 36 inches (914 mm).
3. The elevator does not serve a required accessible floor or occupied roof more than four stories above or below the level of exit discharge.

[NY] 306.7 ~~**305.6**~~ **Alterations**. A facility that is altered shall comply with the applicable provisions in Chapter 11 of the International Building Code, ICC A117.1 and the provisions of Sections 306.7.1 through 306.7.19, unless technically infeasible. Where compliance with this section is technically infeasible, the alteration shall provide access to the maximum extent technically feasible.

> **Exceptions**: Buildings and facilities shall not be required to meet the enhanced classroom acoustics provisions in ICC A117.1.

~~1. The altered element or space is not required to be on an accessible route, unless required by Section 305.7.~~

~~2. Accessible means of egress required by Chapter 10 of the International Building Code are not required to be provided in existing facilities.~~

~~3. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the provision for a Type B dwelling unit.~~

~~4. Type B dwelling or sleeping units required by Section 1107 of the International Building Code are not required to be provided in existing buildings and facilities undergoing alterations where the work area is 50 percent or less of the aggregate area of the building.~~

306.7.1 ~~305.7~~ **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 accessible route to the primary function area shall include toilet facilities and drinking fountains serving the area of primary function.~~ Toilet facilities and drinking fountains serving the area of primary function, and the route from the area of primary function to these facilities, shall be accessible. Priority shall be given to the improvements affecting the *accessible route* to the *primary function* area

Exceptions:

1. The cumulative costs of providing the accessible route, toilet facilities and drinking fountains are not required to exceed 20 percent of the costs of the *alterations* affecting the area of *primary function*.
2. This provision does not apply to *alterations* limited solely to windows, hardware, operating controls, electrical outlets and signs.
3. 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.
4. This provision does not apply to *alterations* undertaken for the primary purpose of increasing the accessibility of a *facility*.
5. This provision does not apply to altered areas limited to Type B dwelling and sleeping units.

306.7.2 Accessible means of egress. Accessible means of egress required by Chapter 10 of the *International Building Code* are not required to be added in existing *facilities*.

306.7.3 Alteration of Type A units. The *alteration* to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the provision for a Type B dwelling unit.

306.7.4 Type B units. Type B dwelling or sleeping units required by Section 1108 of the International Building Code are not required to be provided in *existing buildings* and *facilities* undergoing *alterations* where the *work area* is 50 percent or less of the aggregate area of the building.

~~305.8.1~~306.7.5 **Entrances.** Where an alteration includes alterations to an entrance that is not accessible, and the facility has an accessible entrance, the altered entrance is not required to be accessible unless required by Section ~~305.7.~~ 305.6.1. Signs complying with Section 1111 of the International Building Code shall be provided.

~~**305.8 Scoping for alterations.** The provisions of Sections 305.8.1 through 305.8.15 shall apply to alterations to existing buildings and facilities.~~

306.7.6 Accessible route. Exterior accessible routes, including curb ramps, shall be not less than 36 inches (914 mm) minimum in width.

~~305.8.2~~ 306.7.7 **Elevators.** Altered elements of existing elevators shall comply with ASME A17.1 ~~and ICC A117.1~~. Where the elevator emergency communication system is altered or replaced, that system shall comply with Section 3001.2 of the International Building Code. Such elements shall also be altered in elevators programmed to respond to the same hall call control as the altered elevator.

306.7.8 Limited-use/Limited-application Elevators. Limited-use/Limited-application elevators installed in accordance with ASME A17.1 shall be permitted as a component of an accessible route.

~~305.8.3~~ 306.7.8 **Platform lifts**. Vertical and inclined platform (wheelchair) lifts installed in accordance with ASME A18.1 shall be permitted as a component of an accessible route.

~~305.8.4~~ 306.7.9 **Stairways and escalators in existing buildings.** Where an escalator or stairway is added where none

existed previously and major structural modifications are necessary for installation, an accessible route ~~shall be provided between the levels served by the escalator or stairways in accordance~~ complying with Section 1104.4 of the *International Building Code* is required between levels served by such escalator or stairway.

306.7.11 Determination of number of units. Where Chapter 11 of the *International Building Code* requires Accessible, Type A or Type B units and where such units are being altered or added within an existing building, the number of Accessible, Type A and Type B units shall be determined in accordance with Sections 306.7.10.1 through 306.7.10.3.

~~**305.8.6**~~ **306.7.11.1 Accessible dwelling or sleeping units.** Where Group I-1, I-2, I-3, R-1, R-2 or R-4 dwelling or sleeping units are being altered or added within an existing building, the requirements of Section 1108 of the International Building Code for Accessible units apply only to the quantity of ~~spaces~~ dwelling or sleeping units being altered or added.

~~**305.8.7**~~ **306.7.11.2 Type A dwelling or sleeping units.** Where more than 20 Group R-2 dwelling or sleeping units are being altered or added within an existing building, the requirements of Section 1108 of the International Building Code for Type A units apply only to the quantity of the ~~spaces~~ dwelling or sleeping units being altered or added.

~~**305.8.8**~~ **306.7.11.3 Type B dwelling or sleeping units.** ~~Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1108 of the International Building Code for Type B units apply only to the quantity of the spaces being added.~~ Where Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered or added within an existing building and where the *work area* is greater than 50 percent of the aggregate area of the building, the requirements of Section 1108 of the International Building Code for Type B units apply only to the quantity of the ~~spaces~~ dwelling or sleeping units being altered or added.

~~**305.8.5 Ramps.** Where slopes steeper than allowed by Section 1012.2 of the International Building Code are necessitated by space limitations, the slope of ramps in or providing access to existing facilities shall comply with Table 305.8.5.~~

~~**TABLE 305.8.5 RAMPS**~~

~~SLOPE~~	~~MAXIMUM RISE~~
~~Steeper than 1:10 but not steeper than 1:8~~	~~3 inches~~
~~Steeper than 1:12 but not steeper than 1:10~~	~~6 inches~~

~~**305.8.9 Jury boxes and witness stands.** In alterations, accessible wheelchair spaces are not required to be located within the defined area of raised jury boxes or witness stands and shall be permitted to be located outside these spaces where the ramp or lift access restricts or projects into the required means of egress.~~

~~**305.8.13 Fuel dispensers.** Operable parts of replacement fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum, measuring from the surface of the vehicular way where fuel dispensers are installed on existing curbs.~~

~~**305.8.15 Thresholds.** The maximum height of thresholds at doorways shall be ¾ inch (19.1 mm). Such thresholds shall have beveled edges on each side.~~

~~**305.8.10**~~ **306.7.12 Toilet rooms.** Where it is *technically infeasible* to alter existing toilet ~~and bathing~~ rooms to be accessible, one accessible single-user toilet room or one accessible family or assisted-use toilet ~~or bathing~~ room constructed in accordance with Section 1110.2.1 of the *International Building Code* is permitted. ~~The family or assisted-use~~ This toilet ~~or bathing~~ room shall be located on the same floor and in the same area as the existing toilet ~~or bathing~~ rooms. At the inaccessible toilet ~~and bathing~~ rooms, directional signs indicating the location of the nearest ~~family or assisted-use~~ such toilet room ~~or bathing room~~ shall be provided. These directional signs shall include the International Symbol of Accessibility, and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

306.7.13 Bathing rooms. Where it is technically infeasible to alter existing bathing rooms to be accessible, one accessible single-user bathing room or one accessible family or assisted-use bathing room constructed in accordance with Section 1110.2.1 of the International Building Code is permitted. This accessible bathing room shall be located on the same floor and in the same area as the existing bathing rooms. At the inaccessible bathing rooms, directional signs indicating the location of the nearest such bathing room shall be provided. These directional signs shall include the International Symbol of Accessibility, and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

~~305.8.11~~306.7.14 **Additional toilet and bathing facilities**. In assembly and mercantile occupancies, where additional toilet fixtures are added, not fewer than one accessible family or assisted-use toilet room shall be provided where required by Section 1109.2.1 of the International Building Code. In recreational facilities, where additional bathing rooms are being added, not fewer than one family or assisted-use bathing room shall be provided where required by Section 1109.2.1 of the International Building Code.

306.7.15 Adult changing stations. Where additional toilet facilities are being added, in occupancies where adult changing stations are required by Section 1110.4.1 of the *International Building Code*, not fewer than one accessible family or assisted-use toilet room with an adult changing station shall be provided in accordance with Section 1110.4 of the *International Building Code*. The adult changing station shall be permitted to be located in an family or assisted-use toilet room or bathing room required by Sections 306.7.11, 306.7.12 or 306.7.13.

~~305.8.12~~306.7.16 **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. Where separate-sex facilities are provided, accessible rooms for each sex shall be provided. Separate-sex facilities are not required where only unisex rooms are provided.

~~305.8.16~~306.7.17 **Amusement rides**. Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with requirements for new construction in Section 1110.4.8 of the International Building Code.

~~305.9~~ 306.7.18 **Historic** ~~buildings~~ structures. ~~These provisions shall apply to facilities designated as historic structures that undergo alterations or a change of occupancy, unless technically infeasible.~~ Where compliance with the requirements for accessible routes, entrances or toilet rooms would threaten or destroy the historic significance of the historic structure ~~facility,~~ as determined by the authority having jurisdiction, the alternative requirements of Sections ~~305.9.1~~ 306.7.16.1 through ~~305.9.4~~ 306.7.16.5 for that element shall be permitted.

> ~~**Exception:** Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in *historic buildings*.~~
>
> **Exceptions:**
>
> 1. Accessible means of egress required by Chapter 10 of the *International Building Code* are not required to be provided in historic structures.
> 2. The altered element or space is not required to be on an accessible route, unless required by Sections 306.7.16.1 or 306.7.16.2.

~~305.9.1~~ 306.7.18.1 **Site arrival points**. Not fewer than one exterior accessible route, including curb ramps from a site arrival point to an accessible entrance, shall be provided and shall not be less than 36 inches (914 mm) minimum in width.

~~305.9.2~~306.7.18.2 **Multiple-level buildings and facilities**. An accessible route from an accessible entrance to public spaces on the level of the accessible entrance shall be provided.

~~305.9.1~~ 306.7.18.3 **Entrances.** ~~Not fewer than one main entrance shall be accessible.~~ Where an entrance cannot be made accessible in accordance with Section 306.7.5, an accessible entrance that is unlocked while the building is occupied shall be provided; or, a locked accessible entrance with a notification system or remote monitoring shall be provided.

Signs complying with Section 1112 of the *International Building Code* shall be provided at the public ~~entrance~~ entrances and the accessible entrance.

~~305.9.4~~ 306.7.18.4 **Toilet facilities ~~and bathing facilities.~~** Where toilet rooms are provided, not fewer than one accessible single-user toilet room or one accessible family or assisted-use toilet room complying with Section 1110.2.1 of the *International Building Code* shall be provided.

306.7.18.5 Bathing facilities. Where bathing rooms are provided, not fewer than one accessible single-user bathing room or one accessible family or assisted-use bathing rooms complying with Section 1110.2.1 of the *International Building Code* shall be provided.

306.7.18.6 Type A units. The *alteration* to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the provision for a Type B dwelling unit.

306.7.18.7 Type B units. Type B dwelling or sleeping units required by Section 1108 of the *International Building Code* are not required to be provided in *historic buildings*.

[NY] ~~**305.10**~~ **306.7.19 Off-street parking lots.** Accessible parking complying with Sections 1102.1 and 1106 of the *Building Code of New York State* shall be provided within a six-month period of time when performing any of the following categories of work in an off-street parking lot:

1. Repave, reseal or repaint more than one half of the total number of parking spaces in an off-street parking lot, which contains designated accessible parking spaces;
2. Repave, reseal or repaint more than one half of the total number of designated accessible parking spaces in an off-street parking lot; or
3. Creates designated accessible parking spaces in an off street parking lot.

[NY] ~~**305.10.1**~~ **306.7.19.1 Signage.** Accessible parking spaces shall be provided with signage displaying the International Symbol of Accessibility in accordance with Section 1111.1 of the *Building Code of New York State*. Each access aisle shall be provided with signage reading "NO PARKING ANYTIME." Signs shall be permanently installed in accordance with ICC A117.1 and shall not interfere with an accessible route from an access aisle.

SECTION 307 SMOKE ALARMS

307.1 Smoke Alarms. Where an alteration, addition, change of occupancy or relocation of a building is made to an existing building or structure of a Group R and I-1 occupancy, the existing building shall be provided with smoke alarms in accordance with the International Fire Code or Section R314 of the International Residential Code.

Exception: Work classified as Level 1 Alterations in accordance with Chapter 7.

SECTION 308 CARBON MONOXIDE DETECTION

308.1 Carbon monoxide detection. Where an addition, alteration, change of occupancy, or relocation of a building is made to an existing building, the existing building shall be provided with carbon monoxide detection in accordance with the Fire Code of New York State or Section R311 of the Residential Code of New York State.

Exceptions:

1. Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.
2. Installation, alteration or repairs of plumbing or mechanical systems, other than fuel-burning appliances.
3. Work classified as Level 1 Alterations in accordance with Chapter 7.
4. In Group I-2 Occupancies, carbon monoxide detection is not required in each sleeping unit where carbon monoxide detection, which transmits an alarm signal to an approved location, is provided in each space containing a carbon monoxide source.

[NY] 308.1.1 New fuel-burning appliance. When a new fuel-burning appliance is installed or located in an addition; when a new fuel-burning appliance is added to, installed in, or attached to an existing building; when an existing fuel-burning appliance is relocated to a different room in an existing building, the existing portion of the building shall be provided with additional carbon monoxide detection and notification appliances as necessitated by the new or relocated fuel-burning appliance. The selection, design, and location of the additional detection and notification appliances shall be in accordance with Section 915 of the Fire Code of New York State.

Exception: Where carbon monoxide alarms are powered by a 10-year battery, interconnection shall not be required in the following:

1. Existing portions of a building that are provided with additional carbon monoxide detection and notification appliances as required by Section 502.7.1, unless otherwise required by the Uniform Code.
2. Work areas where an alteration does not result in the removal or exposure of interior wall or ceiling finishes that reveal the structure, unless there is an attic, crawl space, basement, or similar space available that could provide access for power and interconnection without the removal of such interior finishes.

3. Buildings without commercial power.

[NY] 308.1.2 Motor vehicle related occupancy. When a new motor vehicle related occupancy is added to an existing building, the existing portion of the building shall be provided with additional carbon monoxide detection and notification appliances as necessitated by the new motor vehicle related occupancy. The selection, design, and location of the additional detection and notification appliances shall be in accordance with Section 915 of the Fire Code of New York State.

Exception: Where carbon monoxide alarms are powered by a 10-year battery, interconnection shall not be required in the following:

4. Existing portions of a building that are provided with additional carbon monoxide detection and notification appliances as required by Section 502.7.1, unless otherwise required by the Uniform Code.
5. Work areas where an alteration does not result in the removal or exposure of interior wall or ceiling finishes that reveal the structure, unless there is an attic, crawl space, basement, or similar space available that could provide access for power and interconnection without the removal of such interior finishes.
6. Buildings without commercial power.

SECTION 309 ADDITIONS AND REPLACEMENTS OF EXTERIOR WALL COVERINGS AND EXTERIOR WALL ENVELOPES

309.1 General. The provisions of Section 309 apply to all alterations, repairs, additions, relocations of structures and changes of occupancy regardless of compliance method.

309.2 Additions and replacements. Where an exterior wall covering or exterior wall envelope is added or replaced, the materials and methods used shall comply with the requirements for new construction in Chapter 14 and Chapter 26 of the International Building Code if the added or replaced exterior wall covering or exterior wall envelope involves two or more contiguous stories and comprises more than 15% of the total wall area on any side of the building.

309.2.1 Automatic sprinkler systems. Combustible exterior wall covering or combustible exterior wall envelopes shall not be added to an existing high-rise building that is not protected throughout with an automatic sprinkler system

Exceptions:

1. Where such material is located on a single story and is less than 15 percent of the wall area on any side of the building.
2. Water-resistive barriers installed in accordance with Section 1402.5 of the International Building Code.

[NY] SECTION ~~306~~ 310 ELECTRICAL ENERGY STORAGE SYSTEMS (ESS)

[NY] ~~**306.1**~~ **310.1 General** ~~**Energy storage systems**~~**.** The installation, operation, maintenance, repair, and retrofitting of electrical energy storage systems shall be in accordance with Section ~~1208~~ 1207 of the Fire Code of New York State.

Chapter 4 Repairs

401.1.1 Bleachers, folding and telescopic seating, and grandstands. Repairs to existing bleachers, folding and telescopic seating, and grandstands shall comply with ICC 300.

401.2 Compliance. The work shall not make the building less complying than it was before the *repair* was undertaken. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to requirements for alterations.

[BS] 405.1 General. Structural damage ~~*repairs*~~ shall be repaired in compliance with this section and Section 401.2.

405.1.1 Structural Concrete repairs. Repair of structural concrete shall be permitted to comply with ACI 562 Section 1.7, except where Section 405.2.2, 405.2.3 or 405.2.4.1 requires compliance with Section 304.3.

[BS] ~~**502.2**~~ **405.2.2 Disproportionate earthquake damage.** A building assigned to Seismic Design Category D, E or F that has sustained disproportionate earthquake damage shall be subject to the requirements for buildings with substantial structural damage to vertical elements of the lateral force-resisting system.

[BS] 405.2.3.1 Evaluation. The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the *code official*. The evaluation shall establish whether the lateral force-resisting system of the damaged building including its foundation, if repaired to its predamage state, would comply with the provisions of the *International Building Code* for load combinations that include wind ~~or earthquake~~ effects~~, except that the seismic forces shall be the reduced seismic forces~~ and with Section 304.3.2 of this code.

[BS] 405.2.3.3 Extent of repair for noncompliant buildings. If the evaluation does not establish that the lateral force-resisting system of the building in its predamage condition complies with the provisions of Section 405.2.3.1, then the ~~building~~ lateral force-resisting system, including its foundation, shall be retrofitted to comply with the provisions of this section. The wind loads for the *repair* and *retrofit* shall be those required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be in accordance with the *International Building Code*. The seismic retrofit shall comply with Section 304.3.2 of this code, but the earthquake loads for this *retrofit* design shall not be less than those required by the building code in effect at the time of original construction, ~~but not less than the reduced seismic forces~~.

[BS] 405.2.4 Substantial structural damage to gravity load-carrying components. Gravity load-carrying components that have sustained substantial structural damage shall be ~~rehabilitated~~ retrofitted to comply with the applicable provisions for dead, live, and ~~live~~ snow loads in the International Building Code. ~~Snow loads shall be considered if the substantial structural damage was caused by or related to snow load effects.~~ Undamaged gravity load-carrying components, including undamaged foundation components, that receive dead, live or snow loads from ~~rehabilitated~~ retrofitted components shall also be ~~rehabilitated~~ retrofitted if required to comply with ~~the~~ these design loads ~~of the rehabilitation design~~.

[BS] 405.2.5 Substantial structural damage to snow load-carrying components. Where substantial structural damage to any snow load-carrying components is caused by or related to snow load effects, any components required to carry snow loads on roof framing of similar construction shall be repaired, replaced or retrofitted to satisfy the requirements of Section 1608 of the International Building Code.

406.1 ~~Material~~ General. Repairs to existing ~~Existing~~ electrical wiring and equipment ~~undergoing repair~~ shall be ~~allowed to be repaired or replaced with like material~~ in accordance with NFPA 70.

406.1.1 Reconditioned Electrical Equipment. Reconditioned electrical equipment shall comply with NFPA 70. Electrical equipment prohibited from being reconditioned by the applicable sections of NFPA 70 shall not be reconditioned, unless permitted by NFPA 99.

~~**406.1.1 Receptacles.** Replacement of electrical receptacles shall comply with the applicable requirements of Section 406.4(D) of NFPA 70.~~

~~**406.1.2 Plug fuses.** Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering per applicable requirements of Section 240.51(B) of NFPA 70.~~

~~**406.1.3 Nongrounding-type receptacles**. For replacement of nongrounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding-type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system or to any accessible point on the grounding electrode conductor in accordance with Section 250.130(C) of NFPA 70.~~

~~**406.1.4 Group I-2 receptacles**. Receptacles in patient bed locations of Group I-2 that are not "hospital grade" shall be replaced with "hospital grade" receptacles, as required by NFPA 99 and Article 517 of NFPA 70.~~

406.1.2 Health care facilities. Portions of electrical systems being repaired in Group I-2, ambulatory care facilities and outpatient clinics shall comply with NFPA 99 requirements for *repairs*.

~~**406.1.5 Grounding of appliances.** Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be permitted to be grounded to the grounded circuit conductor in accordance with Section 250.140 of NFPA 70.~~

408.3 Healthcare facilities. Portions of Medical Gas systems being repaired in Group I-2, ambulatory care facilities and outpatient clinics shall comply with NFPA 99 requirements for repairs.

Chapter 5 Prescriptive Compliance Method

501.1 Scope. The provisions of this chapter shall control the alteration, addition and change of occupancy of existing buildings and structures, including historic buildings and structures as referenced in Section 301.3.2.

~~**Exception:** Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300.~~

501.3 Healthcare facilities. In Group I-2 facilities, ambulatory care facilities and outpatient clinics, any altered or added portion of an existing electrical or medical gas systems shall be required to meet installation and equipment requirements in NFPA 99.

502.1 General. *Additions* to any building or structure shall comply with the requirements of the *International Building Code* for new construction. *Alterations* to the *existing building* or structure shall be made to ensure that the *existing building* or structure together with the *addition* are not less complying with the provisions of the *International Building Code* than the *existing building* or structure was prior to the *addition*, except that the structural elements need only comply with Sections 502.2 through 502.5. An *existing building* together with its *additions* shall comply with the height and area provisions of Chapter 5 of the *International Building Code*. Where a new occupiable roof is added to a building or structure, the occupiable roof shall comply with the provisions of the International Building Code.

> **Exception:** In-filling of floor openings and nonoccupiable appendages such as elevator and exit stairway shafts shall be permitted beyond that permitted by the International Building Code.

502.1.1 Risk category assignment. Where the addition and the existing building have different occupancies, the risk category of each existing and added occupancy shall be determined in accordance with Section 1604.5.1 of the *International Building Code*. Where application of that section results in a higher risk category for the existing building, such a change shall be considered a change of occupancy and shall comply with Section 506 of this code. Where application of that section results in a higher risk category for the addition, the addition and any systems in the existing building required to serve the addition shall comply with the requirements of the *International Building Code* for new construction for the higher risk category.

502.1.2 Creation or extension of nonconformity. An *addition* shall not create or extend any nonconformity in the *existing building* to which the *addition* is being made with regard to accessibility, structural strength, supports and attachments for nonstructural components, fire safety, means of egress or the capacity of mechanical, plumbing or electrical systems.

> **Exception:** Nonconforming supports and attachments for nonstructural components that serve the addition from within the *existing building* need not be altered to comply with *International Building Code* Section 1613 unless the components are part of the addition's *life safety system* or are required to serve an *addition* assigned to Risk Category IV.

[BS] 502.3 Flood hazard areas. For buildings and structures in *flood hazard* areas established in Section 1612.3 of the International Building Code, or Section R322 of the International Residential Code, as applicable, any *addition* that constitutes *substantial improvement* of the *existing structure* shall comply with the flood design requirements for new construction, and all aspects of the *existing structure* shall be brought into compliance with the requirements for new construction for flood design. For new foundations, foundations raised or extended upward, and replacement foundations, the foundations shall be in compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable, any *additions* that do not constitute *substantial improvement* of the *existing structure* are not required to comply with the flood design requirements for new construction provided that both of the following apply:

1. The addition shall not create or extend a nonconformity of the existing building or structure with the flood resistant construction requirements
2. The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or structure or the lowest floor elevation required in Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

[BS] 502.4 Existing structural elements carrying lateral load. Where the *addition* is structurally independent of the *existing structure*, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the *addition* is not structurally independent of the *existing structure*, the lateral force-resisting system of the *existing structure*

and its *addition* acting together as a single structure shall ~~be shown to meet the requirements of~~ comply with Section~~s~~ 1609 ~~and 1613~~ of the International Building Code ~~using full seismic forces~~ and with Section 304.3.1 of this code.

Exceptions:

1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the *addition* considered is not more than 10 percent greater than its demand-capacity ratio with the *addition* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Section~~s~~ 1609 ~~and 1613~~ of the International Building Code and Section 304.3.1 of this code. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction. When calculating demand-capacity ratios for wind, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration, or repair in compliance with Section 1609 of the *International Building Code* or the code wind forces in effect at the time. When calculating demand-capacity ratios for earthquake, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration, or repair in compliance with Section 304.3.1 or the full seismic forces in effect at the time.
2. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the *existing building* and the *addition* together comply with the conventional light-frame construction methods of the *International Building Code* or the provisions of the *International Residential Code*.

502.5 Smoke Barriers in Group I-1, Condition 2. Where an addition to an existing Group I-1, Condition 2 building adds sleeping areas that result in more than 50 care recipients on a story, smoke barriers shall be provided to subdivide such story into not fewer than two smoke compartments in accordance with Section 420.6 of the International Building Code.

Exception: Where the existing building is divided into smoke compartments, and the addition does not result in any individual smoke compartment exceeding the size and travel distance requirements in Section 420.6 of the International Building Code, additional smoke barriers are not required.

[NY] 502.6 Reserved.

~~**502.6 Smoke alarms in existing portions of a building**. Where an addition is made to a building or structure of a Group R or I-1 occupancy, the existing building shall be provided with smoke alarms in accordance with Section 1103.8 of the International Fire Code.~~

~~**502.7 Carbon monoxide alarms in existing portions of a building**. Where an addition is made to a building or structure of Group I-1, I-2, I-4 or R occupancy, the existing building shall be provided with carbon monoxide alarms in accordance with Section 1103.9 of the International Fire Code or Section R315 of the International Residential Code, as applicable.~~

~~**Exceptions:**~~

~~1. 1.Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.~~
~~2. 2.Installation, alteration or repairs of plumbing or mechanical systems, other than fuel-burning appliances.~~

~~**502.8 Additions to Group E facilities**. For additions to Group E occupancies, storm shelters shall be provided in accordance with Section 1106.1.~~

503.1 General. ~~Except as provided by Section 302.4, 302.5 or this section, alterations~~ *Alterations* to any building or structure shall comply with the requirements of the *International Building Code* for new construction. *Alterations* shall be such that the *existing building* or structure is not less complying with the provisions of the *International Building Code* than the *existing building* or structure was prior to the *alteration*, except that the structural elements need only comply with Sections 503.2 through 503.12.

Exceptions:

1. An existing stairway shall not be required to comply with the requirements of Section 1011 of the International Building Code where the existing space and construction does not allow a reduction in pitch or slope.

2. Handrails otherwise required to comply with Section 1011.11 of the International Building Code shall not be required to comply with the requirements of Section 1014.7 of the International Building Code regarding full extension of the handrails where such extensions would be hazardous because of plan configuration.

3. Where provided in below-grade transportation stations, existing and new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).

[BS] 503.4 Existing structural elements carrying lateral load. Except as permitted by Section 503.13, where the *alteration* increases design lateral loads, results in a prohibited structural irregularity as defined in ASCE 7, or decreases the capacity of any existing lateral load-carrying structural element, the ~~structure~~ lateral force-resisting system of the altered building or structure shall meet the requirements of Section~~s~~ 1609 ~~and 1613~~ of the International Building Code and Section 304.3.2 of this code. ~~Reduced seismic forces shall be permitted.~~

Exceptions:

1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is not more than 10 percent greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Section~~s~~ 1609 ~~and 1613~~ of the *International Building Code* and Section 304.3.1 or Section 304.3.2 of this code. ~~Reduced seismic forces shall be permitted.~~ The same methodology shall be used for the altered and unaltered structures. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.
   When calculating demand-capacity ratios for wind, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration, or repair in compliance with Section 1609 of the *International Building Code* or the code wind forces in effect at the time. When calculating demand-capacity ratios for earthquake, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration, or repair in compliance with Section 304.3.1 or Section 304.3.2 item 1 or item 3 or the full or reduced seismic forces in effect at the time.

2. Buildings in which the increase in the demand-capacity ratio is due entirely to the addition of rooftop-supported mechanical equipment individually having an operating weight less than 400 pounds (181.4 kg) and where the total additional weight of all rooftop equipment placed after initial construction of the building is less than 10 percent of the roof dead load. For purposes of this exception, "roof" shall mean the roof level above a particular story.

3. Increases in the demand-capacity ratio due to lateral loads from seismic forces need not be evaluated for the installation of rooftop *photovoltaic panel systems* where the additional roof dead load due to the system, including ballast where applicable, does not exceed 5 psf and does not exceed 10% of the dead load of the existing roof.

[BS] 503.5 Seismic Design Category F. Where the *work area* exceeds 50 percent of the building area, and where the building is assigned to Seismic Design Category F, the ~~structure~~ lateral force-resisting system of the altered building shall meet the requirements of Section~~s~~ 1609 ~~and 1613~~ of the International Building Code and Section 304.3.2 of this code. ~~Reduced seismic forces shall be permitted~~. Supports and attachments for nonstructural components serving any portion of the building with a use included in Risk Category IV shall comply with Section 1613 of the *International Building Code* or shall comply with ASCE 41 using an objective of Position Retention nonstructural performance with the BSE-1E earthquake hazard level.

[BS] 503.6 Bracing for unreinforced masonry parapets on reroofing. Where the intended *alteration* requires a permit for reroofing and involves removal of roofing materials from more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E or F that has parapets constructed of unreinforced masonry, the work shall comply with Section 304.3.2 by ~~include~~ evaluation of the existing condition or by installation of parapet bracing to resist out-of-plane seismic forces. ~~, unless an evaluation demonstrates compliance of such items. Reduced seismic forces shall be permitted.~~

[BS] 503.7 Anchorage for concrete and reinforced masonry walls. Where the *work area* exceeds 50 percent of the building area, the building is assigned to Seismic Design Category C, D, E or F and the building's structural system includes concrete or reinforced masonry walls with a flexible roof diaphragm, the *alteration* ~~work~~ shall comply with Section 304.3.2 by ~~include~~ evaluation of the existing condition or by installation of wall anchors at the roof line. ~~, unless an evaluation demonstrates compliance of existing wall anchorage. Use of reduced seismic forces shall be permitted.~~

[BS] 503.8 Anchorage for unreinforced masonry walls in major alterations. Where the *work area* exceeds 50 percent of the building area, the building is assigned to Seismic Design Category C, D, E or F and the building's structural system

includes unreinforced masonry bearing walls, the *alteration* shall comply with Section 304.3.2 by ~~include~~ evaluation of the existing condition or by installation of wall anchors at the floor and roof lines. ~~, unless an evaluation demonstrates compliance of existing wall anchorage. Reduced seismic forces shall be permitted.~~

[BS] 503.9 Bracing for unreinforced masonry parapets in major alterations. Where the *work area* exceeds 50 percent of the building area, and where the building is assigned to Seismic Design Category C, D, E or F, and the building has parapets constructed of unreinforced masonry , the alteration shall comply with Section 304.3.2 by evaluation of the existing condition or by installation of parapet ~~shall have~~ bracing ~~installed as needed~~ to resist out-of-plane seismic forces. ~~, unless an evaluation demonstrates compliance of such items. Reduced seismic forces shall be permitted.~~

[BS] 503.10 Anchorage of unreinforced masonry partitions in major alterations. Where the *work area* exceeds 50 percent of the building area, ~~and~~ or where the building is assigned to Seismic Design Category C, D, E or F, and the building has unreinforced masonry partitions ~~and~~ or nonstructural walls , the alteration work shall include evaluation of the existing condition or removal, anchoring, or alteration of any such partitions or walls within the *work area* and adjacent to egress paths from the *work area* , to comply with Section 304.3.2. ~~shall be anchored, removed or altered to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces shall be permitted.~~

[BS] 503.11 Substantial structural alteration. Where the *work area* exceeds 50 percent of the building area and where work involves a *substantial structural alteration*, the lateral load-resisting system of the altered building shall satisfy the requirements of Section~~s~~ 1609 ~~and 1613~~ of the International Building Code and Section 304.3.2 of this code. ~~Reduced seismic forces shall be permitted~~. Where the building is assigned to Seismic Design Category D or F, supports and attachments for nonstructural components required to serve any portion of the building with a use included in Risk Category IV shall comply with Section 1613 of the *International Building Code* or shall comply with ASCE 41 using an objective of Position Retention nonstructural performance with the BSE-1E earthquake hazard level.

Exceptions:

1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes that are altered based on the conventional light-frame construction methods of the *International Building Code* or in compliance with the provisions of the *International Residential Code*.
2. Where the intended *alteration* involves ~~only the~~ structural components of the lowest story of a building, only the lateral load-resisting system above ~~components in and below~~ that story need not comply with this section.

[BS] 503.12 Roof diaphragms resisting wind loads in high-wind regions. Where the intended *alteration* requires a permit for reroofing and involves removal of roofing materials from more than 50 percent of the roof diaphragm of a building or section of a building located where the ~~ultimate design~~ basic wind speed , V, is greater than 130 mph (58 m/s) in accordance with Figure 1609.3(1) of the International Building Code, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in Section 1609 of the International Building Code, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in Section 1609 of the International Building Code.

> **Exception**: Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7—88 or later editions.

[BS] 503.13 Voluntary lateral force-resisting system alterations. Structural *alterations* that are intended exclusively to improve the lateral force- resisting system and are not required by other sections of this code shall not be subject to the structural requirements of Section 503 ~~required to meet the requirements of Section 1609 or 1613 of the International Building Code,~~ provided that all of the following apply:

1. With the alteration complete, the ~~The~~ capacity of existing structural systems to resist forces is not reduced.
2. New structural elements are detailed and connected to existing or new structural elements as required by the selected design criteria ~~International Building Code for new construction~~.

> **Exception:** New lateral force-resisting systems designed in accordance with the *International Building Code* are permitted to be of a type designated as "Ordinary" or "Intermediate" where ASCE 7 Table 12.2-1 states these types of systems are not permitted.

3. Supports and attachments for ~~New or relocated~~ nonstructural elements removed and reinstalled to facilitate the work comply with ~~are detailed and connected to existing or new structural elements as required by~~ the *International Building Code* for new construction.

4. The *alterations* do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

   Exception: Condition 4 need not be satisfied where the work complies with Section 304.3.2 Item 3.

~~**503.14 Smoke alarms**. Individual sleeping units and individual dwelling units in Group R and I-1 occupancies shall be provided with smoke alarms in accordance with Section 1103.8 of the International Fire Code.~~

~~**503.15 Carbon monoxide alarms**. Carbon monoxide alarms shall be provided to protect sleeping units and dwelling units in Group I-1, I-2, I-4 and R occupancies in accordance with Section 1103.9 of the International Fire Code.~~

~~**Exceptions:**~~

~~1. 1.Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.~~

~~2. 2.Installation, alteration or repairs of plumbing or mechanical systems, other than fuel-burning appliances.~~

~~**[NY] 503.15.1 New or relocated fuel-burning appliance.** When a new fuel-burning appliance is added to, installed in, or attached to an existing building, or when an existing fuel-burning appliance is relocated to a different room in an existing building, the building shall be provided with additional carbon monoxide detection and notification appliances to accommodate the new or relocated fuel-burning appliance. The selection, design, and location of the additional carbon monoxide detection and notification appliances shall be in accordance with Section 915 of the Fire Code of New York State.~~

~~**Exception:** Where carbon monoxide alarms are powered by a 10-year battery, interconnection shall not be required in the following:~~

~~1. Work areas where an alteration does not result in the removal or exposure of interior wall or ceiling finishes that reveal the structure, unless there is an attic, crawl space, basement, or similar space available that could provide access for power and interconnection without the removal of such interior finishes.~~

~~2. Existing portions of a building that are provided with additional carbon monoxide detection and notification as required by Section 503.15.1, unless otherwise required by the Uniform Code.~~

~~3. Buildings without commercial power.~~

503.14 Smoke compartments. In Group I-2 occupancies where the alteration is on a story used for sleeping rooms for more than 30 care recipients, the story shall be divided into not less than two compartments by smoke barrier walls in accordance with Section 407.5 of the International Building Code as required for new construction.

~~**503.16**~~ **503.15 Refuge areas.** Where *alterations* affect the configuration of an area utilized as a refuge area, the capacity of the refuge area shall not be reduced below the required capacity of the refuge area for horizontal exits in accordance with Section 1026.4 of the *International Building Code*. Where the horizontal exit also forms a smoke compartment, the capacity of the refuge area for Group I-1, I-2 and I-3 occupancies and ambulatory care *facilities* shall not be reduced below that required in Sections ~~503.16.1 through 503.16.3.~~407.5.3, 408.6.2, 420.6.1 and 422.3.2 of the *International Building Code* as applicable.

503.16 Conditions for I-1 Occupancies. Group I-1 Occupancies that are being altered and where the work area is greater than 50 percent of the aggregate building area, shall be classified as Condition 1 or Condition 2 in accordance with Section 308.2 of the *International Building Code*.

503.16.1 Smoke Barriers in Group I-1, Condition 2. In Group I-1, Condition 2 occupancies where the work area is on a story used for sleeping rooms for more than 30 care recipients, the story shall be divided into not less than two compartments by smoke barrier walls in accordance with Section 420.6 of the *International Building Code*.

503.16 Ambulatory care facilities. Where a work area exceeds 50 percent of the building area the and work area includes an existing ambulatory care facility, the following shall be provided:

1. A smoke compartment in accordance with Section 422.3 of the International Building Code where the alteration results in an ambulatory care facility greater than 10,000 square feet on one story.
2. Separation from adjacent spaces in accordance with Section 422.2 of the International Building Code, where any such facility has the potential for four or more care recipients are to be incapable of self-preservation at any time.

~~**503.16.1 Smoke compartments**. In Group I-2 and I-3 occupancies, the required capacity of the refuge areas for smoke compartments in accordance with Sections 407.5.1 and 408.6.2 of the International Building Code shall be maintained.~~

~~**503.16.2 Ambulatory care**. In ambulatory care facilities required to be separated by Section 422.2 of the International Building Code, the required capacity of the refuge areas for smoke compartments in accordance with Section 422.3.2 of the International Building Code shall be maintained.~~

~~**503.16.3 Horizontal exits**. The required capacity of the refuge area for horizontal exits in accordance with Section 1026.4 of the International Building Code shall be maintained.~~

503.17 Locking arrangements in educational occupancies. In Group E occupancies, Group B educational occupancies and Group I-4 occupancies, egress doors with locking arrangements designed to keep intruders from entering the room shall comply with Section 1010.1.4.4 of the International Building Code.

503.17 Two-way communications systems. Where the work area for alterations exceeds 50 percent of the building area and the building has elevator service, a two way communication systems shall be provided in accordance with Section 1009.8 of the International Building Code.

[NY] 503.18 Reserved.

505.1 Replacement ~~glass~~ windows. The installation or replacement of ~~glass~~ windows shall be as required for new installations.

505.2 ~~Replacement window~~ Window fall prevention ~~opening control devices~~ on replacement windows. In Group R-2 or R-3 buildings containing dwelling units, and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, window opening control devices or other window fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

1. The window is operable.
2. One of the following applies:
   2.1. The window replacement includes replacement of the sash and frame.
   2.2. The window replacement includes the sash only where the existing frame remains.
3. One of the following applies:
   3.1. In Group R-2 or R-3 buildings containing dwelling units, the ~~top~~ bottom of the ~~sill~~ clear opening of the window opening is at a height less than 36 inches (915 mm) above the finished floor.
   3.2. In one- and two-family dwellings and townhouses regulated by the *International Residential Code*, the ~~top~~ bottom of the ~~sill~~ clear opening of the window opening is at a height less than 24 inches (610 mm) above the finished floor.
4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position.
5. The vertical distance from the ~~top~~ bottom of the ~~sill~~ clear opening of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

~~The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2 of the International Building Code.~~

~~**Exceptions:**~~ **Exception:**

1. Operable windows where the ~~top~~ bottom of the ~~sill~~ clear opening of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F2006.

2. ~~Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.~~

505.3 Replacement window for emergency escape and rescue openings. Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies and one-and two-family dwellings and townhouses regulated by the International Residential Code, replacement windows shall be exempt from the requirements of Sections 1030.2~~, 1030.3~~ and 1030.4 of the International Building Code and Sections ~~R310.2.1, R310.2.2 and R310.2.3~~ R310.3 and R310.5 of the International Residential Code, provided that the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

2. ~~The~~Where the replacement of the window is ~~not~~ part of a change of occupancy it shall comply with Section 1011.4.6. ~~Window opening control devices complying with ASTM F2090 shall be permitted for use on windows required to provide emergency escape and rescue openings.~~

505.3.1 Control devices. Window opening control devices or fall prevention devices complying with ASTM F2090 shall be permitted for use on windows required to provide emergency escape and rescue openings. After operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

505.4 ~~Emergency escape and rescue openings.~~ Bars, grilles, covers or screens. ~~Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.~~ Bars, grilles, covers, ~~grates~~ screens or similar devices are permitted to be placed over emergency escape and rescue openings ~~provided that the~~ , bulkhead enclosure or window wells that serve such openings, provided all of the following conditions are met:

1. The minimum net clear opening size complies with the code that was in effect at the time of construction ~~and such~~

2. Such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening.

3. Where such ~~bars, grilles, grates or similar~~ devices are installed, they shall not reduce the net clear opening of the emergency escape and rescue openings.

4. Smoke alarms shall be installed in accordance with Section 907.2.10 of the International Building Code ~~regardless of the valuation of the alteration~~.

506.4 Existing Emergency escape and rescue openings. Where a change of occupancy would require emergency escape and rescue opening in accordance with Section 1030.1 of the International Building Code, operable windows serving as the emergency escape and rescue opening shall comply with the following:

1. An existing operable window shall provide a minimum net clear opening of 4 square feet (0.38 m^2) with a minimum net clear opening height of 22 inches (559 mm) and a minimum net clear opening width of 20 inches (508 mm).

2. A replacement window where such window complies with both of the following:

   2.1. The replacement window meets the size requirements in Item 1.

   2.2. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

~~506.4.3~~ **506.5.3 Seismic loads (seismic force-resisting system).** Where a *change of occupancy* results in a building being assigned to a higher *risk category*, or where the change is from a Group S or Group U occupancy to any occupancy other than Group S or Group U, the lateral force- resisting system of the building shall ~~satisfy the requirements of Section 1613 of the International Building Code~~ comply with Section 304.3.1 for the new *risk category* ~~using full seismic forces~~. Where a change of occupancy results in a building being assigned to Risk Category IV and Seismic Design Category D or F, nonstructural components serving any portion of the building changed to Risk Category IV shall comply with the

requirements of Section 1613 of the International Building Code or shall comply with ASCE 41 using an objective of Operational nonstructural performance with the BSE-1N earthquake hazard level.

Exceptions:

1. Where the area of the new occupancy is less than 10 percent of the building area, the occupancy is not changing from a Group S or Group U occupancy, and the new occupancy is not assigned to *Risk Category* IV, compliance with this section is not required. The cumulative effect of occupancy changes over time shall be considered.
2. Where a *change of use* results in a building being reclassified from *Risk Category* I or II to Risk Category III and the seismic coefficient, S_{DS}, is less than 0.33, compliance with this section is not required.
3. Unreinforced masonry bearing wall buildings assigned to *Risk Category* III and to Seismic Design Category A or B, shall be permitted to use Appendix Chapter A1 of this code.
4. Where the change is from a Group S or Group U occupancy and there is no change of risk category, compliance with Section 304.3.2 shall be permitted.

506.5.4 Access to Risk Category IV. Any structure that provides operational access to an adjacent structure assigned to *Risk Category* IV as the result of a *change of occupancy* shall itself ~~satisfy the requirements of~~ comply with Sections 1608~~,~~ and 1609 ~~and 1613~~ of the International Building Code and Section 304.3.1 of this code. ~~For compliance with Section 1613, International Building Code level seismic forces shall be used.~~ Where operational access to the *Risk Category* IV structure is less than 10 feet (3048 mm) from either an interior lot line or from another structure, access protection from potential falling debris shall be provided.

Chapter 6 Classification of Work

601.1 Scope. The provisions of this chapter shall be used in conjunction with Chapters 7 through 12 and shall apply to the *alteration*, *addition* and *change of occupancy* of *existing structures*, including historic ~~and moved~~ structures, as referenced in Section 301.3.2. The work performed on an *existing building* shall be classified in accordance with this chapter.

603.1 Scope. Level 2 alterations include the ~~reconfiguration of space, the~~ addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment; and shall apply where the work area is equal to or less than 50 percent of the building area.

Exception: The movement or addition of non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753mm) in height shall not be considered a Level 2 alteration.

~~**SECTION 608 RELOCATED BUILDINGS**~~

~~**608.1 Scope.** Relocated building provisions shall apply to relocated or moved buildings.~~

~~**608.2 Application.** Relocated buildings shall comply with the provisions of Chapter 14.~~

Chapter 7 Alterations - Level I

702.4 Window fall prevention ~~opening control devices on replacement windows~~. In Group R-2 or R-3 buildings containing dwelling units and one- and two-family dwellings and townhouses regulated by the International Residential Code, window opening control devices or other window fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

1. The window is operable.
2. One of the following applies:
   - 2.1 The window replacement includes replacement of the sash and the frame.
   - 2.2 The window replacement includes the sash only where the existing frame remains.

3. One of the following applies:

   3.1 In Group R-2 or R-3 buildings containing dwelling units, the ~~top~~ bottom of the ~~sill of~~ clear opening of the window opening is at a height less than 36 inches (915 mm) above the finished floor.

   3.2 In one- and two-family dwellings and townhouses regulated by the International Residential Code, ~~the top sill~~ the bottom of the clear opening of the window opening is at a height less than 24 inches (610 mm) above the finished floor.

4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position.

5. The vertical distance from the ~~top~~ bottom of the ~~sill~~ clear opening of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

~~The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2 of the International Building Code.~~

~~**Exceptions:**~~ **Exception:**

1. Operable windows where the ~~top~~ bottom of the ~~sill~~ clear opening of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F2006.

~~2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.~~

702.5 Replacement window for emergency escape and rescue openings. Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies and one-and two-family dwellings and townhouses regulated by the International Residential Code, replacement windows shall be exempt from the requirements of Sections 1030.2~~,~~ and 1030.3 ~~and 1030.4~~ of the International Building Code and Sections ~~R310.2.1, R310.2.2 and R310.2.3 of~~ R310.3 and R310.5 of the International Residential Code, provided that the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

2. 2.~~The~~Where the replacement window is ~~not~~ part of a change of occupancy it shall comply with Section 1011.4.6.

~~Window opening control devices complying with ASTM F2090 shall be permitted for use on windows required to provide emergency escape and rescue openings.~~

702.5.1 Control devices. Window opening control devices or fall prevention devices complying with ASTM F2090 shall be permitted for use on windows required to provide *emergency escape and rescue openings* and, after operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

~~**701.4**~~ **702.6**~~**Emergency escape and rescue openings.**~~ **Bars, grilles, covers or screens.**~~Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.~~ Bars, grilles, ~~grates~~ covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings~~, shall comply with the~~ bulkhead enclosure or window wells that serve such openings, provided all of the following conditions are met:

1. 1.The minimum net clear opening size ~~required by~~ complies with the code that was in effect at the time of construction.

2. Such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening.

3. Where such ~~bars, grilles, grates or similar~~ devices are installed, they shall not reduce the net clear opening of the emergency escape and rescue openings.

4. Smoke alarms shall be installed in accordance with Section 907.2.10 of the International Building Code ~~regardless of the valuation of the alteration~~.

704.1.1 Projections in Nursing Home Corridors. In Group I-2, Condition 1 occupancies, where the corridor is at least 96 inches wide, projections into the corridor width are permitted in accordance with Section 407.4.3 of the International Building Code.

704.2 Casework. Addition, alteration or reconfiguration of non-fixed and movable cases, counters, and partitions not over 5 feet 9 inches (1753 mm) in height shall maintain the required means of egress path.

704.3 Locking arrangements in educational occupancies. In Group E occupancies, Group B educational occupancies and Group I-4 occupancies, egress doors with locking arrangements designed to keep intruders from entering the room shall comply with Section 1010.1.4.4 of the International Building Code.

[BS] 705.1 General. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15 of the International Building Code.

Exceptions:

1. Roof replacement or roof recover of existing low-slope roof coverings shall not be required to meet the minimum design slope requirement of 1/4 unit vertical in 12 units horizontal (2-percent slope) in Section 1507 of the International Building Code for roofs that provide positive roof drainage and meet the requirements of Sections 1608.3 and 1611.2 of the International Building Code.
2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1502 of the International Building Code for roofs that provide for positive roof drainage and meet the requirements of Sections 1608.3 and 1611.2 of the International Building Code. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1502 of the International Building Code.

[BS] 705.2 Roof replacement. Roof replacement shall include the removal of all existing layers of roof coverings down to the roof deck.

Exceptions:

1. Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck and the existing sheathing is not water-soaked or deteriorated to the point that it is not adequate as a base for additional roofing, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section 1507 of the International Building Code where permitted by the roof-covering manufacturer and new ice-barrier underlayment manufacturer.
2. Where the existing roof includes a self-adhered underlayment and the existing sheathing is not water-soaked or deteriorated to the point that it is not adequate as a base for additional roofing, the existing self-adhered underlayment shall be permitted to remain in place and covered with an underlayment complying with Tables 1507.1.1(1), 1507.1.1(2) and 1507.1.1(3) of the International Building Code.
3. Where the existing roof includes one layer of self-adhered underlayment and the existing layer cannot be removed without damaging the roof deck, a second layer of self-adhered underlayment is permitted to be installed over the existing self-adhered underlayment provided all of the following conditions are met:
   - 3.1. It is permitted by the roof-covering manufacturer and self-adhered underlayment manufacturer.
   - 3.2. The existing sheathing is not water-soaked or deteriorated to the point that it is not adequate as a base for additional roofing.
   - 3.3. The second layer of self-adhered underlayment is installed such that buildup of material at walls, valleys, roof edges, end laps and side laps does not exceed two layers.

[BS] ~~705.2.1~~ 705.3 Roof recover. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:

1. The new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.
2. Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.

3. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 705.3.
4. The application of a new protective roof coating over an existing protective roof coating, a metal roof panel, built-up roof, spray polyurethane foam roofing system, metal roof shingles, mineral surfaced roll roofing, modified bitumen roofing or thermoset and thermoplastic single-ply roofing shall be permitted without tear off of existing roof coverings.

~~**705.2.1.1 Exceptions.**~~ **Exception:** A roof recover shall not be permitted where any of the following conditions occur:

1. Where the existing roof or roof covering is water-soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
2. Where the existing roof covering is slate, clay, cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.

[BS] ~~**705.3**~~ **705.3.1 Roof recovering over wood shingles or shakes**. Where the application of a new roof covering over wood shingle or shake roofs creates a combustible concealed space, the entire existing surface shall be covered with gypsum ~~board~~ panel products, mineral fiber, glass fiber or other *approved* materials securely fastened in place.

705.4 Reinstallation of materials. Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edgings, drain outlets, collars and metal counterflashings shall not be reinstalled where rusted, damaged or deteriorated. ~~Aggregate~~ Existing ballast that is damaged, cracked or broken shall not be reinstalled. Existing aggregate surfacing materials from built-up roofs shall not be reinstalled.

[BS] 706.3.1 Bracing for unreinforced masonry bearing wall parapets. Where a permit is issued for reroofing for more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E or F that has parapets constructed of unreinforced masonry, the work shall comply with Section 304.3.2 by evaluation of the existing condition or by installation of parapet bracing ~~unless an evaluation demonstrates compliance of such items. Reduced seismic forces shall be permitted.~~

[BS] 706.3.2 Roof diaphragms resisting wind loads in high-wind regions. Where roofing materials are removed from more than 50 percent of the roof diaphragm or section of a building located where the ~~ultimate design~~ basic wind speed, ~~V_{ult}~~ V, is greater than 130 mph (58 m/s)~~determined~~ in accordance with Figure 1609.3(1) of the International Building Code for Risk Category II~~, is greater than 115 mph (51 m/s),~~ roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the *International Building Code*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the *International Building Code*.

> **Exception**: Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7—88 or later editions.

707.1 Healthcare facilities. In Group I-2 facilities, ambulatory care facilities and outpatient clinics, any altered, portion of an existing electrical systems shall be required to meet installation and equipment requirements in NFPA 99.

Chapter 8 Alterations – Level II

801.3 System installations. Requirements related to work area are not applicable where the Level 2 alterations are limited solely to one or more of the following:

1. Mechanical systems, electrical systems, fire protection systems and abatement of hazardous materials.
2. Windows, hardware, operating controls, electrical outlets and signs.
3. Alterations undertaken for the primary purpose of increasing the accessibility of a facility.

802.3 Smoke compartments. In Group I-2 occupancies where the work area is on a story used for sleeping rooms for more than 30 ~~patients~~ care recipients, the story shall be divided into not less than two compartments by smoke barrier walls in accordance with Section 407.5 of the International Building Code as required for new construction.

802.4 Interior finish. The interior finish and trim of walls and ceilings in exits and corridors in any work area shall comply with the requirements of the International Building Code.

Exception: Existing ~~interior finish~~ materials that do not comply with the ~~interior finish~~ requirements of the International Building Code shall be permitted to be treated with an approved fire-retardant coating in accordance with the manufacturer's instructions to achieve the required ~~rating.~~ classification. Compliance with this section shall be demonstrated by testing the fire-retardant coating on the same material and achieving the required performance. Where the same material is not available, testing on a similar material shall be permitted.

802.4.1 Supplemental interior finish requirements. Where the work area on any floor exceeds 50 percent of the floor area, Section 802.4 shall apply to the interior finish and trim in exits and corridors serving the work area throughout the floor.

Exception: Interior finish within tenant spaces that are entirely outside the work area.

803.2.2 Groups A, B, E, F-1, H, ~~I~~ I-1, I-3, I-4, M, R-1, R-2, R-4, S-1 and S-2. In buildings with occupancies in Groups A, B, E, F-1, H, ~~I~~ I-1, I-3, I-4, M, R-1, R-2, R-4, S-1 and 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 both of the following conditions occur:

1. The *work area* is required to be provided with automatic sprinkler protection in accordance with the *International Building Code* as applicable to new construction.
2. The *work area* exceeds 50 percent of the floor area.

Exception: If the building does not have an existing ~~sufficient municipal~~ water supply present at ~~for~~ the floor of the proposed work area with sufficient pressure and flow for the design of a fire sprinkler system ~~available to the floor~~ and without installation of a new fire pump, the *work areas* shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the International Building Code.

803.2.3 Group I-2. In Group I-2 occupancies, an automatic sprinkler system installed in accordance with Section 903.3.1.1 of the International Fire Code shall be provided in the following:

1. In Group I-2, Condition 1, throughout the work area.
2. In Group I-2, Condition 2, throughout the work area where the work area is 50 percent or less of the smoke compartment.
3. In Group I-2, Condition 2, throughout the smoke compartment in which the work occurs where the work area exceeds 50 percent of the smoke compartment.

803.2.5 Other required automatic sprinkler systems. In buildings and areas listed in Table 903.2.11.6 of the *International Building Code*, *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 an automatic sprinkler system under the following conditions:

1. The *work area* is required to be provided with an automatic sprinkler system in accordance with the International Building Code applicable to new construction; and
2. The building has an existing water supply present at the floor of the proposed work area with sufficient pressure and flow for the design of an automatic sprinkler system and without installation of a new fire pump.

803.2.6 Supervision. Automatic ~~Fire~~ sprinkler systems required by this section shall be provided with supervision ~~supervised and alarms~~ in accordance with Section 903.4 of the *International Building Code*. ~~by one of the following methods:~~

~~1. *Approved* central station system in accordance with NFPA 72.~~

~~2. *Approved* proprietary system in accordance with NFPA 72.~~

~~3. *Approved* remote station system of the jurisdiction in accordance with NFPA 72.~~

~~4. Where *approved* by the *code official*, *approved* local alarm service that will cause the sounding of an alarm in accordance with NFPA 72.~~

~~**Exception:** Supervision is not required for the following:~~

1. Underground gate valve with roadway boxes.

2. Halogenated extinguishing systems.

3. Carbon dioxide extinguishing systems.

4. Dry- and wet-chemical extinguishing systems.

5. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic and automatic sprinkler systems and a separate shutoff valve for the automatic sprinkler system is not provided.

803.4 Fire alarm and detection. An *approved* fire alarm system shall be installed in accordance with Sections 803.4.1 through 803.4.2 803.4.3. Where automatic sprinkler protection is provided in accordance with Section 803.2 and is connected to the building fire alarm system, automatic heat detection shall not be required.

An *approved* automatic fire detection system shall be installed in accordance with the provisions of this code and NFPA 72. Devices, combinations of devices, appliances, and equipment shall be *approved*. The automatic fire detectors shall be smoke detectors, except that an *approved* alternative type of detector shall be installed in spaces such as boiler rooms, where products of combustion are present during normal operation in sufficient quantity to actuate a smoke detector.

803.4.1.1 Group E. A fire alarm system shall be installed in *work areas* of Group E occupancies as required by Chapter 11 of the *International Fire Code* for existing Group E occupancies.

803.4.1.2 Group I-1. A An automatic fire alarm system shall be installed in work areas of Group I-1 residential care/assisted living facilities as required by Chapter 11 of the International Fire Code for existing Group I-1 occupancies.

803.4.1.3 Group I-2. A An automatic fire alarm system shall be installed throughout Group I-2 occupancies as required by Chapter 11 of the International Fire Code.

803.4.1.5 Group R-1. A fire alarm system shall be installed in Group R-1 occupancies as required by Chapter 11 of the *International Fire Code* for existing Group R-1 occupancies.

803.4.2 Supplemental fire alarm system requirements. Where the *work area* on any floor exceeds 50 percent of that floor area, Section 803.4.1 shall apply throughout the floor.

> **Exception:** Alarm-initiating and notification appliances shall not be required to be installed in tenant spaces outside of the *work area*.

803.4.3 Smoke alarms. Individual sleeping units and individual dwelling units in any work area in Group R and I-1 occupancies shall be provided with smoke alarms in accordance with the International Fire Code.

> **Exception:** Interconnection of smoke alarms outside of the work area shall not be required.

803.4.3 Installation. Where a fire alarm system is required to be installed in accordance with Sections 803.4.1 or 803.4.2 the *fire alarm system* shall be installed in accordance with the provisions of this code, Section 907 of the *International Building Code* and NFPA 72

SECTION 804 CARBON MONOXIDE DETECTION

[NY]804.1 Carbon monoxide alarms.. Carbon monoxide detection and notification shall be provided in accordance with Sections 503.15 through 503.15.1 for buildings that undergo an alteration.

Exceptions:

1. Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.

2. Installation, alteration or repairs of plumbing or mechanical systems, other than fuel-burning appliances.

804.3 Group I-2. In Group I-2 occupancies, in areas where corridors are used for movement of care recipients in beds, the clear width of ramps and corridors shall be not less than 48 inches (1219 mm).

805.10 804.4 Refuge areas. Where *alterations* affect the configuration of an area utilized as a refuge area, the capacity of the refuge area shall not be reduced below the required capacity of the refuge area for horizontal exits in accordance with Section 1026.4 of the International Building Code. Where the horizontal exit also forms a smoke compartment, the

capacity of the refuge area for Group I-1, I-2 and I-3 occupancies and ambulatory care facilities shall not be reduced below that required in Sections ~~805.10.1 and 805.10.2.~~ 407.5.3, 408.6.2, 420.6.1 and 422.3.2 of the International Building Code, as applicable.

~~804.4~~ 804.5 **Number of exits.** The number of exits or access to exits shall be in accordance with Sections 804.4.1 through 804.4.3.

~~804.4.1~~ 804.5.1 **Minimum number.** Every story utilized for human occupancy on which there is a *work area* that includes exits , access to exits, or corridors shared by more than one tenant within the *work area* shall be provided with the minimum number of exits based on the occupancy and the occupant load in accordance with the *International Building Code*. In addition, the exits shall comply with Sections 804.4.1.1 and 804.4.1.2.

[NY] 804.5.1.1 ~~805.3.1.1~~ **Single-exit buildings.** Only one exit is required from buildings and stories, including occupiable roofs, of the following occupancies:

1. In Group A, E, F and U occupancies located on the level of exit discharge, in buildings not more than five stories, when the occupant load of the story is not greater than 50 and the exit access travel distance is not greater than 75 feet (22.86 m).
2. Group B, S2 or M occupancies located on the level of exit discharge in buildings not more than five stories, provided the required building features in Table 804.3.1.1 (1) shall be provided.
3. Group B, F2, and S2 occupancies in buildings not more than two stories that are not greater than 3,500 square feet per floor (326 m^2) when the exit access travel distance is not greater than 75 feet (22.86 m). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be one hour.
4. Open parking structures where vehicles are mechanically parked.
5. In group B, S2 or M occupancies in buildings from three stories to five stories, provided the required building features in Table 804.3.1.1(1) shall be provided.
6. In Group R-2 or R-3 buildings not more than five stories, provided the required building features in Table 804.3.1.1(2) shall be provided.
7. In H-4, H-5 and I occupancies and in rooming houses and child care centers located on the level of exit discharge, with a maximum occupant load of 10 and the exit access travel distance not greater than 75 feet (22.86 m).

[NY] TABLE 804.3.1.1(1) ~~805.3.1.1(1)~~ GROUP B, S2 OR M LOCATED ON THE LEVEL OF EXIT DISCHARGE SINGLE EXIT BUILDING

Required Building Features	MAXIMUM NUMBER OF STORIES OR OCCUPIABLE ROOFS ABOVE GRADE PLANE[a]				
	1 and 2		3		4 and 5
	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
Permitted Occupancy	B, S2 or M	B, S2 or M	B, S2 or M	B, S2 or M	B, S2 or M
Content restriction limited to storage or retail display of hazardous materials within the building not exceeding 10% of the maximum allowable quantities in Table 307.1(1) of the Building Code of New York State	Yes	Yes	Yes	Yes	Yes
Maximum gross floor area per story or occupiable roof (square feet)	3,500	3,500	3,500	3,500	3,500
Exit access travel distance (feet)	50	75	50	75	75
One emergency escape and rescue opening on each floor and accessible to each tenant[d]	Yes	No	Yes	Yes	Yes

Fire resistance rating of shafts and vertical exit enclosures (hours)	1	0.5	1	0.5	2
Fire resistance rating of corridors (hours)[b]	0.5	0	1	0.5	1
Fire protection rating of corridor openings (hours)	0.33	Self-Closing	0.75	0.33	0.75
Vertical exit and hoistway venting at 3.5% of the cross section and activated by a smoke detector, or smoke management by Section 909 of the Building Code of New York State	No Sprinklers	No	No Sprinklers	No	Yes
Corridor and exit interior finishes per Sections 803 and 804 of the Building Code of New York State	Yes	Yes	Yes	Yes	Yes
Horizontal assemblies between use groups (hours)[b]	0.5	0	0.5	0	1
Fire partitions between tenants (hours)[b]	0.5	0	0.5	0	1
Incidental use areas fire resistance rating enclosures (hours) in Table 509 of the Building Code of New York State	1	0.5	2	0.5	2
Fire dampers per Section 717 of the Building Code of New York State for duct and air transfer openings in horizontal assemblies and shaft enclosures which require a fire resistance rating	Yes	No	Yes	No	Yes
Electrical branch circuits meeting NFPA 70 requirements	Yes	Yes	Yes	Yes	Yes
Manual fire alarm system per Section 907 of the Building Code of New York State	Yes	Yes	Yes	Yes	Yes
Automatic heat detection system per Section 907 of the Building Code of New York State throughout building in spaces which would otherwise be provided with fire sprinklers per NFPA 13	Yes	No	Yes	No	Yes
Automatic smoke detection per Section 907 of the Building Code of New York State in shared exit access corridors	No	No	No	No	No
Electrically supervised quick response wet pipe sprinkler system throughout the building per Section 903.3[c] of the Building Code of New York State	No	Yes	No	Yes	Yes
Class I Manual — Wet Fire Standpipe System per Section 905 of the Building Code of New York State	No	No	No	No	Yes

a. Provided the building has not more than one level below the first story. Not applicable for Type V construction greater than 3 stories in height.

b. Zero (0) fire resistance rating means wall is required to resist the passage of smoke.

c. Dry pipe sprinkler protection with standard response sprinklers is only permitted in unheated spaces subject to freezing temperatures.

d. Where required, an emergency escape and rescue opening shall have the following characteristics: it shall have a minimum net clear opening of 4 square feet with a minimum dimension of 18 inches (457 mm) with bottom of opening no higher than 3 feet 6 inches (1067 mm) nor lower than 18 inches (457 mm) above finished floor in all above grade stories and no higher than 4 feet 6 inches (1372 mm) in a basement.

[NY] TABLE 804.3.1.1(2) ~~805.3.1.1(2)~~ GROUP R-2 OR R-3 SINGLE EXIT BUILDING

Required Building Features	MAXIMUM NUMBER OF STORIES OR OCCUPIABLE ROOFS ABOVE GRADE PLANE[a]				
	1 and 2		3		4 and 5
	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
Permitted Occupancy	R2 or R3	R2 or R3	R2 or R3	R2 or R3	R2 or R3
Content restriction limited to storage or retail display of hazardous materials within the building not exceeding 10% of the maximum allowable quantities in Table 307.1(1) of the Building Code of New York State	Yes	Yes	Yes	Yes	Yes
Maximum gross floor area per story (square feet)	4 Dwelling Units and 3,500	4 Dwelling Units and 3,500	4 Dwelling Units and 3,500	4 Dwelling Units and 3,500	4 Dwelling Units and 3,500
Exit access travel distance (feet)	50	75	50	75	75
One emergency escape and rescue opening on each floor and accessible to each tenant[d]	Yes	No	Yes	Yes	Yes
Fire resistance rating of shafts and vertical exit enclosures (hours)	1	0.5	1	0.5	2
Fire resistance rating of corridors (hours)[b]	0.5	0	1	0.5	1
Fire protection rating of corridor openings (hours)	0.33	Self-Closing	0.75	0.33	0.75
Vertical exit and hoistway venting at 3.5% of the cross section and activated by a smoke detector, or smoke management in accordance with Section 909 of the Building Code of New York State	No	No	No	No	Yes
Corridor and exit interior finishes per Sections 803 and 804 of the Building Code of New York State	Yes	Yes	Yes	Yes	Yes
Horizontal assemblies between use groups (hours)[b]	0.5	0	0.5	0	1
Fire partitions between tenants (hours)[b]	0.5	0	0.5	0	1
Incidental use areas fire-resistance-rating enclosures (hours) in Table 509 of the Building Code of New York State	1	0.5	2	0.5	2
Fire dampers per Section 717 of the Building Code of New York State for duct and air transfer openings in horizontal assemblies and shaft enclosures which require a fire resistance rating	Yes	No	Yes	No	Yes
Electrical branch circuits meeting NFPA 70 requirements	Yes	Yes	Yes	Yes	Yes

Manual fire alarm system per Section 907 of the Building Code of New York State	Yes	Yes	Yes	Yes	Yes
Automatic heat detection system per Section 907 of the Building Code of New York State throughout the building in spaces which would otherwise be provided with fire sprinklers per NFPA 13	Yes	No	Yes	No	No
Single or multiple-station smoke alarms within dwelling units per Section 907 of the Building Code of New York State	Yes	Yes	Yes	Yes	Yes
Automatic smoke detection per Section 907 of the Building Code of New York State in shared exit access corridors	Yes	No	Yes	No	No
Electrically supervised quick response wet pipe sprinkler system throughout the building per Section 903.3[c] of the Building Code of New York State	No[c]	Yes	Type V construction only[c]	Yes	Yes
Class I Manual — Wet Fire Standpipe System per Section 905 of the Building Code of New York State	No	No	No	No	Yes

a. Provided the building has not more than one level below the first story. Not applicable for Type V construction greater than 3 stories in height.

b. Zero (0) fire resistance rating means the wall is required to resist the passage of smoke.

c. Quick response sprinkler protection is required in all nonresidential occupancies located below Group R and for all 3 story, Type V buildings. Dry pipe sprinkler protection with standard response sprinklers is only permitted in unheated spaces subject to freezing temperatures.

d. Where required, an emergency escape and rescue opening shall have the following characteristics: it shall have a minimum net clear opening of 4 square feet with a minimum dimension of 18 inches (457 mm) with bottom of opening no higher than 3 feet 6 inches (1067 mm) nor lower than 18 inches (457 mm) above finished floor in all above grade stories and no higher than 4 feet 6 inches (1372 mm) in a basement.

804.5.2 Door swing. In the *work area* and in the egress path from any *work area* to the exit discharge, all egress doors serving an occupant load ~~greater than~~ of 50 or more shall swing in the direction of exit travel.

~~**805.4.1.2**~~ **804.6.1.2 Group I-2.** In ~~buildings of~~ Group I-2 ~~occupancy, any patient sleeping room or suite of patient rooms greater than 1,000 square feet (93 m2) within the work area shall have not fewer than two egress doorways.~~, Condition 2, work areas that include altered care suites shall comply with Sections 407.4.4 through 407.4.4.6.2 of the International Building Code.

~~**805.4.4**~~ **804.6.4 Panic and fire exit hardware**. In any work area, and in the egress path from any work area to the exit discharge, in buildings or portions thereof of Group A assembly occupancies with an occupant load greater than 100, all required exit doors equipped with latching devices shall be equipped with approved panic ~~hardware.~~ or fire exit hardware in accordance with Section 1010.1.10 of the International Building Code.

~~**805.5.3**~~ **804.7.3 Other corridor openings**. In any work area, unless otherwise protected in accordance with Section 716 of the *Building Code of New York State*, any other sash, grille, or opening in a corridor and any window in a corridor not opening to the outside air shall be sealed with materials consistent with the corridor construction.

~~**805.6**~~ **804.8 Dead-end corridors**. Dead-end corridors in any work area shall not exceed 35 feet (10 670 mm). In Group I-2 occupancies, dead-end corridors shall not exceed 30 feet (9144 mm).

Exceptions:

1. Where dead-end corridors of greater length are permitted by the International Building Code.
2. In other than Group A, I-2 and H occupancies, the maximum length of an existing dead-end corridor shall be 50 feet (15 240 mm) in buildings equipped throughout with an automatic fire alarm system installed in accordance with the International Building Code.
3. In other than Group A, I-2 and H occupancies, the maximum length of an existing dead-end corridor shall be 70 feet (21 356 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the International Building Code.
4. In other than Group A, I-2 and H occupancies, the maximum length of an existing, newly constructed, or extended dead-end corridor shall not exceed 50 feet (15 240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the International Building Code.

804.11 Stairways. An existing stairway shall not be required to comply with the requirements of Section 1011 of the *International Building Code* where the existing space and construction does not allow a reduction in pitch or slope.

804.12 Escalators. Where provided in below-grade transportation stations, existing and new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).

~~**804.10.2**~~ **804.13.2 Design.** Handrails required in accordance with Section ~~804.10.1~~ 804.13.1 shall be designed and installed in accordance with the provisions of the *International Building Code*.

Exception: Handrails otherwise required to comply with Section 1011.11 of the *International Building Code* shall not be required to comply with the requirements of Section 1014.6 of the *International Building Code* regarding full extension of the handrails where such extensions would be hazardous because of plan configuration.

~~**804.12.2**~~ **804.14.2 Design.** Guards required in accordance with Section 804.12.1 shall be designed and installed in accordance with the *International Building Code*.

Exception: In Group I-1 and I-2 facilities, required guards enclosing the occupiable roof areas shall be permitted to be greater than 48 inches (1219 mm) above the surface of the occupiable roof where the occupants, because of clinical needs, require restraint or containment as part of a function of a psychiatric or cognitive treatment area.

[BS] 805.3 Existing structural elements resisting lateral loads. Except as permitted by Section 805.4, where the *alteration* increases design lateral loads, or where the alteration results in prohibited structural irregularity as defined in ASCE 7, or where the *alteration* decreases the capacity of any existing lateral load-carrying structural element, the ~~structure~~ lateral force-resisting system of the altered building or structure shall meet the requirements of Section~~s~~ 1609 ~~and 1613~~ of the International Building Code and Section 304.3.2 of this code. ~~Reduced seismic forces shall be permitted.~~

Exceptions:

1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the *alteration* considered is not more than 10 percent greater than its demand-capacity ratio with the *alteration* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Section~~s~~ 1609 ~~and 1613~~ of the International Building Code and Section 304.3.1 or Section 304.3.2 of this code. ~~Reduced seismic forces shall be permitted.~~ The same methodology shall be used for the altered and unaltered structures. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction. When calculating demand-capacity ratios for wind, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration, or repair in compliance with Section 1609 of the International Building Code or the code wind forces in effect at the time. When calculating demand-capacity ratios for earthquake, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration, or repair in compliance with Section 304.3.1 or Section 304.3.2 item 1 or item 3 or the full or reduced seismic forces in effect at the time.
2. Buildings in which the increase in the demand-capacity ratio is due entirely to the addition of rooftop-supported mechanical equipment individually having an operating weight less than 400 pounds (181.4 kg) and where the total additional weight of all rooftop equipment placed after initial construction of the building is less than 10 percent of the roof dead load. For purposes of this exception, "roof" shall mean the roof level above a particular story.

3. Increases in the demand-capacity ratio due to lateral loads from seismic forces need not be evaluated for the installation of rooftop *photovoltaic panel systems* where the additional roof dead load due to the system, including ballast where applicable, does not exceed 5 psf and does not exceed 10% of the dead load of the existing roof.

[BS] 805.4 Voluntary lateral force-resisting system alterations. Structural *alterations* that are intended exclusively to improve the lateral force- resisting system and are not required by other sections of this code shall not be subject to the structural requirements of this chapter or Chapter 7 ~~required to meet the requirements of Section 1609 or Section 1613 of the International Building Code,~~ provided that the following conditions are met:

1. With the alteration complete, the ~~The~~ capacity of existing structural systems to resist forces is not reduced.
2. New structural elements are detailed and connected to existing or new structural elements as required by the selected design criteria ~~International Building Code for new construction~~.

   Exception: New lateral force-resisting systems designed in accordance with the International Building Code are permitted to be of a type designated as "Ordinary" or "Intermediate" where ASCE 7 Table 12.2-1 states these types of systems are not permitted.
3. Supports and attachments for ~~New or relocated~~ nonstructural elements removed and reinstalled to facilitate the work comply with ~~are detailed and connected to existing or new structural elements as required by~~ the *International Building Code* for new construction.
4. The *alterations* do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

   Exception: Condition 4 need not be satisfied where the work complies with Section 304.3.2 Item 3.

~~**805.10.1 Capacity**. The required capacity of refuge areas shall be in accordance with Sections 805.10.1.1 through 805.10.1.3.~~

~~**805.10.1.1 Group I-2.** In Group I-2 occupancies, the required capacity of the refuge areas for smoke compartments in accordance with Section 407.5.1 of the International Building Code shall be maintained.~~

~~**805.10.1.2 Group I-3**. In Group I-3 occupancies, the required capacity of the refuge areas for smoke compartments in accordance with Section 408.6.2 of the International Building Code shall be maintained.~~

~~**805.10.1.3 Ambulatory care**. In ambulatory care facilities required to be separated by Section 422.2 of the International Building Code, the required capacity of the refuge areas for smoke compartments in accordance with Section 422.3.2 of the International Building Code shall be maintained.~~

~~**805.10.2 Horizontal exits**. The required capacity of the refuge area for horizontal exits in accordance with Section 1026.4 of the International Building Code shall be maintained.~~

806.3 Healthcare facilities. In Group I-2 facilities, ambulatory care facilities and outpatient clinics, any added portion of an existing electrical systems shall be required to meet installation and equipment requirements in NFPA 99.

SECTION 808~~9~~ PLUMBING

~~**809.1 Minimum fixtures**. Where the occupant load of the story is increased by more than 20 percent, plumbing fixtures for the story shall be provided in quantities specified in the International Plumbing Code based on the increased occupant load.~~

808.1 Healthcare facilities. In Group I-2 facilities, ambulatory care facilities and outpatient clinics, any added portion of an existing medical gas systems shall be required to meet installation and equipment requirements in NFPA 99.

Chapter 9 – Alterations - Level III

902.1 High-rise buildings. Any building having occupied floors or an occupiable roof more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access shall comply with the requirements of Sections 902.1.1 and 902.1.2.

902.2 Conditions for I-1 Occupancies. Group I-1 Occupancies shall be classified as Condition 1 or Condition 2 in accordance with Section 308.2 of the *International Building Code*.

902.2.1 Smoke Barriers in Group I-1, Condition 2. In Group I-1, Condition 2 occupancies where the work area is on a story used for sleeping rooms for more than 30 care recipients, the story shall be divided into not less than two compartments by smoke barrier walls in accordance with Section 420.6 of the *International Building Code*.

902.3 Ambulatory care facilities. Where a Level 3 work area includes an existing ambulatory care facility, the following shall be provided:

1. A smoke compartment in accordance with Section 422.3 of the International Building Code where the alteration results in an ambulatory care facility greater than 10,000 square feet on one story.
2. Separation from adjacent spaces in accordance with Section 422.2 of the International Building Code, where any such facility has the potential for four or more care recipients are to be incapable of self-preservation at any time.

[NY] 903.4 Reserved.

904.1.4 Groups A, B, E, F-1, H, I-1, I-3, I-4, M, R-1, R-2, R-4, S-1 and S-2. In buildings with occupancies in Groups A, B, E, F-1, H, I-1, I-3, I-4, M, R-1, R-2, R-4, S-1 work areas shall be provided with automatic sprinkler protection where all of the following conditions occur:

1. The work area is required to be provided with automatic sprinkler protection in accordance with the *International Building Code* as applicable to new construction; and
2. The building site has sufficient municipal water supply for design and installation of an automatic sprinkler system.

Exception: If the building site does not have sufficient municipal water supply for design of an automatic sprinkler system, work areas shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the International Building Code.

904.1.5 Group I-2. In Group I-2 occupancies, an automatic sprinkler system installed in accordance with Section 903.3.1.1 of the International Fire Code shall be provided in the following:

1. In Group I-2, Condition 1, throughout the work area.
2. In Group I-2, Condition 2, throughout the work area where the work area is 50 percent or less of the smoke compartment.
3. In Group I-2, Condition 2, throughout the smoke compartment in which the work occurs where the work area exceeds 50 percent of the smoke compartment.

904.1.6 Windowless stories. Work located in a windowless story, as determined in accordance with *the International Building Code*, shall be sprinklered where the work area is required to be sprinklered under the provisions of the *International Building Code* for newly constructed buildings and the building site has a sufficient municipal water supply for the design and installation of an automatic sprinkler system.

~~**904.1.4**~~ **904.1.7 Other required automatic sprinkler systems**. In buildings and areas listed in Table 903.2.11.6 of the *International Building Code*, 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 an automatic sprinkler system under the following conditions:

1. The work area is required to be provided with an automatic sprinkler system in accordance with the *International Building Code* applicable to new construction.
2. The building site has sufficient municipal water supply for design and installation of an automatic sprinkler system.

904.1.8 Supervision and Alarms. Where an automatic sprinkler system is required by Sections 904.1.1 through 904.1.7 such systems shall be provided with supervision and alarms in accordance with Section 903.4 of the *International Building Code*.

905.4 Two-way communications systems. In buildings with elevator service, a two way communication system shall be provided in accordance with Section 1009.8 of the International Building Code.

[BS] 906.2 Existing structural elements resisting lateral loads. Where work involves a *substantial structural alteration*, the lateral load-resisting system of the altered building shall be shown to satisfy the requirements of Section~~s~~ 1609 ~~and 1613~~ of the International Building Code and Section 304.3.2 of this code. ~~Reduced seismic forces shall be permitted.~~ Where the building is assigned to Seismic Design Category D or F, supports and attachments for nonstructural components required to serve any portion of the building with a use included in Risk Category IV shall comply with Section 1613 of the *International Building Code* or shall comply with ASCE 41 using an objective of Position Retention nonstructural performance with the BSE-1E earthquake hazard level.

Exceptions:

1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes that are altered based on the conventional light-frame construction methods of the *International Building Code* or in compliance with the provisions of the *International Residential Code*.
2. Where the intended alteration involves only the lowest story of a building, ~~only the~~ structural components of the lateral load resisting system above ~~components in and below~~ that story need not comply with this section.

[BS] 906.3 Seismic Design Category F. Where the building is assigned to Seismic Design Category F, the ~~structure~~ lateral force-resisting system of the altered building shall meet the requirements of Section~~s~~ 1609 ~~and 1613~~ of the International Building Code and Section 304.3.2 of this code. ~~Reduced seismic forces shall be permitted~~. Supports and attachments for nonstructural components serving any portion of the building with a use included in Risk Category IV shall comply with Section 1613 of the *International Building Code* or shall comply with ASCE 41 using an objective of Position Retention nonstructural performance with the BSE-1Eearthquake hazard level.

[BS] 906.4 Anchorage for concrete and masonry buildings. For any building assigned to Seismic Design Category D, E or F with a structural system that includes concrete or reinforced masonry walls with a flexible roof diaphragm, the *alteration* ~~work~~ shall comply with Section 304.3.2 by ~~include~~ evaluation of the existing condition or by installation of wall anchors at the roof line of all subject buildings and at the floor lines of unreinforced masonry. ~~buildings unless an evaluation demonstrates compliance of existing wall anchorage. Reduced seismic forces shall be permitted.~~

[BS] 906.5 Anchorage for unreinforced masonry walls. For any building assigned to Seismic Design Category C, D, E or F with a structural system that includes unreinforced masonry bearing walls, the *alteration* ~~work~~ shall comply with Section 304.3.2. ~~include~~ By evaluation of the existing condition or by installation of wall anchors at the roof line, ~~unless an evaluation demonstrates compliance of existing wall anchorage. Reduced seismic forces shall be permitted.~~

[BS] 906.6 Bracing for unreinforced masonry parapets. Parapets constructed of unreinforced masonry in buildings assigned to Seismic Design Category C, D, E or F shall comply with Section 304.3.2 by evaluation of the existing condition or by installation of parapet ~~shall have~~ bracing ~~installed as needed to resist the reduced International Building Code level seismic forces in accordance with Section 304.3, unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces shall be permitted.~~

[BS] 906.7 Anchorage of unreinforced masonry partitions. Where the building is assigned to Seismic Design Category C, D, E or F, unreinforced masonry partitions and nonstructural walls within the *work area* and adjacent to egress paths from the *work area* shall have their existing conditions evaluated or shall be anchored, removed, or altered to resist out-of-plane seismic forces, to comply with Section 304.3.2. ~~unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces shall be permitted.~~

SECTION 908

EMERGENCY RESPONDER COMMUNICATIONS ENHANCEMENT SYSTEM COVERAGE

908.1 Emergency Responder Communication Enhancement System Coverage. The existing building shall undergo an evaluation of the emergency responder communication signal strength and coverage area within the entire building in accordance with 908.1.1 and 908.1.2.

> **Exception:** Where it is determined by the fire code official that the emergency responder communication enhancement system (ERCES) is not needed.

908.1.1 Evaluation. The evaluation shall determine the current signal strength and coverage capabilities of the public safety communication systems utilized by the jurisdiction, measured at the exterior of the building.

908.1.2 Compliance. The evaluation report shall be submitted for approval by the fire code official and the frequency license holder. Where the coverage area, signal strength or DAQ does not comply with Section 510 of the International

Fire Code, the existing building shall be provided with ERCES coverage. The fire code official is authorized to establish the timeframe for such installation or modification.

Chapter 10 Change of Occupancy

1001.2 Certificate of occupancy. A *change of occupancy* or a *change of occupancy* within a space where there is a different fire protection system threshold requirement in Chapter 9 of the current *International Building Code* than exists in the current building or space shall not be made to any structure without the approval of the *code official*. A certificate of occupancy shall be issued where it has been determined that the requirements for the *change of occupancy* have been met.

1001.2.1 Change of use. Any work undertaken in connection with a ~~change in use~~ *change of use* ~~that does not involve a change of occupancy classification or a change to another group within an occupancy classification~~ shall conform to the applicable requirements for the work as classified in Chapter 6 and to the requirements of Sections 1002 through 1010.

Exception: As modified in Section 1204 for *historic buildings*.

1001.2.2 Change of occupancy classification ~~or group~~. Where a building undergoes a change of occupancy classification ~~the occupancy classification of a building changes~~, the provisions of Sections 1002 through 1011 shall apply. ~~This includes a change of occupancy classification and a change to another group within an occupancy classification.~~

1001.2.2.1 Partial change of occupancy. Where a portion of an *existing building* undergoes a change of occupancy classification ~~the occupancy classification or group of a portion of an existing building is changed, Section 1011 shall apply~~.

1002.1 Compliance with the building code. Where ~~the character or use of~~ an existing building or part of an existing building ~~is changed~~ undergoes a change of occupancy to one of the following special use or occupancy categories as ~~defined~~ described in Chapter 4 in the International Building Code, the building shall comply with all of the ~~applicable~~ requirements of Chapter 4 of the International Building Code applicable to the special use or occupancy~~:~~

~~1. Covered and open mall buildings.~~

~~2. Atriums.~~

~~3. Motor vehicle-related occupancies.~~

~~4. Aircraft-related occupancies.~~

~~5. Motion picture projection rooms.~~

~~6. Stages and platforms.~~

~~7. Special amusement buildings.~~

~~8. Incidental use areas.~~

~~9. Hazardous materials.~~

~~10. Ambulatory care facilities.~~

~~11. Group I-2 occupancies.~~

1002.2 ~~Underground buildings~~ Incidental uses. ~~An underground building in which there is a change of~~ Where a portion of a building undergoes a change of occupancy to one of the incidental uses listed in Table 509 of the International Building Code, the incidental use shall comply with ~~the requirements~~ Section 509 of the International Building Code applicable to ~~underground structures~~ the incidental use.

1002.3 Change of occupancy in health care. Where a *change of occupancy* occurs to a Group I-2 or I-1 *facility*, the *work area* with the *change of occupancy* shall comply with the International Building Code.

~~Exception~~ Exceptions:

1. A change in use or occupancy in the following cases shall not be required to meet the International Building Code:

1.1. Group I-2, Condition 2 to Group I-2, Condition 1.

1.2. Group I-2 to ambulatory health care.

1.3. Group I-2 to Group I-1.

1.4. Group I-1, Condition 2 to Group I-1, Condition 1.

2. In a Group I-1 occupancy, where a change of use is not in conjunction with a Level 3 alteration, a smoke barrier in accordance with Section 420.6 of the International Building Code is not required to be added.

1002.4 Storage. In Group I-2 occupancies, equipped throughout with an automatic sprinkler in accordance with Section 903.3.1.1 of the International Building Code, where a room 250 ft^2 (23.2 m^2) or less undergoes a change in occupancy to a storage room, the room shall be separated from the remainder of the building by construction capable of resisting the passage of smoke in accordance with Section 509.4.2 of the International Building Code.

1004.1 General. Fire protection requirements ~~of~~ in Section 1011 shall apply where either of the following occur:

1. ~~a~~ A building , or portion~~s~~ thereof , ~~undergo~~ undergoes a *change of occupancy* . ~~classification or where~~
2. ~~there is a~~ A building, or portion thereof, undergoes a *change of occupancy* ~~within a space where~~ and there is a different fire protection system threshold requirement in Chapter 9 of the current *International Building* Code than exists in the current building or portion thereof.

[BS] 1006.3 Seismic loads. Where a *change of occupancy* results in a building being assigned to a higher *risk category*, or where the change is from a Group S or Group U occupancy to any occupancy other than Group S or Group U, the lateral force-resisting system of the building shall comply with Section 304.3.1 ~~satisfy the requirements of Section 1613 of the International Building Code for the new risk category using full seismic forces~~. Where a change of occupancy results in a building being assigned to Risk Category IV and Seismic Design Category D or F, nonstructural components serving any portion of the building changed to Risk Category IV shall comply with the requirements of Section 1613 of the International Building Code or shall comply with ASCE 41 using an objective of Operational nonstructural performance with the BSE-1N earthquake hazard level.

Exceptions:

1. Where a *change of use* results in a building being reclassified from *Risk Category* I or II to *Risk Category* III and the seismic coefficient, S_{DS}, is less than 0.33, compliance with this section is not required.
2. Where the area of the new occupancy is less than 10 percent of the building area, the occupancy is not changing from a Group S or Group U occupancy, and the new occupancy is not assigned to *Risk Category* IV, compliance with this section is not required. The cumulative effect of occupancy changes over time shall be considered.
3. Unreinforced masonry bearing wall buildings assigned to *Risk Category* III and to Seismic Design Category A or B shall be permitted to use Appendix Chapter A1 of this code.
4. Where the change is from a Group S or Group U occupancy and there is no change of risk category, compliance with Section 304.3.2 shall be permitted.

[BS] 1006.4 Access to Risk Category IV. Any structure that provides operational access to an adjacent structure assigned to *Risk Category* IV as the result of a change of occupancy shall itself ~~satisfy the requirements of~~ comply with Sections 1608~~,~~ and 1609 ~~and 1613~~ of the International Building Code and Section 304.3.1 of this code. ~~For compliance with Section 1613 of the International Building Code, the full seismic forces shall be used.~~ Where operational access to *Risk Category* IV is less than 10 feet (3048 mm) from either an interior lot line or from another structure, access protection from potential falling debris shall be provided.

1007.1 Special occupancies. Where the occupancy of an existing building or part of an existing building is changed to one of the following special occupancies as described in NFPA 70, the electrical wiring and equipment of the building or portion thereof that contains the proposed occupancy shall comply with the applicable requirements of NFPA 70 ~~whether or not a change of occupancy group is involved~~. Health care facilities, including Group I-2, ambulatory healthcare facilities and outpatient clinics, shall also comply with the applicable requirements of NFPA 99:

1. Hazardous locations.

2. Commercial garages, repair and storage.

3. Aircraft hangars.

4. Gasoline dispensing and service stations.

5. Bulk storage plants.

6. Spray application, dipping and coating processes.

7. Health care facilities, including Group I-2, ambulatory healthcare facilities and outpatient clinics.

8. Places of assembly.

9. Theaters, audience areas of motion picture and television studios, and similar locations.

10. Motion picture and television studios and similar locations.

11. Motion picture projectors.

12. Agricultural buildings.

1009.1 Increased demand. Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to increased or different plumbing fixture requirements or to increased water supply requirements in accordance with the International Plumbing Code, the new occupancy shall comply with the intent of the respective International Plumbing Code provisions.

> **Exception:** Only where the occupant load of the story is increased by more than 20 percent, plumbing fixtures for the story shall be provided in quantities specified in the International Plumbing Code based on the increased occupant load.

1009.5 Group I-2. If the occupancy group is changed to Group I-2, the plumbing system and medical gas system shall comply with the applicable requirements of the International Plumbing Code.

1011.1 General. The provisions of this section shall apply to buildings or portions thereof undergoing a *change of occupancy* classification. This includes a *change of occupancy* classification within a group as well as a *change of occupancy* classification from one group to a different group . The provisions of this section shall also apply ~~or~~ where there is a *change of occupancy* within a ~~space where~~ building or portion thereof and there is a different fire protection system threshold requirement in Chapter 9 of the current *International Building* Code than exists in the current building or space. Such buildings shall also comply with Sections 1002 through 1010 of this code. ~~The application of requirements for the change of occupancy shall be as set forth in Sections 1011.1.1 through 1011.1.4. A change of occupancy, as defined in Section 202, without a corresponding change of occupancy classification shall comply with Section 1001.2~~

~~**1011.1.1 Compliance with Chapter 9.** The requirements of Chapter 9 shall be applicable throughout the building for the new occupancy classification based on the separation conditions set forth in Sections 1011.1.1.1 and 1011.1.1.2.~~

~~**1011.1.1.1 Change of occupancy classification without separation**. Where a portion of an existing building is changed to a new occupancy classification or where there is a change of occupancy within a space where there is a different fire protection system threshold requirement in Chapter 9 of the International Building Code, and that portion is not separated from the remainder of the building with fire barriers having a fire-resistance rating as required in the International Building Code for the separate occupancy, the entire building shall comply with all of the requirements of Chapter 9 of this code applied throughout the building for the most restrictive occupancy classification in the building and with the requirements of this chapter.~~

~~**1011.1.1.2 Change of occupancy classification with separation**. Where a portion of an existing building is changed to a new occupancy classification or where there is a change of occupancy within a space where there is a different fire protection system threshold requirement in Chapter 9 of the International Building Code, and that portion is separated from the remainder of the building with fire barriers having a fire-resistance rating as required in the International Building Code for the separate occupancy, that portion shall comply with all of the requirements of Chapter 9 of this code for the new occupancy classification and with the requirements of this chapter.~~

~~**1011.1.2 Fire protection and interior finish.** The provisions of Sections 1011.2 and 1011.3 for fire protection and interior finish, respectively, shall apply to all buildings undergoing a change of occupancy classification.~~

~~**1011.1.3 Change of occupancy classification based on hazard category**. The relative degree of hazard between different occupancy classifications shall be determined in accordance with the categories specified in Tables 1011.4, 1011.5 and 1011.6. Such a determination shall be the basis for the application of Sections 1011.4 through 1011.7.~~

1011.2.1 ~~Fire~~ Automatic sprinkler system. ~~Where a change in occupancy classification occurs or where there is a change of occupancy within a space where there is a different fire protection system threshold requirement in Chapter 9 of~~

~~the International Building Code that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the International Building Code, such system shall be provided throughout the area where the change of occupancy occurs.~~ The installation of an automatic sprinkler system shall be required where there is a change of occupancy classification and Chapter 9 of the *International Building Code* requires an automatic fire sprinkler system based on the new occupancy or where there is a change of occupancy within the space where there is a different fire protection system threshold requirement in Chapter 9 of the *International Building Code* than exists in the current building or space. The installation of the automatic sprinkler system shall be required within the area of the *change of occupancy* and areas of the building not separated horizontally and vertically from the *change of occupancy* by a nonrated permanent partition and horizontal assemblies, fire partition, smoke partition, smoke barrier, fire barrier, or fire wall.

Exceptions:

1. An automatic sprinkler system shall not be required in a one- or two-family dwelling constructed in accordance with the International Residential Code.
2. Automatic sprinkler system shall not be required in a townhouse constructed in accordance with the International Residential Code.
3. The townhouse shall be separated from adjoining units in accordance with Section R302.2 of the International Residential Code.

1011.2.1.1 Nonrequired automatic sprinkler systems. The code official is authorized to permit the removal of existing automatic sprinkler system where all of the following conditions exist:

1. The system is not required for new construction.
2. Portions of the system that are exposed to the public are removed.
3. The system was not installed as part of any special construction features, including fire-resistance-rated assemblies and smoke-resistive assemblies, conditions of occupancy, means of egress conditions, fire code deficiencies, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building.

1011.2.1.1.1 Approval. Plans, investigation and evaluation reports, and other data shall be submitted documenting compliance Section 1011.2.1.1 for review and approval in support of a determination authorizing the removal of the automatic sprinkler system by the code official.

[NY] 1011.4 Reserved.

1011.4.6 Existing emergency escape and rescue openings. Where a change of occupancy would require emergency escape and rescue opening in accordance with Section 1030.1 of the International Building Code, operable windows serving as the emergency escape and rescue opening shall comply with the following:

1. An existing operable window shall provide a minimum net clear opening of 4 square feet (0.38 m^2) with a minimum net clear opening height of 22 inches (559 mm) and a minimum net clear opening width of 20 inches (508 mm).
2. A replacement window where such window complies with both of the following:
   2.1. The replacement window meets the size requirements in Item 1.
   2.2. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

1011.5.1 Means of egress for change to a higher-hazard category. Where a change of occupancy classification is made to a higher-hazard category (lower number) as shown in Table 1011.5, the means of egress shall comply with the requirements of Chapter 10 of the International Building Code.

Exceptions:

1. Stairways shall be enclosed in compliance with the applicable provisions of Section 903.1.

2. Existing stairways including handrails and guards complying with the requirements of Chapter 9 shall be permitted for continued use subject to approval of the *code official*.

3. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.

4. Existing corridor walls constructed on both sides of wood lath and plaster in good condition or wallboard shall be permitted. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.

5. Existing corridor doorways, transoms and other corridor openings shall comply with the requirements in Sections 804.6.1, 804.6.2 and 804.6.3.

6. Existing dead-end corridors shall comply with the requirements in Section 804.7.

7. An ~~existing operable window with clear opening area not less than 4 square feet (0.38 m2) and minimum opening height and width of 22 inches (559 mm) and 20 inches (508 mm), respectively~~ operable window complying with Section 1011.4.6 shall be accepted as an *emergency escape and rescue opening*.

8. In Group I-1 and I-2 facilities, required guards enclosing the occupiable roof areas shall be permitted to be greater than 48 inches (1219 mm) above the surface of the occupiable roof where the occupants, because of clinical needs, require restraint or containment as part of a function of a psychiatric or cognitive treatment area.

1011.5.2 Means of egress for change of use to an equal or lower-hazard category. Where a change of occupancy classification is made to an equal or lesser-hazard category (higher number) as shown in Table 1011.5, existing elements of the means of egress shall comply with the requirements of Section 905 for the new occupancy classification. Newly constructed or configured means of egress shall comply with the requirements of Chapter 10 of the International Building Code.

~~**Exception**~~ **Exceptions**:

1. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.

2. In Group I-1 and I-2 facilities, required guards enclosing the occupiable roof areas shall be permitted to be greater than 48 inches (1219 mm) above the surface of the occupiable roof where the occupants, because of clinical needs, require restraint or containment as part of a function of a psychiatric or cognitive treatment area.

1011.6.1 Height and area for change to a higher-hazard category. Where a change of occupancy classification is made to a higher-hazard category as shown in Table 1011.6, heights and areas of buildings and structures shall comply with the requirements of Chapter 5 of the *International Building Code* for the new occupancy classification.

~~**Exception**~~ **Exceptions**:

1. For high-rise buildings constructed in compliance with a previously issued permit, the type of construction reduction specified in Section 403.2.1 of the *International Building Code* is permitted. This shall include the reduction for columns. The high-rise building is required to be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Building Code*.

2. Buildings that were constructed in compliance with a previously issued permit that have floor assemblies with a 1-1/2 hour fire resistance rating shall not be required to comply with Chapter 5 of the *International Building Code* where all of the following apply:

   2.1. Chapter 5 of the *International Building Code* requires Type IB construction.

   2.2. The building does not include Group H occupancies.

   2.3. The building is protected throughout with an automatic sprinkler system in accordance Section 903.3.1.1 of the *International Building Code*.

1011.7.1 Exterior wall rating for change of occupancy classification to a higher-hazard category. Where a change of occupancy classification is made to a higher hazard category as shown in Table 1011.7, exterior walls shall have fire resistance, ~~and~~ exterior opening areas, and opening protectives as required by the *International Building Code*.

> **Exception:** A 2-hour fire-resistance rating shall be allowed where the building does not exceed three stories in height and is classified as one of the following groups: A-2 and A-3 with an occupant load of less than 300, B, F, M or S.

1011.8.2 Stairways. Where a change of occupancy classification is made to a higher-hazard category as shown in Table 1011.5, interior stairways shall be enclosed as required by the *International Building Code*.

Exceptions:

1. In other than Group I occupancies, an enclosure shall not be required for openings serving only one adjacent floor and that are not connected with corridors or stairways serving other floors.
2. Unenclosed existing stairways need not be enclosed in a continuous vertical shaft if each story is separated from other stories by 1-hour fire-resistance-rated construction or *approved* wired glass set in steel frames and all exit corridors are sprinklered in accordance with the *International Building Code*. The openings between the corridor and the ~~occupant~~ tenant space shall have not fewer than one sprinkler ~~head~~ above the openings on the tenant side. ~~The sprinkler system shall be permitted to be supplied from the domestic water supply systems, provided that the system is of adequate pressure, capacity and sizing for the combined domestic and sprinkler requirements.~~
3. Existing penetrations of stairway enclosures shall be accepted if they are protected in accordance with the *International Building Code*.

Chapter 11 Additions

1101.2 Creation or extension of nonconformity. An *addition* shall not create or extend any nonconformity in the *existing building* to which the *addition* is being made with regard to accessibility, structural strength, supports and attachments for nonstructural components, fire safety, means of egress or the capacity of mechanical, plumbing or electrical systems.

> **Exception:** Nonconforming supports and attachments for nonstructural components that serve the addition from within the *existing building* need not be altered to comply with *International Building Code* Section 1613 unless the components are part of the addition's *life safety system* or are required to serve an *addition* assigned to Risk Category IV.

1101.3 Risk category assignment. Where the addition and the existing building have different occupancies, the risk category of each existing and added occupancy shall be determined in accordance with Section 1604.5.1 of the *International Building Code*. Where application of that section results in a higher risk category for the existing building compared with the risk category for the existing building before the addition, such a change shall be considered a change of occupancy and shall comply with Chapter 10 of this code. Where application of that section results in a higher risk category for the addition compared with the risk category for the addition by itself, the addition and any systems in the existing building required to serve the addition shall comply with the requirements of the *International Building Code* for new construction for the higher risk category.

1101.4 Smoke Barriers in Group I-1, Condition 2. Where an addition to an existing Group I-1, Condition 2 building adds sleeping areas that result in more than 50 care recipients on a story, smoke barriers shall be provided to subdivide such story into not fewer than two smoke compartments in accordance with Section 420.6 of the International Building Code.

> **Exception:** Where the existing building is divided into smoke compartments, and the addition does not result in any individual smoke compartment exceeding the size and travel distance requirements in Section 420.6 of the International Building Code, additional smoke barriers are not required.

1101.5 Occupiable Roofs. Where a new occupiable roof is added to a building or structure, the occupiable roof shall comply with the provisions of the *International Building Code*.

[NY] 1101.6 Reserved.

1102.2 Area limitations. An *addition* shall not increase the area of an *existing building* beyond that permitted under the applicable provisions of Chapter 5 of the International Building Code for new buildings unless fire separation as required by the *International Building Code* is provided.

> **Exception:** In-filling of floor openings and nonoccupiable appendages such as elevator and exit stairway shafts shall be permitted beyond that permitted by the International Building Code.

1102.3 Fire protection systems. Existing fire areas increased by the *addition* shall comply with Chapter 9 of the International Building Code.

> **Exception:** Nonoccupiable appendages such as elevator and exit stairway shafts shall be permitted beyond that permitted by the *International Building Code*.

[BS] 1103.2 Lateral force-resisting system. Where the *addition* is structurally independent of the *existing structure*, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the *addition* is not structurally independent of the *existing structure*, the lateral force-resisting system of the *existing structure* and its *addition* acting together as a single structure shall ~~meet the requirements of~~ comply with Section~~s~~ 1609 and 1613 of the *International Building Code* ~~using full seismic forces~~ and Section 304.3.1 of this code.

Exceptions:

1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the *existing building* and the *addition* comply with the conventional light-frame construction methods of the *International Building Code* or the provisions of the *International Residential Code*.
2. Any existing lateral load-carrying structural element whose demand-capacity ratio with the *addition* considered is not more than 10 percent greater than its demand-capacity ratio with the *addition* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Section~~s~~ 1609 ~~and 1613~~ of the *International Building Code* and Section 304.3.1 of this code. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

   When calculating demand-capacity ratios for wind, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration, or repair in compliance with Section 1609 of the *International Building Code* or the code wind forces in effect at the time. When calculating demand-capacity ratios for earthquake, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration, or repair in compliance with Section 304.3.1 or the full seismic forces in effect at the time.

[BS] 1103.3 Flood hazard areas. *Additions* and *foundations* in *flood hazard areas* shall comply with the following requirements:

1. For horizontal *additions* that are structurally interconnected to the *existing building*:
   - 1.1. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *International Building Code*, or Section R322 of the International Residential Code, as applicable.
   - 1.2. If the *addition* constitutes *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.
   - 1.3. If the addition does not constitute substantial improvement the addition is not required to comply with the flood design requirements for new construction provided that both of the following apply.
     - 1.3.1. The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.
     - 1.3.2. The lowest floor of the addition shall be at or above the lower of the *lowest floor* of the existing building or the lowest floor elevation required in Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.
2. For horizontal *additions* that are not structurally interconnected to the *existing building*:

2.1. The *addition* shall comply with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

2.2. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the International Building Code, or Section R322 of the *International Residential Code*, as applicable.

3. For vertical *additions* and all other proposed work that, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

4. ~~For a raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute substantial improvement, the existing building shall comply with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.~~

5. For a new foundation~~, or~~ replacement foundation, or a foundation raised or extended upward, the foundation shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable.

~~**SECTION 1104 SMOKE ALARMS IN OCCUPANCY GROUPS R AND I-1**~~

~~**1104.1 Smoke alarms in existing portions of a building.** Where an addition is made to a building or structure of a Group R or I-1 occupancy, the existing building shall be provided with smoke alarms as required by Section 1103.8 of the International Fire Code or Section R314 of the International Residential Code as applicable.~~

~~**SECTION 1105 CARBON MONOXIDE ALARMS IN GROUPS I-1, I-2, I-4 AND R**~~

~~**1105.1 Carbon monoxide alarms in existing portions of a building.** Where an addition is made to a building or structure of a Group I-1, I-2, I-4 or R occupancy, the existing building shall be equipped with carbon monoxide alarms in accordance with Section 1103.9 of the International Fire Code or Section R315 of the International Residential Code, as applicable.~~

~~**SECTION 1106 STORM SHELTERS**~~

Chapter 12 Historic Buildings

[BS] 1201.2 Report. A *historic building* undergoing *alteration* or *change of occupancy* shall be investigated and evaluated, and . ~~If it is intended that the building meet the requirements of this chapter,~~ a written report shall be prepared and filed with the *code official* by a *registered design professional* where ~~such a report is necessary in the opinion of~~ required by the *code official*. ~~Such~~ The report ~~shall be in accordance with Chapter 1 and~~ shall identify all unsafe conditions as defined in Section 115 ~~each required safety feature that is in compliance with this chapter and where compliance with other chapters of these provisions would be damaging to the contributing historic features~~. For buildings assigned to Seismic Design Category D, E or F, a description of ~~structural evaluation describing, at a minimum~~, the vertical and horizontal elements of the lateral force- resisting system and ~~any~~ strengths or weaknesses therein shall be included ~~prepared~~. Additionally, the report shall describe the components of the building that provide a level of safety substantially below that required of existing non-historic buildings. ~~each feature that is not in compliance with these provisions and shall demonstrate how the intent of these provisions is complied with in providing an equivalent level of safety.~~

> **Exception:** An investigation, evaluation, and report shall not be required where the *alteration* is scoped by Section 602 as a Level 1 *alteration* and does not make the building or structure less complying with the provisions of the *International Building Code*.

1201.3 Special occupancy exceptions—museums. Where a building in Group R-3 is used for Group A, B or M purposes such as museum tours, exhibits and other public assembly activities, or for museums less than 3,000 square feet (279 m^2) per floor and a maximum of three stories, the occupancy shall be classified as Group B where life safety conditions are

approved by the code official in accordance with Section 1201.2. ~~the code official may determine that the occupancy is Group B where life safety conditions can be demonstrated in accordance with Section 1201.2.~~ Adequate means of egress in such buildings, ~~which may include~~ including, but not limited to, a means of maintaining doors in an ~~open~~ unlocked position to permit egress, a limit on building occupancy to an occupant load permitted by the means of egress capacity, a limit on occupancy of certain areas or floors, or supervision by a person knowledgeable in the emergency exiting procedures, shall be provided.

[NY] 1201.4 Flood hazard areas. In *flood hazard areas*, if all proposed work, including *repairs*, work required because of a *change of occupancy*, and *alterations*, constitutes *substantial improvement*, then the *existing building* shall comply with Section 1612 of the *Building Code of New York State*, or Section R306 ~~R322~~ of the *Residential Code of New York State*, as applicable.

Exception: If a *historic building* will continue to be a *historic building* after the proposed work is completed, then the proposed work is not considered a *substantial improvement*. For the purposes of this exception, a *historic building* is any of the following:

1. Listed, or certified as eligible for listing, ~~by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places~~ in the National Register of Historic Places or in the New York State Register of Historic Places.
2. Designated as historic under an applicable state or local law.
3. Certified as a contributing resource within a National Register-listed, ~~or a state-designated~~ State Register-listed, or locally designated historic district.

1203.2 General. Every *historic building* that does not conform to the construction requirements specified in this code for the occupancy or use and that constitutes a distinct fire hazard as defined herein shall be provided with an *approved* automatic sprinkler ~~fire-extinguishing~~ system as determined appropriate by the *code official*. However, an automatic sprinkler ~~fire-extinguishing~~ system shall not be used to substitute for, or act as an alternative to, the required number of exits from any *facility*.

1203.3 Means of egress. ~~Existing door openings and corridor and stairway widths less than those specified elsewhere in this code may be approved, provided that,~~ Where in the opinion of the *code official*, there is sufficient width and height for a person to pass through the opening or traverse the means of egress , existing door openings and corridor and stairway widths are not required to meet the widths required by the *International Building Code* or this code. Where *approved* by the *code official*, the front or main exit doors need not swing in the direction of the path of exit travel, provided that other *approved* means of egress having sufficient capacity to serve the total occupant load are provided.

1203.4 Transoms. In ~~fully sprinklered~~ buildings with automatic sprinkler systems of Group R-1, R-2 or R-3 ~~occupancy~~, existing transoms in corridors and other fire-resistance-rated walls may be maintained if fixed in the closed position. A sprinkler shall be installed on each side of the transom.

1203.11 Exit signs. Where exit sign or egress path marking location would damage the historic character of the building, alternative exit signs are permitted with approval of the ~~*building*~~ *code official*. Alternative signs shall identify the exits and egress path.

1203.12 Automatic sprinkler ~~fire-extinguishing~~ systems. Every *historic building* that cannot be made to conform to the construction requirements specified in the *International Building Code* for the occupancy or use and that constitutes a distinct fire hazard shall be deemed to be in compliance if provided with an *approved* automatic sprinkler ~~fire-extinguishing~~ system.

Exception: Where the ~~*building*~~ *code official* approves an alternative life-safety system.

1204.7 Door swing. Where approved by the ~~*building*~~ *code official*, existing front doors need not swing in the direction of exit travel, provided that other approved exits having sufficient capacity to serve the total occupant load are provided.

1204.9 ~~Finishes.~~ Interior finish. Where interior finish materials are required to ~~have a flame spread index of Class C or better, when tested in accordance with ASTM E84 or UL 723,~~ comply with the fire test requirements of Section 803.1 of the International Building Code, existing nonconforming materials shall be permitted to be surfaced with an approved fire-retardant ~~paint or finish.~~ coating to achieve the required classification. Compliance with this section shall be demonstrated by testing the fire-retardant coating on the same material and achieving the required fire classification. If the same material is not available, it shall be permitted to test on a similar material.

1204.12 Exit signs. The ~~*building*~~ *code official* may accept alternative exit sign locations where the location of such signs would damage the historic character of the building or structure. Such signs shall identify the exits and exit path.

1204.14 Natural light. Where it is determined by the ~~*building*~~ *code official* that compliance with the natural light requirements of Section 1010.1 will lead to loss of historic character or historic materials in the building, the existing level of natural lighting shall be considered to be acceptable.

[BS] 1205.1 General. *Historic buildings* shall comply with the applicable structural provisions for the work as classified in Chapter ~~4 or 5~~ 6.

Exceptions:

1. The *code official* shall be authorized to accept existing floor~~s~~ and roof framing and ~~existing~~ previously approved live loads and roof live loads and to approve operational controls that limit the live load ~~on any floor~~ or roof live load..
2. ~~Repair of substantial structural damage is not required to comply with Sections 405.2.3 and 405.2.4. Substantial structural damage shall be repaired in accordance with Section 405.2.1.~~ Regardless of the level of damage, structural repairs shall be permitted to return the building to its pre-damage condition without additional work. ~~repairs need only comply with Section 405.2.1. Repairs need not comply with Section 405.2.1.1 or Sections 405.2.2 through 405.2.6.~~

[BS] 1205.2 Dangerous conditions. Conditions determined by the ~~*building*~~ *code official* to be dangerous shall be remedied. Work shall not be required beyond what is required to remedy the dangerous condition.

Chapter 13 Performance Compliance Methods

1301.1 Scope. The provisions of this chapter shall apply to the alteration, addition and change of occupancy of existing structures, including historic structures, as referenced in Section 301.3.3. The provisions of this chapter are intended to maintain or increase the current degree of public safety, health and general welfare in existing buildings while permitting, alteration, addition and change of occupancy without requiring full compliance with Chapters 6 through 12, except where compliance with the prescriptive method of Chapter 5 or the work area method of other provisions of this code is specifically required in this chapter.

SECTION 1302 APPLICABILITY

~~**1301.2**~~ **1302.1 Applicability**. Existing buildings in which there is work involving additions, alterations or changes of occupancy shall be made to conform to the requirements of this chapter or the provisions of Chapters 6 through 12. The provisions of Sections 1301.2.1 through ~~1301.2.5~~ 1301.2.6 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, I-2, M, R and S. These provisions shall also apply to Group U occupancies when such occupancies are undergoing a change of occupancy or a partial change in occupancy with separations in accordance with Section 1301.2.2. These provisions shall not apply to buildings with occupancies in Group H ~~or~~, I-1, I-3, or I-4.

~~**1301.1.2.1**~~ **1302.1.1 Change in occupancy**. Where an existing building is changed to a new occupancy classification and this section is applicable, the provisions of this section for the new occupancy shall be used to determine compliance with this code.

~~**1301.2.2**~~ **1302.1.2 Partial change in occupancy**. Where a portion of the building is changed to a new occupancy classification and that portion is separated from the remainder of the building with fire barrier or horizontal assemblies having a fire-resistance rating as required by Table 508.4 of the International Building Code or Section R302 of the International Residential Code for the separate occupancies, or with approved compliance alternatives, the portion changed shall be made to conform to the provisions of this section. Only the portion separated shall be required to be evaluated for compliance.

Where a portion of the building is changed to a new occupancy classification and that portion is not separated from the remainder of the building with fire barriers or horizontal assemblies having a fire-resistance rating as required by Table 508.4 of *the International Building Code* or Section R302 of the *International Residential Code* for the separate occupancies, or with approved compliance alternatives, the provisions of this section which apply to each occupancy shall apply to the entire building. Where there are conflicting provisions, those requirements which secure the greater public safety shall apply to the entire building or structure.

~~1301.2.3~~ 1302.1.3 **Additions.** *Additions* to *existing buildings* shall comply with the requirements of the *International Building Code* or the *International Residential Code* for new construction. The combined height and area of the *existing building* and the new *addition* shall not exceed the height and area allowed by Chapter 5 of the International Building Code. Where a fire wall that complies with Section 706 of the International Building Code is provided between the *addition* and the *existing building*, the *addition* shall be considered a separate building. Where a new occupiable roof is added to a building or structure, the occupiable roof shall comply with the provisions of the *International Building Code*.

> **Exception:** In-filling of floor openings and nonoccupiable appendages such as elevator and exit stairway shafts shall be permitted beyond that permitted by the *International Building Code*. ~~Where an addition is an exit or exit access stairway or to provide an accessible route, the addition shall not be considered an area increase for compliance with this section.~~

~~**1301.2.3.1 Additions to Group E facilities.** For additions to Group E occupancies, storm shelters shall be provided in accordance with Section 1106.1.~~

~~1301.2.4~~ 1302.1.4 **Alterations.** An existing building or portion thereof shall not be altered in such a manner that results in the building being less safe or sanitary than such building is currently.

> **Exception:** Where the current level of safety or sanitation is proposed to be reduced, the portion altered shall conform to the requirements of the International Building Code.

~~1301.2.5~~ 1302.1.5 **Escalators.** Where escalators are provided in below-grade transportation stations, existing and new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).

1301.2.6 Plumbing Fixtures. Plumbing fixtures shall be provided in accordance with Section 1009 for a Change of Occupancy and Section 809 for Alterations. Plumbing fixtures for additions shall be in accordance with the International Plumbing Code.

[NY] ~~1301.2.6~~ 1302.1.7 **Carbon monoxide detection and notification.** Carbon monoxide detection and notification shall be provided in accordance with Chapter ~~5~~3 of this code for existing buildings undergoing alterations, additions, or changes of occupancy.

SECTION 1303 ACCEPTANCE

Note: Provisions not shown were renumbered to match created sections, but otherwise are unchanged.

~~1301.3.1~~ 1303.1.1 **Hazards.** Where the ~~building~~ code official determines that an unsafe condition exists as provided for in Section ~~103~~ 115, such unsafe condition shall be abated in accordance with Section ~~103~~ 115.

[BS] ~~1301.3.3~~ 1303.1.3**Compliance with flood hazard provisions.** In *flood hazard areas*, buildings that are evaluated in accordance with this section shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable, if the work covered by this section constitutes *substantial improvement*. If the work covered by this section is a structurally connected horizontal addition that does not constitute *substantial improvement*, the addition is not required to comply with the flood design requirements for new construction provided that both of the following apply.

1. The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.
2. The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or the lowest floor elevation required in Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

SECTION 1304 INVESTIGATION AND EVALUATION

Note: Provisions not shown were renumbered to match created sections, but otherwise are unchanged.

SECTION 1305 SCORING AND EVALUATION

Note: Provisions not shown were renumbered to match created sections, but otherwise are unchanged.

~~1301.6.2~~ 1305.2.2 **Building area**. The value for building area shall be determined by the formula in Section 1301.6.2.2. Section 506 of the International Building Code and the formula in Section 1301.6.2.1 shall be used to determine the allowable area of the building. ~~Subtract the actual building area from the allowable area and divide by 1,200 square feet (112 m2).~~ Enter the area value and its sign (positive or negative) in Table 1301.7 under Safety Parameter 1301.6.2, Building Area, for fire safety, means of egress and general safety. In determining the area value, the maximum permitted positive value for area is 50 percent of the fire safety score as listed in Table 1301.8, Mandatory Safety Scores. Group I-2 occupancies shall be scored zero.

~~1301.6.2.2~~ 1305.2.2.2 **Area formula**. The following ~~formula~~ formulas shall be used in computing the area value.

~~Determine~~ Equation 13-4 shall be used for a single occupancy buildings and Equation 13-5 shall be used for multiple occupancy buildings. Determine the area value for each occupancy floor area on a floor-by-floor basis. For ~~each~~ multiple occupancy~~, choose~~ buildings the minimum area value of the set of values obtained for the particular occupancy shall be used as the area value for that occupancy.

For single occupancy buildings:

$$\text{Area value}_i = \text{Allowable area}_i - \text{Actual area}_i \text{ / 1200 square feet} \qquad \textbf{(Equation 13-4)}$$

For multiple occupancy buildings:

$$\text{Area value}_i = \frac{\text{Allowable area}_i}{1200\,\text{square feet}}\left[1-\left(\frac{\text{Actual area}_i}{\text{Allowable area}_i}+\ldots+\frac{\text{Actual area}_n}{\text{Allowable area}_n}\right)\right] \qquad \textbf{(Equation ~~13-4~~13-5)}$$

where:

i = Value for an individual separated occupancy on a floor.

n = Number of separated occupancies on a floor.

~~1301.6.3~~ 1305.2.3 **Compartmentation**. Evaluate the compartments created by fire barriers or horizontal assemblies which comply with Sections ~~1301.6.3.1 and~~ 1301.6.3.2 and 1301.6.3.3 and which are exclusive of the wall elements considered under Sections 1301.6.4 and 1301.6.5. Conforming compartments shall be figured as the net area and do not include shafts, chases, stairways, walls, or columns. Using Table 1301.6.3, determine the appropriate compartmentation value (CV) and enter that value into Table 1301.7 under Safety Parameter 1301.6.3, Compartmentation, for fire safety, means of egress, and general safety.

TABLE ~~1301.6.3~~ 1305.2.3 COMPARTMENTATION VALUES

OCCUPANCY	CATEGORIES[a]				
	a ~~Compartment size equal to or greater than 15,000square feet~~	b ~~Compartment size of 10,000 square feet~~	c ~~Compartment size of 7,500 square feet~~	d ~~Compartment size of 5,000 square feet~~	e ~~Compartment size of 2,500 square feet or less~~
A-1, A-3	0	6	10	14	18
A-2	0	4	10	14	18
A-4, B, E, S-2	0	5	10	15	20
F, M, R, S-1	0	4	10	16	22
I-2	0	2	8	10	14

For SI: 1 square foot = 0.0929 m^2.

a. For compartment sizes between categories, the compartmentation value shall be obtained by linear interpolation.

1305.2.3.1 Categories. The categories for compartment separations are:

1. Category a-compartment size of 15,000 square feet or more.
2. Category b-maximum compartment size of 10,000 square feet.
3. Category c-maximum compartment size of 7,500 square feet.
4. Category d-maximum compartment size of 5,000 square feet.
5. Category e-maximum compartment size of 2,500 square feet.

~~1301.6.3.1~~ 1305.2.3.2 **Wall construction**. A wall used to create separate compartments shall be a fire barrier conforming to Section 707 of the International Building Code with a fire-resistance rating of not less than 2 hours. Where the building is not divided into more than one compartment, the compartment size shall be taken as the total floor area on all floors. Where there is more than one compartment within a story, each compartmented area on such story shall be provided with a horizontal exit conforming to Section 1026 of the International Building Code. The fire door serving as the horizontal exit between compartments shall be so installed, fitted, and gasketed that such fire door will provide a substantial barrier to the passage of smoke.

~~1301.6.3.2~~ 1305.2.3.3 **Floor/ceiling construction.** A floor/ceiling assembly used to create compartments shall conform to Section 711 of the International Building Code and shall have a fire-resistance rating of not less than 2 hours.

The term "patient" is replaced with "care recipient" for the following sections as follows: ~~patient~~ care recipient. The body of each section or table is omitted if it is unchanged, and shown if there are any further changes.

~~1301.6.4~~ 1305.2.4 **Tenant and dwelling unit separations**. Evaluate the fire-resistance rating of floors and walls separating tenants, including dwelling units, and not evaluated under Sections 1301.6.3 and 1301.6.5. Group I-2 occupancies shall evaluate the rating of the separations between ~~patient~~ care recipient sleeping rooms. Under the categories and occupancies in Table 1301.6.4, determine the appropriate value and enter that value in Table 1301.7 under Safety Parameter 1301.6.4, Tenant and Dwelling Unit Separation, for fire safety, means of egress, and general safety. The value shall be zero for single tenant buildings, and buildings without dwelling units.

~~1301.6.5.1~~ 1305.2.5.1 **Categories**. The categories for tenant and dwelling unit separations are:

1. Category a—No fire partitions; incomplete fire partitions; no doors; or doors not self-closing.
2. Category b—Less than 1-hour fire-resistance rating or not constructed in accordance with Section 708.4 of the International Building Code, respectively.
3. Category c—1-hour to less than 2-hour fire-resistance rating, with doors conforming to Section 716 of the International Building Code or without corridors as permitted by Section 1020 of the International Building Code to be without a fire-resistance rating.
4. Category d—2-hour or greater fire-resistance rating, with doors conforming to Section 716 of the International Building Code.

~~1301.6.7.1~~ 1305.2.7.1 **Categories**. The categories for HVAC systems are:

1. Category a—Plenums not in accordance with Section 602 of the International Mechanical Code. -10 points.
2. Category b—Air movement in egress elements not in accordance with Section 1020.5 of the International Building Code. -5 points.
3. Category c—Both Categories a and b are applicable. -15 points.
4. Category d—Compliance of the HVAC system with Section 1020.5 of the International Building Code and Section 602 of the International Mechanical Code. 0 points.
5. Category e—Systems serving one story; or a central boiler/chiller system without ductwork connecting two or more stories~~.~~ ; or where systems have no ductwork. +5 points.

~~1301.6.17~~ 1305.2.17 **Automatic sprinklers**. Evaluate the ability to suppress or control a fire based on the installation of an automatic sprinkler system in accordance with Section ~~903.3.1.1~~ 903.3.1 of the *International Building Code*. "Required sprinklers" shall be based on the requirements of ~~this code.~~ the *International Building Code*. Under the categories and occupancies in Table 1301.6.17, determine the appropriate value and enter that value into Table 1301.7 under Safety Parameter 1301.6.17, Automatic Sprinklers, for fire safety, means of egress divided by 2, and general safety. High-rise

buildings defined in Chapter 2 of the *International Building Code* that undergo a change of occupancy to Group R shall be equipped throughout with an automatic sprinkler system in accordance with Section 403 of the *International Building Code* and Chapter 9 of the *International Building Code*. Facilities in Group I-2 occupancies meeting Category a, b, c or f shall be considered to fail the evaluation.

~~1301.6.17.1~~ 1305.2.17.1 **Categories**. The categories for automatic sprinkler system protection are:

1. Category a~~—Sprinklers are~~ An approved automatic sprinkler system is required throughout; an approved automatic sprinkler ~~protection~~ system is not ~~provided or the~~ provided.
2. Category b—An approved automatic sprinkler system ~~design~~ is ~~not adequate for the hazard protected in accordance with Section 903 of the International Building Code. Category b—Sprinklers are required in a portion of the building; sprinkler protection is not provided or~~ required in a ~~fire area or compartment~~ portion of a building; an approved automatic sprinkler system sprinkler is not provided; the sprinkler system design is not adequate for the hazard protected in accordance with ~~Section 903~~ Chapter 9 of the International Building Code.
3. Category ~~c—Sprinklers are~~ c—An approved automatic sprinkler system is not required; none are provided.
4. Category ~~d—Sprinklers are~~ d—An approved automatic sprinkler system is required in a ~~fire area or compartment~~ portion of ~~the~~ a building; ~~sprinklers are~~ an approved automatic sprinkler system is provided in ~~such portion; the system is one that complied with the code at the time of installation and is maintained and supervised in accordance with Section 903~~ a ~~fire area or compartment~~ portion of the building in accordance with Chapter 9 of the International Building Code.
5. Category ~~e—Sprinklers are~~ e—An approved automatic sprinkler system is required throughout; ~~sprinklers are~~ an approved automatic sprinkler system is provided throughout in accordance with Chapter 9 of the International Building Code.
6. Category ~~f—Sprinklers are~~ f—An approved automatic sprinkler system is not required throughout; ~~sprinklers are~~ an approved automatic sprinkler system is provided throughout in accordance with Chapter 9 of the International Building Code.

TABLE ~~1301.6.20~~ 1305.2.20 SMOKE COMPARTMENTATION VALUES

OCCUPANCY	CATEGORIES[a]		
	a	b	c
A, B, E, F, M, R and S	0	0	0
I-2	0	~~NP~~-10	NP

For SI: 1 square foot = 0.093 m^2. NP = Not Permitted.

a. For areas between categories, the smoke compartmentation value shall be obtained by linear interpolation.

~~1301.6.20.1~~ 1305.2.20.1 **Categories**. Categories for smoke compartment size are:

1. Category a-Smoke compartment complies with IBC Section 407.5. ~~size is equal to or less than 22,500 square feet (2092 m2).~~
2. Category b-Smoke compartment are provided but do not comply with IBC Section 407.5. ~~size is greater than 22,500 square feet (2092 m2).~~
3. Category c-Smoke compartments are not provided.

The term "patient" is replaced with "care recipient" for the following sections as follows: ~~patient~~ care recipient. The body of each section or table is omitted if it is unchanged, and shown if there are any further changes.

~~1301.6.21~~ 1305.2.21 ~~Patient~~ Care recipient **ability, concentration, smoke compartment location and ratio to attendant**. In I-2 occupancies, the ability of ~~patients~~ care recipients, their concentration and ratio to attendants shall be evaluated and applied in accordance with this section. Evaluate each smoke compartment using the categories in Sections

1301.6.21.1, 1301.6.21.2 and 1301.6.21.3 and enter the value in Table 1301.7. To determine the safety factor, multiply the three values together; if the ~~sum~~ product is less than 6 ~~9 or greater~~, compliance has failed.

~~1301.6.21.1~~ 1305.2.21.1 ~~Patient~~ Care recipient ability for self-preservation.

TABLE ~~1301.6.21.1~~ 1305.2.21.1 ~~PATIENT~~ CARE RECIPIENT ABILITY VALUES

OCCUPANCY	CATEGORIES		
	a	b	c
I-2	~~1~~ 3	2	~~3~~ 1

~~1301.6.21.1.1~~ 1305.2.21.1.1 Categories.

~~1301.6.21.2~~ 1305.2.21.2 ~~Patient~~ Care recipient concentration.

TABLE ~~1301.6.21.2~~ 1305.2.21.2 ~~PATIENT~~ CARE RECIPIENT CONCENTRATION VALUES

~~1301.6.21.2.1~~ 1305.2.21.2.1 Categories:

~~1301.6.21.3~~ 1305.2.21.3 ~~Attendant-to-patient~~ Attendant-to-care recipient ratio.

TABLE ~~1301.6.21.3~~ 1305.2.21.3 ~~ATTENDANT-TO-PATIENT~~ ATTENDANT-TO-CARE RECIPIENT RATIO VALUES

OCCUPANCY	CATEGORIES		
	a	b	c
I-2	~~1~~ 3	2	~~3~~ 1

~~1301.6.21.3.1~~ 1305.2.21.3.1 Categories. The categories for attendant-to-care recipient concentrations are:

5. Category a - attendant-to-care recipient concentration is 1:5 or no care recipients.
6. Category b - attendant-to-care recipient concentration is 1:6 to 1:10.
7. Category c - attendant-to-care recipient concentration is greater than 1:10 ~~or no care recipients~~.

SECTION 1306 BUILDING SCORE

Note: Provisions not shown were renumbered to match created sections, but otherwise are unchanged.

TABLE ~~1301.7~~ 1306.1 SUMMARY SHEET—BUILDING CODE

SECTION 1307 EVALUATION OF BUILDING SAFETY

Note: Provisions not shown were renumbered to match created sections, but otherwise are unchanged.

~~1301.9.1~~ 1307.1.1 Mixed occupancies. For mixed occupancies, the following provisions shall apply:

1. Where the separation between mixed occupancies does not qualify for any category indicated in Section 1301.6.16, the mandatory safety scores for the occupancy with the lowest general safety score in Table 1301.8 shall be utilized (see Section 1301.6).
2. Where the separation between mixed occupancies qualifies for any category indicated in Section 1301.6.16, the mandatory safety scores for each occupancy shall be placed against the evaluation scores for the appropriate occupancy. An evaluation is not required for areas of the building with separated occupancies in accordance with Table 508.4 of the International Building Code in which there are no alterations or change of occupancy.

Chapter 14 Relocated or Moved Buildings

1401.1.1 Bleachers, folding and telescopic seating, and grandstands. Relocated or moved bleachers, folding and telescopic seating, and grandstands shall comply with ICC 300.

[BS] 1402.7 Required inspection and repairs. The ~~*building*~~ *code official* shall be authorized to inspect, or to require approved professionals to inspect at the expense of the owner, the various structural parts of a relocated building to verify that structural components and connections have not sustained structural damage. Any repairs required by the ~~*building*~~ *code official* as a result of such inspection shall be made prior to the final approval.

Chapter 15 Construction Safeguards

[BG] 1501.1 Scope. The provisions of this chapter shall govern safety during construction and the protection of adjacent public and private properties. Fire safety during construction shall also comply with the applicable provisions of Chapter 33 of the International Fire Code

[BG] 1501.2 Storage and placement of construction equipment and materials. Construction equipment and materials shall be stored and placed so as not to endanger the public, the workers or ~~adjoining~~ adjacent property for the duration of the construction project.

[BS] ~~705.2~~ 1501.3 ~~Structural and construction~~ Roof loads. Structural roof components shall be capable of supporting the roof-covering system and the material and equipment loads that will be encountered during installation of the system.

[BG] ~~1501.3~~ 1501.4 ~~Alterations, repairs and additions~~ Maintenance of exit s, existing structural elements, fire protection devices and sanitary safeguards. Required exits, existing structural elements, fire protection devices and sanitary safeguards shall be maintained at all times during *alterations*, *repairs* or *additions* to any building or structure.

Exceptions:

1. Where such required elements or devices are being altered or repaired, adequate substitute provisions shall be made.
2. Maintenance of such elements and devices is not required where the *existing building* is not occupied.

[BG] ~~1501.4~~ 1501.5 Removal of waste materials ~~Manner of removal~~. Waste materials shall be removed in a manner that prevents injury or damage to persons, ~~adjoining~~ adjacent properties and public rights-of-way.

~~**[BG] 1501.5 Fire safety during construction.** Fire safety during construction shall comply with the applicable requirements of the *International Building Code* and the applicable provisions of Chapter 33 of the International Fire Code.~~

SECTION 1502 OWNER'S RESPONSIBILITY FOR FIRE PROTECTION.

1502.1 Site Safety Plan. The owner or owner's authorized agent shall be responsible for the development, implementation and maintenance of an approved, written site safety plan establishing a fire prevention program at the project site applicable throughout all phases of the construction, repair, alteration or demolition work. The plan shall be submitted and approved before a building permit is issued, Any changes to the plan shall address the requirements of this chapter and other applicable portions of the *International Fire Code*, the duties of staff, and staff training requirements. The plan shall be submitted for approval in accordance with the *International Fire Code*.

1502.1.1 Components of site safety plans. Site safety plans shall include the following as applicable:

1. Name and contact information of site safety director.
2. Documentation of the training of the site safety director and fire watch personnel.

3. Procedures for reporting emergencies.
4. Fire department vehicle access routes.
5. Location of fire protection equipment, including portable fire extinguishers, standpipes, fire department connections and fire hydrants.
6. Smoking and cooking policies, designated areas to be used where approved, and signage locations in accordance with the International Fire Code.
7. Location and safety considerations for temporary heating equipment.
8. Hot work permit plan.
9. Plans for control of combustible waste material.
10. Locations and methods for storage and use of flammable and combustible liquids and other hazardous materials.
11. Provisions for site security and, where required, for a fire watch.
12. Changes that affect this plan.
13. Other site-specific information required by the International Fire Code.

1502.2 Site safety director. The owner shall designate a person to be the site safety director. The site safety director shall be responsible for ensuring compliance with the site safety plan. The site safety director shall have the authority to enforce the provisions of this chapter and other provisions as necessary to secure the intent of this chapter. Where guard service is provided in accordance with the International Fire Code, the site safety director shall be responsible for the guard service.

1502.3 Daily fire safety inspection. The site safety director shall be responsible for completion of a daily fire safety inspection at the project site. Each day, all building and outdoor areas shall be inspected to ensure compliance with the inspection list in this section. The results of each inspection shall be documented and maintained on-site until a certificate of occupancy has been issued. Documentation shall be immediately available on-site inspection and review.

1. Any contractors entering the site to perform hot work each day have been instructed in the hot work safety requirements in the International Fire Code, and hot work is performed only in areas approved by the site safety director.
2. Temporary heating equipment is maintained away from combustible materials in accordance with the equipment manufacturer's instructions.
3. Combustible debris, rubbish and waste material is removed from the building in areas where work is not being performed.
4. Temporary wiring does not have exposed conductors.
5. Flammable liquids and other hazardous materials are stored in locations that have been approved by the site safety director when not involved in work that is being performed.
6. Fire apparatus access roads required by the International Fire Code are maintained clear of obstructions that reduce the width of the usable roadway to less than 20 feet (6096 mm).
7. Fire hydrants are clearly visible from access roads and are not obstructed.
8. The location of fire department connections to standpipe and in-service sprinkler systems are clearly identifiable from the access road and such connections are not obstructed.
9. Standpipe systems are in service and continuous to the highest work floor, as specified in Section 1506.
10. Portable fire extinguishers are available in locations required by Sections 1504 and for roofing operations in accordance with the International Fire Code.
11. Where a fire watch is required, fire watch records complying with the International Fire Code are up-to-date.

1502.3.1 Violations. Failure to properly conduct, document and maintain documentation required by this section shall constitute an unlawful act in accordance with Section 114.1 and shall result in the issuance of a notice of violation to the site safety director in accordance with Section 114.2. Upon the third offense, the Building Official is authorized to issue a stop work order in accordance with Section 115, and work shall not resume until satisfactory assurances of future compliance have been presented to and approved by the Building Official.

SECTION 1503 SANITARY.

[BG] ~~1501.7~~ 1503.1 **Facilities required.** Sanitary facilities shall be provided during construction or demolition activities in accordance with the *International Plumbing Code* .

SECTION 1504 PROTECTION OF PEDESTRIANS.

(Renumber 1501.6 through 1501.6.7 as 1504 subsections)

SECTION ~~1502~~1505 PROTECTION OF ~~ADJOINING~~ ADJACENT PROPERTY

[BS] ~~1502~~1505**.1 Protection required**. ~~Adjoining~~ Adjacent public and private property shall be protected from damage during construction and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights and roofs. Provisions shall be made to control water runoff and erosion during construction or demolition activities. The person making or causing an excavation to be made shall provide written notice to the owners of ~~adjoining~~ adjacent ~~buildings~~ property advising them that the excavation is to be made and that the ~~adjoining~~ adjacent ~~buildings~~ property should be protected. Said notification shall be delivered not less than 10 days prior to the scheduled starting date of the excavation.

[BS] 1505.2 Excavation retention systems. Where a retention system is used to provide support of an excavation for protection of adjacent property or structures, the system shall conform to the requirements in Section 1502.2.1 through 1502.2.3.

[BS] 1505.2.1 Excavation retention system design. Excavation retention systems shall be designed by a registered design professional to provide vertical and lateral support.

[BS] 1505.2.2 Excavation retention system monitoring. The retention system design shall include requirements for monitoring of the system and adjacent property or structures for horizontal and vertical movement.

[BS] 1505.2.3 Retention system removal. Elements of the system shall only be removed or decommissioned where adequate replacement support is provided by backfill or by the new structure. Removal or decommissioning shall be performed in such a manner that protects the adjacent property.

SECTION ~~1509~~1512 WATER SUPPLY FOR FIRE PROTECTION

[F] ~~1509~~1512**.1 When required.** An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible building materials arrives on the site, on commencement of vertical combustible construction, and upon installation of a standpipe system in buildings under construction, in accordance with Sections 3312.2 through 3312.5.

> **Exception:** The fire code official is authorized to reduce the fire-flow requirements for isolated buildings or a group of buildings in rural areas or small communities where the development of full fire-flow requirements is impractical.

1512.2 Combustible building materials. When combustible building materials of the building under construction are delivered to a site, a minimum fire flow of 1,000 gpm shall be provided. The fire hydrant used to provide this fire flow supply shall be within 500 feet of the combustible building materials, as measured along an approved fire apparatus access lane. Where the site configuration is such that one fire hydrant cannot be located within 500 feet of all combustible building materials, additional fire hydrants shall be required to provide coverage in accordance with this section.

1512.3 Vertical construction of Types III, IV, and V construction. Prior to commencement of vertical construction of Type III, IV, or V buildings that utilize any combustible building materials, the fire flow required by Sections 3312.3.1 through 3312.3.3 shall be provided, accompanied by fire hydrants in sufficient quantity to deliver the required fire flow and proper coverage.

1512.3.1 Fire separation up to 30 feet. Where a building of Type III, IV, or V construction has a fire separation distance of less than 30 feet from property lot lines, and an adjacent property has an existing structure or otherwise can be

constructed upon, the water supply shall provide either a minimum of 500 gpm, or the entire fire flow required for the building when constructed, whichever is greater.

1512.3.2 Fire separation of 30 feet up to 60 feet. Where a building of Type III, IV, or V construction has a fire separation distance of 30 feet up to 60 feet from property lot lines, and an adjacent property has an existing structure or otherwise can be constructed upon, the water supply shall provide a minimum of 1,000 gpm, or 50% of the fire flow required for the building when constructed, whichever is greater.

1512.3.3 Fire separation of 60 feet or greater. Where a building of Type III, IV, or V construction has a fire separation of 60 feet or greater from a property lot line, a water supply of 500 gpm shall be provided.

1512.4 Vertical Construction, Type I and II construction. If combustible building materials are delivered to the construction site, water supply in accordance with Section 3312.2 shall be provided. Additional water supply for fire flow is not required prior to commencing vertical construction of Type I and II buildings.

1512.5 Standpipe supply. Regardless of the presence of combustible construction materials, the construction type or the fire separation distance, where a standpipe is required in accordance with Section 3313, a water supply providing a minimum flow of 500 gpm shall be provided. The fire hydrant used for this water supply shall be located within 100 feet of the Fire Department Connection supplying the standpipe.

Chapter 16 Referenced Standards

ACI

ACI 562-21. Assessment, Repair, and Rehabilitation of Existing Concrete Structures - Code Requirements

AISC

341-16: Seismic Provisions for Structural Steel Buildings

ASTM

C67-14: Test Methods of Sampling and Testing Brick and Structural Clay Tile

NFPA

~~NFPA 13R – 19 Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height~~

Appendices

[BS] ~~**A106.2.2.2**~~ **A106.2.3.1 Concrete masonry units and structural clay load-bearing tile**. Grouted or ungrouted hollow concrete masonry units shall be tested in accordance with ASTM C140. Grouted or ungrouted structural clay load-bearing tile shall be tested in accordance with ASTM ~~C34~~ C67.

[BS] A106.2.3.1 In-place mortar joint shear tests. Mortar joint shear test values, v_{to}, shall be obtained by one of the following:

1. ASTM C1531.
2. For masonry walls that have high shear strength mortar, or where in-place testing is not practical because of crushing or other failure mode of the masonry, alternative procedures for testing shall be used in accordance with Section A106.2.3.2.

[BS] A106.2.3.2 Alternative procedures for testing masonry. The ~~tensile splitting~~ splitting tensile strength of existing masonry, f_{sp}, or the prism strength of existing masonry, f'_m, is permitted to be determined in accordance with ASTM C496 and calculated by the following equation:

$$f_{sp} = \frac{0.494P}{a_n}$$ **(Equation A1-1)**

[BS] A106.2.3.6 Minimum quality of masonry. Where the alternative procedures of Section A106.2.3.2 are used to determine masonry quality, the following minimums apply:

1. The minimum average value of ~~tensile splitting~~ splitting tensile strength, f_{sp}, as calculated by Equation A1-1 shall be 50 pounds per square inch (344.7 kPa).
2. Individual unreinforced masonry walls with average ~~tensile splitting~~ splitting tensile strength of less than 50 pounds per square inch (344.7 kPa) shall be pointed and retested.
3. The lower-bound mortar strength f_{spL} is defined as the mean minus one standard deviation P D+L of the ~~tensile splitting~~ splitting tensile test values f_{sp}.

[NY] A202.1 Scope. The provisions of this chapter shall apply to wall anchorage systems that resist out-of-plane forces and to collectors in existing reinforced concrete or reinforced masonry buildings with flexible diaphragms. Wall anchorage systems that were designed and constructed in accordance with the 1997 Uniform Building Code~~, 1999 BOCA National Building Code, 1999 Standard Building Code~~ or the 2000 ~~and~~ or subsequent editions of the International Building Code and the Building Code of New York State shall be deemed to comply with these provisions.

[BS] A107.2 Masonry shear tests. In-place masonry shear tests shall comply with Section A106.2.3.1. Testing of masonry for determination of ~~tensile~~ splitting tensile strength shall comply with Section A106.2.3.3.

[BS] A203.1 Definitions. For the purpose of this chapter, the applicable definitions listed in ~~Chapters 16, 19, 21, 22 and 23 of~~ the International Building Code and the following shall apply:

CONTINUITY CONNECTOR. A component, typically a plate, rod, strap, or hold-downs, that ensures load path continuity along the full length of a crosstie or strut.

CROSSTIE. A member or group of members continuous across the main diaphragm that connects opposite wall lines and transfers out-of-plane wall anchorage forces into the diaphragm.

[BS] FLEXIBLE DIAPHRAGM~~S~~. ~~Roofs and floors including, but not limited to, those~~ A roof or floor sheathed with plywood, wood decking (1-by or 2-by) or metal ~~decks~~ deck without a concrete topping ~~slabs~~ slab.

~~**[BS] STORY STRENGTH.** The total strength of all seismic-resisting elements sharing the same story shear in the direction under consideration.~~

STRUT. A member or group of members continuous across a subdiaphragm that transfers out-of-plane wall anchorage forces into the subdiaphragm.

WALL ANCHORAGE SYSTEM. The components comprising a complete load path for out-of-plane wall forces from the wall to the main diaphragm, typically including anchors embedded in or fastened to the wall; rods, straps, plates, hold-downs or other hardware; subdiaphragms and their chords; crossties; struts; and continuity connectors.

WALL SEGMENT. Any length of concrete or reinforced masonry wall not interrupted or intersected by a pilaster or vertical construction joint or any length of reinforced masonry wall with continuous horizontal reinforcing and not interrupted or intersected by a pilaster or vertical control joint.

[BS] A205.1 General. The seismic-resisting elements specified in this chapter shall comply with applicable provisions of Section 1613 of the International Building Code and Chapter 12 of ASCE 7, except as modified herein.

~~**[BS] A205.2 Alterations and repairs.** Alterations and repairs required to meet the provisions of this chapter shall comply with applicable structural requirements of the building code unless specifically modified in this chapter.~~

[BS] A205.3 Requirements for plans. The plans shall accurately reflect the results of the engineering investigation and design and shall show all pertinent dimensions and sizes for plan review and construction. The following shall be provided:

1. Floor plans and roof plans shall show existing framing construction, diaphragm construction, proposed wall anchors, ~~cross-ties~~ crossties and collectors. Existing nailing, anchors, ~~cross-ties~~ crossties and collectors shall be shown on the plans if they are considered part of the lateral force-resisting systems.

~~2. At elevations where there are alterations or damage, details shall show roof and floor heights, dimensions of openings, location and extent of existing damage and proposed repair.~~

3. Typical wall panel details and sections with panel thickness, height, pilasters and location of anchors shall be provided.
4. Details shall include existing and new anchors and the method of developing anchor forces into the diaphragm framing, existing and new ~~cross-ties~~ crossties, and existing and new or improved support of roof and floor girders at pilasters or walls.
5. The basis for design and the building code used for the design shall be stated on the plans.

[BS] A205.4 Structural ~~observation, testing and inspection~~ observation. Structural observation~~,~~ in accordance with Section 1709 1704.6 of the International Building Code~~, shall be required for all structures in which seismic retrofit is being performed in accordance with this chapter.~~ is required, regardless of seismic design category, height, or other conditions. Structural observation shall include visual observation of work for conformance to the approved construction documents and confirmation of existing conditions assumed during design.

~~Structural testing and inspection for new construction materials shall be in accordance with the building code, except as modified by this chapter.~~

A205.4.1 Additional special inspection. In addition to the requirements of International Building Code Section 1705.12, special inspection shall be required for:

1. Installation of anchors into existing concrete or masonry walls to form part of a wall anchorage system.
2. Fastening of new or existing steel deck forming part of a wall anchorage system.
3. Installation of continuity connectors along the length of crossties, to ensure compliance with Section A206.2. This inspection may be periodic special inspection.

A205.4.2 Testing to establish adequacy of existing wall anchors. Testing shall show that the existing anchors can sustain a test load of 1.5 times the design tension load without noticeable deformation or damage to the anchor, to the masonry or concrete element, or to any part of the existing load path between the anchor and new retrofit components. Three anchors of each existing detail type shall be tested, and all three shall satisfy the requirement. Prior to testing, the design professional shall submit a test plan for code official approval identifying the expected locations of the existing anchors in question, the locations of the proposed tests, and the test procedure and criteria. After testing, the design professional shall submit a report of the satisfactory testing showing the test results, the design strengths derived from them, and the size and spacing as confirmed by investigation.

A205.5 Testing and Inspection. Structural testing and inspection for new construction materials, submittals, reports, and certificates of compliance, shall be in accordance with Sections 1704 and 1705 of the International Building Code. Work done to comply with this chapter shall not be eligible for Exception 1 to International Building Code Section 1704.2, or Exception 2 to International Building Code Section 1705.12.

[BS] A206.1 Reinforced concrete and reinforced masonry wall anchorage. Concrete and masonry walls shall be anchored to all floors and roofs that provide lateral support for the ~~wall.~~ wall in accordance with ASCE 7 Section 12.11.2. The anchorage shall provide a ~~positive~~ direct connection ~~between the wall and floor or roof construction~~ capable of resisting 75 percent of the ~~horizontal~~ forces specified in ~~Section 1613 of the International Building Code.~~ ASCE 7 Section 12.11.2.1.

Exceptions:

1. Existing walls need not be evaluated or retrofitted for bending between anchors.
2. Work required by this chapter need not consider shrinkage, thermal changes, or differential settlement.

A206.1.1 Seismicity parameters, Site Class, and geologic hazards. For any site designated as Site Class E, the value of Fa shall be taken as 1.3. Site-specific procedures are not required for compliance with this chapter. Mitigation of existing geologic site hazards such as liquefiable soil, fault rupture, or landslide is not required for compliance with this chapter.

[BS] A206.2 ~~Special~~ Additional requirements for wall anchorage systems. The wall anchorage system shall comply with the requirements of this section and of ASCE 7 Section 12.11.2.2.

~~The steel elements of the wall anchorage system shall be designed in accordance with the International Building Code without the use of the 1.33 short duration allowable stress increase where using allowable stress design.~~

The maximum spacing between wall anchors shall be 8 feet, and each wall segment shall have at least two wall anchors.

The wall anchorage system, excluding subdiaphragms and existing roof or floor framing members, shall be designed and installed to limit the relative movement between the wall and the diaphragm to no more than 1/8" before engagement of the anchors. Wall anchors shall be provided to resist out-of-plane forces, independent of existing shear anchors.

Where new members are added as crossties, they shall be spaced no more than 24 feet (7315 mm) apart. Where existing girders are used as crossties, their actual spacing shall be deemed adequate even where the spacing exceeds 24 feet (7315 mm), as long as the girders are provided with continuity connectors as required.

~~Wall anchors shall be provided to resist out-of-plane forces, independent of existing shear anchors.~~

~~Expansion anchors are only allowed with special inspection and approved testing for seismic loading.~~

~~Attaching~~ Wall anchorage shall not be provided by fastening the edge of plywood sheathing to steel ~~ledgers is not considered compliant with the positive anchoring requirements of this chapter. Attaching the~~ ledgers. Wall anchorage shall not be provided by fastening the edge of steel ~~decks~~ decking to steel ledgers ~~is not considered as providing the positive anchorage of this chapter unless testing or analysis is performed to establish shear values for the attachment perpendicular to the edge of the deck. Where steel decking is used as a wall anchor system, the~~ unless analysis demonstrates acceptable capacity. The existing connections shall be subject to field verification and the new connections shall be subject to special inspection.

New wall anchors shall be provided to resist the full wall anchorage design force independent of existing shear or tension anchors.

> **Exception:** Existing cast-in-place ~~shear~~ anchors ~~are allowed to~~ shall be ~~used~~ permitted as part of the wall ~~anchors~~ anchorage system if the tie element can be readily attached to the anchors, and if ~~the engineer or architect can establish tension values for~~ the ~~existing~~ anchors ~~through the use of approved as-built plans or testing and through analysis showing that the bolts~~ are capable of resisting the total vertical and lateral shear load (including dead load) while being acted on by the maximum tension force caused by an earthquake. ~~Criteria for analysis and testing~~ Acceptable tension values for the existing anchors shall be ~~determined by the building official.~~ established by testing in accordance with Section A205.4.2.

[BS] A206.3 Development of ~~anchor loads~~ anchorage forces into the diaphragm. Development of ~~anchor loads~~ the required anchorage forces into roof and floor diaphragms shall comply with the requirements of this section and of ASCE 7 Section 12.11.2.2. ~~Section 1613 of the International Building Code using horizontal forces that are 75 percent of those used for new construction.~~

~~In wood diaphragms, anchorage shall not be accomplished by use of toenails or nails subject to withdrawal. Wood ledgers, top plates or framing shall not be used in cross-grain bending or cross-grain tension. The continuous ties required in Section 1613 of the International Building Code shall be in addition to the diaphragm sheathing.~~

Lengths of development of anchor loads in wood diaphragms shall be based on existing field nailing of the sheathing unless existing edge nailing is positively identified on the original construction plans or at the site.

> ~~**Exception:** If continuously tied girders are present, the maximum spacing of the continuity ties is the greater of the girder spacing or 24 feet (7315 mm).~~

[BS] A206.4 Anchorage at pilasters. ~~Anchorage at pilasters shall be designed for the tributary wall anchoring load per Section A206.1, considering the wall as a two-way slab. The edges of the two-way slab shall be considered to be fixed where there is continuity at pilasters and shall be considered to be pinned at roof and floor.~~ Where pilasters are present, the wall anchorage system shall comply with the requirements of this section and of ASCE 7 Section 12.11.2.2.7. The pilasters or the walls immediately adjacent to the pilasters shall be anchored directly to the roof framing such that the existing vertical anchor bolts at the top of the pilasters are bypassed without permitting tension or shear failure at the top of the pilasters.

> **Exception:** If existing vertical anchor bolts at the top of the pilasters are used for the anchorage, additional exterior confinement shall be provided as required to resist the total anchorage force.

~~**[BS] A206.5 Symmetry**. Symmetry of wall anchorage and continuity connectors about the minor axis of the framing member is required.~~

> ~~**Exception:** Eccentricity shall be allowed where it can be shown that all components of forces are positively resisted. The resistance must be supported by calculations or tests.~~

[BS] A206.7 Collectors. ~~If collectors are not present~~ Collectors designed in accordance with this section shall be provided at reentrant corners ~~or~~ and at interior shear ~~walls, they shall be provided.~~ walls. Existing or new collectors shall ~~be designed for~~ have the capacity ~~required~~ to develop into the diaphragm a force equal to the lesser of the rocking or shear capacity of the reentrant wall or the tributary shear based on 75 percent of the ~~horizontal~~ diaphragm design forces specified in ~~Chapter 16 of the International Building Code.~~ ASCE 7 Section 12.10. The capacity of the collector need not exceed the capacity of the diaphragm to deliver loads to the collector. A connection shall be provided from the collector to the reentrant wall to transfer the full collector ~~force (load).~~ internal force. If a truss or beam other than a rafter or purlin is supported by the reentrant wall or by a column integral with the reentrant wall, then an independent secondary column is required to support the roof or floor members whenever rocking or shear capacity of the reentrant wall is less than the tributary shear.

[BS] A401.2 Scope. The provisions of this chapter ~~shall~~ apply to ~~all~~ existing ~~Occupancy Group R-1 and R-2~~ buildings of wood construction ~~or portions thereof~~ that contain residential occupancy and are assigned to Risk Category II, and where the structure has a soft, weak, or open-front wall line, and there exists one or more stories above.

[BS] A403.2 Scope of analysis. This chapter requires the alteration, repair, replacement or addition of structural elements and their connections to meet the strength and stiffness requirements herein. The lateral load-path analysis shall include the resisting elements and connections from the wood diaphragm immediately above any soft, weak or open-front wall lines to the foundation soil interface or to the uppermost story of a podium structure comprised of steel, masonry, or concrete structural systems that supports the upper, wood-framed structure. Stories above the uppermost story with a soft, weak, or open-front wall line shall be considered in the analysis but need not be modified. The lateral load-path analysis for added structural elements shall include evaluation of the allowable soil-bearing and lateral pressures in accordance with the building code. Where any portion of a building within the scope of this chapter is constructed on or into a slope steeper than one unit vertical in three units horizontal (33-percent slope), the lateral force-resisting system at and below the base level diaphragm shall be analyzed for the effects of concentrated lateral forces at the base caused by this hillside condition.

> ~~**Exception:** Where an open-front, weak or soft wall line exists because of parking at the ground floor of a two-story building and the parking area is less than 20 percent of the ground floor area, then only the wall lines in the open, weak or soft directions of the enclosed parking area need comply with the provisions of this chapter.~~

[BS] A403.3 Design base shear and design parameters. The design base shear in a given direction shall be permitted to be 75 percent of the value required for similar new construction in accordance with the building code. The value of R used in the design of the strengthening of any story shall not exceed the lowest value of R used in the same direction at any story above. The system overstrength factor, ~~A_0~~ Ω_0, and the deflection amplification factor, C_d, shall be not less than the largest respective value corresponding to the R factor being used in the direction under consideration.

Exceptions:

1. For structures assigned to Seismic Design Category B, values of R, ~~A_0~~ Ω_0, and C_d shall be permitted to be based on the seismic force-resisting system being used to achieve the required strengthening.
2. For structures assigned to Seismic Design Category C or D, values of R, ~~A_0~~ Ω_0, and C_d shall be permitted to be based on the seismic force-resisting system being used to achieve the required strengthening, provided that when the strengthening is complete, the strengthened structure will not have an extreme weak story irregularity defined as Type 5b in ASCE 7, Table 12.3-2.
3. For structures assigned to Seismic Design Category E, values of R, ~~A_0~~ Ω_0, and C_d shall be permitted to be based on the seismic force-resisting system being used to achieve the required strengthening, provided that when the strengthening is complete, the strengthened structure will not have an extreme soft story, a weak story, or an extreme weak story irregularity defined, respectively, as Types 1b, 5a and 5b in ASCE 7, Table 12.3-2.
4. For retrofit systems involving different seismic force-resisting systems in the same direction within the same story, resisting elements are permitted to be designed using the least value of R for the different structural systems found in each independent line of resistance if the following conditions are met: (1) The building is assigned to Risk Category I or II (2) The building height is no more than four stories above grade plane, and (3) the seismic force-resisting systems of the retrofitted building comprise only wood structural panel shear walls, steel moment-resisting frames, steel cantilever columns, and steel braced frames. Values for C_d and Ω_0 shall be consistent with the R value used.

5. With reference to ASCE 7 Table 12.2-1, ordinary, intermediate and special steel systems, and all light-frame systems shall be permitted without limitation where those systems are used only for retrofit to comply with the requirements of this chapter.

A403.3.1 Expected story strength. Despite any other requirement of Section A403.3 or A403.4, the total expected strength of retrofit elements added to any story need not exceed 1.7 times the expected strength of the story immediately above in a two-story building, or 1.3 times the expected strength of the story immediately above in a three-story or taller building, as long as the retrofit elements are located symmetrically about the center of mass of the story above or so as to minimize torsion in the retrofitted story. Calculation of expected story strength and identification of irregularities in Section A403.3 shall be based on the expected strength of all wall lines, even if sheathed with nonconforming materials. The strength of a wall line above the retrofitted story shall be permitted to be reduced to account for inadequate load path or overturning resistance.

A403.3.2 Seismicity parameters, Site Class, and geologic hazards. For any site designated as Site Class E, the value of F shall be taken as 1.3. Site-specific procedures are not required for compliance with this chapter. Mitigation of existing geologic site hazards such as liquefiable soil, fault rupture, or landslide is not required for compliance with this chapter.

[BS] A403.7 Collector elements. Collector elements shall be provided ~~that can~~ to transfer the seismic forces ~~originating in other portions of the building to~~ between the elements within the scope of Section A403.2 ~~that provide resistance to those forces~~.

~~**[BS] A403.8 Horizontal diaphragms.** The strength of an existing horizontal diaphragm sheathed with wood structural panels or diagonal sheathing need not be investigated unless the diaphragm is required to transfer lateral forces from vertical elements of the seismic force-resisting system above the diaphragm to elements below the diaphragm because of an offset in placement of the elements.~~

~~Rotational effects shall be accounted for where asymmetric wall stiffness increases shear demands.~~

[BS] A403.8 Floor diaphragms. Floor diaphragms within the scope of Section A403.2 shall be shown to have adequate strength at the following locations:

1. For straight lumber sheathed diaphragms without integral hardwood flooring throughout the diaphragm: The code official is authorized to waive the requirement where it is shown that the condition occurs in areas small enough not to affect overall building performance.
2. For all other diaphragms adequate strength shall be shown to be provided at locations where forces are transferred between the diaphragm and each new or strengthened vertical element of the seismic force-resisting system. Collector elements shall be provided where needed to distribute the transferred force over a greater length of diaphragm.

Exception: Where the existing vertical elements of the seismic force-resisting system are shown to comply with this chapter, diaphragms need not be evaluated.

[BS] A403.9 Wood-framed shear walls. Wood-framed shear walls shall have strength and stiffness sufficient to resist the seismic loads and shall conform to the requirements of this section. Where new sheathing is applied to existing studs to create new wood-framed shear walls, the new wall elements shall be considered bearing wall systems for purposes of determining seismic design parameters.

[BS] A403.9.1 Gypsum or cement plaster products. Gypsum or cement plaster products shall not be used to provide ~~lateral resistance in a soft or weak story or in a story with an open-front wall line, whether or not new elements are added to mitigate the soft, weak or open-front condition.~~ the strength required by Section A403.3 or the stiffness required by Section A403.4.

A403.10 Steel retrofit systems. Steel retrofit systems shall have strength and stiffness sufficient to resist the seismic loads and shall conform to the requirements of this section.

A403.10.1 Special moment frames. Steel special moment frames shall comply with all applicable provisions of AISC 341, except that Section E3.4a addressing strong-column/weak-beams of AISC 341, is not required for columns that carry no gravity load.

A403.10.2 Inverted moment frame systems. Cantilevered column systems shall be permitted to be designed as inverted special, intermediate, or ordinary moment frames, with corresponding moment frame seismic design coefficients, where the system satisfies the following conditions:

1. The columns carry no gravity load.
2. The columns are configured in pairs or larger groups connected by a continuous reinforced concrete foundation or grade beam.
3. The foundation or grade beam shall be designed to resist the expected plastic moment at the base of each column, computed as R_yF_yZ in accordance with AISC 341.
4. The flexibility of the foundation or grade beam, considering cracked section properties of the reinforced concrete, shall be included in computing the deformation of the steel frame system.
5. The column height shall be taken as twice the actual height when checking lateral torsional buckling.

[BS] A404.1 Limitation. These prescriptive measures shall apply only to two-story buildings and only where deemed appropriate by the code official. These prescriptive measures rely on rotation of the second floor diaphragm to distribute the seismic load between the side and rear walls ~~of the~~ around a ground floor open area. In the absence of an existing floor diaphragm of wood structural panel or diagonal sheathing at the top of the first story, a new wood structural panel diaphragm of minimum thickness of ¾ inch (19.1 mm) and with 10d common nails at 6 inches (152 mm) on center shall be applied.

SECTION A406 ~~INFORMATION REQUIRED TO BE ON THE PLANS~~ CONSTRUCTION DOCUMENTS

[BS] A406.1 General. The plans shall show all information necessary for plan review and for construction and shall accurately reflect the ~~results of the engineering investigation and~~ design. The plans shall contain a note that states that this retrofit was designed in compliance with the criteria of this chapter.

[BS] A406.2 Existing construction. The plans shall show existing diaphragm and shear wall sheathing and framing materials; fastener type and spacing; diaphragm and shear wall connections; continuity ties; collector elements; and the portion of the existing materials that needs verification during construction. If the cap allowed by Section A403.3.1 is used to limit the scope of retrofit, the foregoing information shall be shown for each retrofitted story and at least one story above the uppermost retrofitted story. If the cap allowed by Section A403.3.1 is not used, the foregoing information need only be shown for each retrofitted story and for the floor at the top of that story.

[**BS] A406.3.2 Framing plan elements**. The framing plan shall include the length, location and material of shear walls; the location and material of frames; references ~~on~~ or details for the column-to-beam connectors, beam-to-wall connections and shear transfers at floor and roof diaphragms; and the required nailing and length for wall top plate splices.

[BS] A406.3.3 Shear wall schedule, notes and details. Shear walls shall have a referenced schedule on the plans that includes the correct shear wall capacity in pounds per foot (N/m); the required fastener type, length, gage and head size; and a complete specification for the sheathing material and its thickness. The schedule shall also show the required location of 3-inch (76 mm) nominal or two 2-inch (51 mm) nominal edge members; the spacing of shear transfer elements such as framing anchors or added sill plate nails; the required hold-down with its bolt, screw or nail sizes; and the dimensions, lumber grade and species of the attached framing member.

Notes shall show required edge distance for fasteners ~~on~~ of structural wood panels and framing members; required flush nailing at the plywood surface; limits of mechanical penetrations; and the sill plate material assumed in the design. The limits of mechanical penetrations shall be detailed showing the maximum notching and drilled hole sizes.

[BS] A407.1 Structural observation~~, testing and inspection~~**.** Structural observation, in accordance with Section ~~1709~~ 1704.6 of the International Building Code~~, shall be required for all structures in which seismic retrofit is being performed in accordance with this chapter.~~ is required, regardless of seismic design category, height, or other conditions. Structural observation shall include visual observation of work for conformance to the approved construction documents and confirmation of existing conditions assumed during design.

~~Structural testing and inspection for new construction materials shall be in accordance with the building code, except as modified by this chapter.~~

A407.2 Contractor responsibility. Contractor responsibility shall be in accordance with Section 1704.4 of the International Building Code.

A407.3 Testing and inspection. Structural testing and inspection for new construction materials, submittals, reports and certificates of compliance shall be in accordance with Sections 1704 and 1705 of the International Building Code. Work

done to comply with this chapter shall not be eligible for Exceptions 1, 2, or 3 of Section 1704.2 of the International Building Code or for the exception to Section 1705.13.2 of the International Building Code.

[NY] SECTION B105 ENHANCED CLASSROOM ACOUSTICS

[NY] B105.1 Alterations. For all levels of alterations in Group E occupancies, where the work area exceeds 50 percent of the building area, enhanced classroom acoustics shall be provided in all classrooms with a volume of 20,000 cubic feet (565 m^3) or less. Enhanced classroom acoustics shall comply with the reverberation time in Section 808 of ICC A117.1.

[NY] B105.2 Additions. For additions in Group E occupancies, enhanced classroom acoustics shall be provided in all classrooms in the addition with a volume of 20,000 cubic feet (565 m^3) or less. Enhanced classroom acoustics shall comply with the reverberation time in Section 808 of ICC A117.1.

[BS] C201.1 Purpose. This chapter provides prescriptive methods for partial structural retrofit of an *existing building* to increase its resistance to wind loads. It is intended for voluntary use where the ~~ultimate design~~ basic wind speed, ~~V_{ult}~~, V , is greater than 130 mph (58 m/s) ~~determined~~ in accordance with Figure 1609.3(1) of the International Building Code, ~~exceeds 130 mph (58 m/s)~~ and for reference by mitigation programs. The provisions of this chapter do not necessarily satisfy requirements for new construction. Unless specifically cited, the provisions of this chapter do not necessarily satisfy requirements for structural improvements triggered by *addition, alteration, repair, change of occupancy*, building relocation or other circumstances.

APPENDIX D RESERVED

APPENDIX E

TEMPORARY EMERGENCY USES

SECTION E101 GENERAL

E101.1 Scope. The provisions of this appendix shall apply to the use, installation, alteration, relocation and location of existing buildings and any service utilities or systems that serve such existing buildings during or based on the response to the emergency.

E101.1.1 Objectives. The objective of this Appendix is to provide flexibility for the code official to permit the temporary uses of existing buildings during an emergency to address unusual circumstances that temporarily overwhelms response capabilities of an entity while maintaining the level of safety intended by the code.

E101.1.2 Temporary use. Where temporary uses during emergencies exceed 180 days, judgement shall be used by the code official to allow for temporary uses and conditions to continue for the duration of the emergency based on the needs of the emergency. The code official is authorized to grant extensions for demonstrated cause.

SECTION E102

DEFINITIONS

EMERGENCY. Any event declared by local, state, or federal entities that temporarily overwhelms response capabilities, and that require the temporary suspension or modification of regulations, codes, or standards to facilitate response to such an event.

TEMPORARY USE. An activity or practice that is established at a designated location for a period of less than 180 days. Uses include, but are not limited to, those functional designations listed within the occupancy group descriptions in Section 302.1 of the International Building Code.

SECTION E103 SUBMITTAL DOCUMENTS

E103.1 General. Submittal documents shall be of sufficient clarity to indicate the location, nature and extent of the work or use proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the code official.

SECTION E104

CONFORMANCE

E104.1 Conformance. Temporary use of existing buildings shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation, and sanitary requirements of this code as necessary to provide a reasonable level of safety, health, and general welfare as determined by the code official.

E104.2 Changes over time. As an emergency evolves, submittal documents shall be submitted to demonstrate that the temporary uses of the existing buildings are in compliance with the requirements of the *International Existing Building Code*.

SECTION E105 PERMITS

E105.1 Emergency permits. In an emergency situation, an existing building undergoes a temporary change of use or occupancy, the *permit* application shall be submitted as soon as practicable to the *code official*.

SECTION E106

GENERAL STANDARDS FOR EMERGENCY USES

E106.1 Scope. The provisions of Sections E106.2 through E106.7 shall apply to all existing structures being repurposed and to all structures relocated to support the response to an emergency.

E106.2 Intent. The intent of this section is to provide a reasonable level of safety in a structure repurposed for emergency use.

E106.3 Change of use or occupancy. Existing buildings used in a way that was not originally intended by the occupancy, class, or use shall be allowed without formally changing the occupancy. The previous occupancy and use shall resume upon the conclusion of the emergency. Where the temporary live load of the floor is more than that required by Section 1607 of the International Building Code for the original use, the area designated for the temporary live load shall be posted with placards for the approved live load.

E106.4 Fire Safety Provisions. Determination of the fire safety requirements by the code official shall be in accordance with Section E106.4.1 through E106.4.5 in order to make determinations of safe conditions rather than strict adherence to the provisions of the International Fire Code.

E106.4.1 Fire safety and evacuation plans. Fire safety and evacuation plans shall be provided in accordance with Section 403 and 404 of the *International Fire Code*. Submittal documents shall be updated where there are any physical changes to the layout of the structure.

E106.4.2 Training and practice drills. Training of staff and practice drills shall comply with Section 405 and 406 of the *International Fire Code*. Structures in place for longer than 30 days shall conduct evacuation drill in accordance with Section 405.3 of the International Fire Code based on the temporary use.

E106.4.3 Fire Protection. An evaluation shall be performed to decide on fire protection needed utilizing NFPA 550.

E106.4.4 Emergency Access. Emergency vehicle access roads shall be approved by the fire code official.

E106.4.5 Fire Watch. A fire watch in accordance with Section 403.11.1 of the *International Fire Code* shall be permitted to be provided in lieu of other fire protection systems.

E106.5 Means of Egress. Means of egress shall comply with Section 1011.5 in addition to Sections E106.5.1 through E106.5.3.

> **Exception:** In Group I-2 occupancies, in areas where corridors are used for movement of care recipients in beds, the clear width of ramps and corridors shall be not less than 48 inches (1219 mm).

E106.5.1 Exit Discharge. Exit discharge shall provide access to a public way, or to a safe dispersal area in accordance with Section 1028.5 of the *International Building Code*

E106.5.2 Means of Egress Lighting. The means of egress shall be illuminated when the space is occupied.

> **Exception:** Sleeping areas.

E106.5.3 Exit Signs. Exit signs shall be provided where the means of egress is not readily identifiable. Exit signs shall be permitted to be illuminated by the lighting provided in the structure.

E106.6 Accessibility. A facility that is constructed to be accessible shall be maintained accessible during occupancy.

E106.7 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, the source of energy, fuel, or power, or the water system or sewer system in accordance with Section 111. Water closets and lavatories shall be either permanent plumbing fixtures installed within the structure, or temporary water closets or lavatories, such as chemical toilets or other means approved by the code official.

E106.7.1 Portable heating, cooling, and cooking equipment. Portable heating, cooling, an cooking equipment shall be used in accordance with the *International Fire Code*, their listing, and manufacturer's instructions.

SECTION E107

USE OF SPECIFIC STANDARDS

E107.1 Increased occupant load. Allowing for additional occupants in existing building shall comply with Section E107.1.1 through E107.1.3.

E107.1.1 Authorization. The code official is authorized to allow for an increase in the number of occupants or a change of use in a building or portion of a building during an emergency.

E107.1.2 Maintenance of the means of egress. The existing a means of egress shall be maintained.

E107.1.3 Sleeping areas. Where a space is used for sleeping purposes, the space shall be equipped with smoke alarms in accordance with Sections 907.2.6.2 and 907.2.11 if the International Fire Codeor be provided with a fire watch in accordance with Section 403.11.1 of the *International Fire Code*. Carbon monoxide alarms shall be installed in accordance with Section 915 of the *International Fire Code* where the structure uses any fossil fuel or wood burning appliances.

E107.2 Temporary healthcare facilities. Temporary health care facilities shall comply with Section E107.2.1 and E107.2.2.

E107.2.1 General. Temporary health care facilities shall be erected, maintained and operated to minimize the possibility of a fire emergency requiring the evacuation of occupants.

E107.2.2 Membrane structures under projections. Membrane structures of less than 100 square feet (9.3 m2) shall be permitted tobe placed under projections of a permanent building provided the permanent building is protected with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

E107.3 Use of tiny houses or manufactured homes. Tiny houses or manufactured homes used for temporary housing shall comply with Section E107.3.1 through E107.3.5.

E107.3.1 Fire separation distances. Tiny houses or manufactured homes shall be separated by not less than 5 feet (1524 mm) between structures.

E107.3.2 Fire breaks. Tiny houses and manufactured homes shall not be located in groups of more than 20 units. Fire breaks of at least 20 feet (6096 mm) shall be provided between each group.

E107.3.3 Smoke alarms. Tiny houses and manufactured homes used for sleeping purposes shall be equipped with a smoke alarm complying with Section 907.2.11. of the *International Fire Code*. Smoke alarms are not required to be hard wired.

E107.3.4 Carbon monoxide alarms. Carbon monoxide alarm shall be installed in accordance with Section 915, where the tiny house or manufactured homes uses any fossil fuel or wood burning appliances.

E107.3.5 Structures located in a wildland urban interface zone. Tiny houses and manufactured homes that a relocated in a wildland urban interface area shall be provided with defensible space in accordance with the Section 603 of the International Wildland Urban Interface Code.

SECTION E108 REFERENCED STANDARDS

E108.1 General. See Table E108.1for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, standard title, and the section or sections of this appendix referenced in the standard.

TABLE E108.1 REFERENCED STANDARDS

STANDARD ACRONYM	STANDARD NAME	SECTION REFERENCED HEREIN

NFPA 550-2017	Guide to the Fire Safety Concepts Tree	E106.5.3

[NY] APPENDIX F ~~D~~

DIAPER CHANGING STATIONS

The content of this appendix is unchanged except for renumbering from Appendix D to Appendix F.

[NY] APPENDIX G

503.17 Ambulatory care facilities. Where a work area exceeds 50 percent of the building area and the work area includes an existing ambulatory care facility, the following shall be provided:

1. A smoke compartment in accordance with Section 422.3 of the International Building Code where the alteration results in an ambulatory care facility greater than 10,000 square feet on one story.

2. Separation from adjacent spaces in accordance with Section 422.2 of the International Building Code, where any such facility has the potential for four or more care recipients are to be incapable of self-preservation at any time.