



2016 UNIFORM CODE SUPPLEMENT

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INTRODUCTION

The New York State Uniform Fire Prevention and Building Code (the “Uniform Code”) is formulated by the State Fire Prevention and Building Code Council (the “Code Council”) pursuant to Article 18 of the New York State Executive Law.

The text of the Uniform Code is found in Title 19 of the New York Codes, Rules and Regulations (“19 NYCRR”), Parts 1219 through 1227, and in the publications incorporated by reference in 19 NYCRR Parts 1219 through 1227. The publications incorporated by reference in 19 NYCRR Part 1219 through 1227 include: the 2015 edition of the International Residential Code (the “2015 IRC”), the International Building Code (the “2015 IBC”), the International Plumbing Code (the “2015 IPC”), the International Mechanical Code (the “2015 IMC”), the International Fuel Gas Code (the “2015 IFGC”), the International Fire Code (the “2015 IFC”), the International Property Maintenance Code (the “2015 IPMC”), the International Existing Building Code (the “2015 IEBC”), this publication (the “2016 Supplement”), and other standards referenced in 19 NYCRR Parts 1219 through 1227.

- The Residential Code consists of Chapters 1 through Chapter 44 and Appendices E, H, and J of the 2015 IRC, as deemed to be amended by Chapter 1 and 2 of this publication, and selected referenced standards listed in Chapter 10 of this publication and incorporated by reference into 19 NYCRR Part 1220;
- The Building Code consists of Chapters 1 through Chapter 35 and Appendices E, F, and I of the 2015 IBC, as deemed to be amended by Chapter 1 and 3 of this publication, and selected referenced standards listed in Chapter 10 of this publication and incorporated by reference into 19 NYCRR Part 1221;
- The Plumbing Code consists of Chapters 1 through Chapter 15 and Appendices C of the

2015 IPC, as deemed to be amended by Chapter 1 and 4 of this publication, and selected referenced standards listed in Chapter 10 of this publication and incorporated by reference into 19 NYCRR Part 1222;

- The Mechanical Code consists of Chapters 1 through Chapter 15 of the 2015 IMC, as deemed to be amended by Chapter 1 and 5 of this publication, and selected referenced standards listed in Chapter 10 of this publication and incorporated by reference into 19 NYCRR Part 1223;
- The Fuel Gas Code consists of Chapters 1 through Chapter 8 of the 2015 IFGC, as deemed to be amended by Chapter 1 and 6 of this publication, and selected referenced standards listed in Chapter 10 of this publication and incorporated by reference into 19 NYCRR Part 1224;
- The Fire Code consists of Chapters 1 through Chapter 80 and Appendix D of the 2015 IFC, as deemed to be amended by Chapter 1 and 7 of this publication, and selected referenced standards listed in Chapter 10 of this publication and incorporated by reference into 19 NYCRR Part 1225;
- The Property Maintenance Code consists of Chapters 1 through Chapter 8 of the 2015 IPMC, as deemed to be amended by Chapter 1 and 8 of this publication, and selected referenced standards listed in Chapter 10 of this publication and incorporated by reference into 19 NYCRR Part 1226;
- The Existing Building Code consists of Chapters 1 through Chapter 16, Appendix A, and Resource A of the 2015 EBC, as deemed to be amended by Chapter 1 and 9 of this publication, and selected referenced standards listed in Chapter 10 of this publication and incorporated by reference into 19 NYCRR Part 1227.

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CHAPTER 1

Amendments to Chapter 1 of the 2015 IRC, IBC, IPC, IMC, IFGC, IFC, IPMC and IEBC

For the purposes of applying the 2015 IRC, IBC, IPC, IMC, IFGC, IFC, IPMC and IEBC in this State, Chapter 1 of the 2015 IRC, IBC, IPC, IMC, IFGC, IFC, IPMC and IEBC shall each be deemed to be amended in the manner specified in this Chapter:

1. 2015 IRC, IBC, IPC, IMC, IFGC, IFC, IPMC and IEBC (Chapter 1).

Chapter 1 of the 2015 IRC, IBC, IPC, IMC, IFGC, IFC, IPMC and IEBC shall each be deemed to be amended to read as follows:

CHAPTER 1

GENERAL REQUIREMENTS

SECTION 101

TITLE, SCOPE AND PURPOSE

101.1 Title. These provisions shall be known as the New York State Uniform Fire Prevention and Building Code and referred to herein as the “Uniform Code”.

The Uniform Code includes the following code documents as published by the International Code Council: 2015 IRC 2nd printing, 2015 IBC 3rd printing, 2015 IPC 3rd printing, 2015 IMC 3rd printing, 2015 IFGC 3rd printing, 2015 IFC 3rd printing, 2015 IPMC 4th printing, and 2015 IEBC 5th printing. Each of these International Code Council documents shall be deemed to be amended by the publication entitled 2016 Uniform Code Supplement, as published by the New York Department of State.

Each code document has a specific scope with regard to the minimum standards for building construction and fire prevention, as outlined in Section 101.2 Scope.

101.2 Scope. The provisions of the Uniform Code shall apply to all new and existing buildings, structures, systems and equipment as indicated in Sections 101.2.1 through 101.2.8, with the following exceptions:

Exceptions:

1. Structures, systems and equipment lawfully in existence at the time of adoption of the Uniform Code shall be permitted to have their use continued, provided that the use is in accordance with the original design and no hazard to life, health or property is created by such structure, system or equipment and except when provisions of the 2015 IRC, 2015 IBC, 2015 IPC, 2015 IMC, 2015 IFGC, 2015 IFC, 2015 IPMC,

and 2015 IEBC specifically apply to existing buildings.

2. Additions, alterations, renovations or repairs to any structure, system or equipment shall conform to that required for new construction without requiring the existing structure, system or equipment to comply with all of the requirements of the Uniform Code. Additions, alterations or repairs shall not cause an existing structure, system or equipment to become unsafe, unsanitary, hazardous or overloaded. Minor additions, alterations, renovations and repairs to existing structure, system or equipment shall meet the provisions for new construction, unless such work is done in the same manner and arrangement as was in the existing, is not hazardous, and is approved.
3. Construction trailers used as a temporary office for the purpose of monitoring construction at a construction site.
4. Structures such as radio and television transmission, communication and wind generation towers not attached to buildings.

101.2.1 The Residential Code. The provisions of the 2015 IRC shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, their accessory structures not more than three stories above grade plane in height, one-family dwellings converted to owner occupied bed and breakfast dwellings with five or fewer guest rooms, and plumbing, mechanical, and fuel gas systems and appliances servicing these structures.

Exceptions:

1. Live/work units located in townhouses and complying with the requirements of Section 419 of the 2015 IBC shall be permitted to be constructed in accordance with the 2015 IRC for one- and two-family dwellings. Fire suppression required by Section 419.5 of the 2015 IBC where constructed under the 2015 IRC for one- and two-family dwellings shall conform to the Section P2904 of the 2015 IRC.
2. Home occupations in dwelling units complying with the requirements of Appendix J shall be permitted.
3. Owner-occupied lodging houses with five or fewer guestrooms shall be permitted to be constructed in accordance with the 2015 IRC where equipped with a fire sprinkler system in accordance with Section P2904 of the 2015 IRC.

101.2.1.1 Regulation by other State of New York Departments or Agencies. Where a building or premises under the custody, licensure, supervision or jurisdiction of a department or agency of the State of New York is regulated as a one- or two-family dwelling or multiple single-family dwelling (townhouse), in accordance with established laws or regulations of that department or agency, said buildings or premises, such as a community residence or hospice residence, and their accessory structures shall comply with the 2015 IRC.

101.2.1.2 Change of use or occupancy. No change shall be made in the use or occupancy of any structure unless such structure is made to comply with the requirements of Appendix J.

101.2.1.3 Additions, alterations or repairs. Additions, alterations or repairs to any structure shall conform to the requirements of Appendix J without requiring the existing structure to comply with all of the requirements of the 2015 IRC, unless otherwise stated. Additions, alterations or repairs shall not cause an existing structure to become unsafe or adversely affect the performance of the building

101.2.1.4 Factory Manufactured Homes (Modular Homes). Such homes shall be constructed and installed in accordance with the requirements of the 2015 IRC and shall bear an Insignia of Approval issued in accordance with the 19 NYCRR Part 1209, Regulations and Fees for Factory Manufactured Homes.

101.2.2 The Building Code. The provisions of the 2015 IBC shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, their accessory structures not more than three stories above grade plane in height, and one-family dwellings converted to owner occupied bed and breakfast dwellings with five or fewer guest rooms shall comply with the provisions of the 2015 IRC.
2. Agricultural buildings, including barns, sheds, poultry houses and other buildings and equipment on the premises used directly and solely for agricultural purposes. "Agricultural building" shall mean a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products, excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

101.2.3 The Plumbing Code. The provisions of the 2015 IPC shall apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems. This code shall also regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems.

Exceptions:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, their

accessory structures not more than three stories above grade plane in height, and one-family dwellings converted to owner occupied bed and breakfast dwellings with five or fewer guest rooms are permitted to comply with the provisions of the 2015 IRC.

2. Plumbing systems in existing buildings that are undergoing repairs, alterations, or changes in occupancy or construction of additions shall be permitted to comply with provisions of the 2015 IEBC.

101.2.4 The Mechanical Code. The provisions of the 2015 IMC shall regulate the design, installation, maintenance, alteration, and inspection of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This shall include ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

Exceptions:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, their accessory structures not more than three stories above grade plane in height, and one-family dwellings converted to owner occupied bed and breakfast dwellings with five or fewer guest rooms are permitted to comply with the provisions of the 2015 IRC.
2. Mechanical systems in existing buildings that are undergoing repairs, alterations, or changes in occupancy or construction of additions shall be permitted to comply with provisions of the 2015 IEBC.

101.2.5 The Fuel Gas Code. The provisions of the 2015 IFGC shall apply to the design, installation, maintenance, alteration and inspection of the fuel gas piping and equipment, fuel gas-fired appliances, and fuel gas-fired appliance venting systems that are permanently installed and specifically addressed in the 2015 IFGC. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances, the installation and operation of residential and commercial gas appliances and related accessories, and gaseous hydrogen systems.

Exceptions:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, their accessory structures not more than three stories above grade plane in height, and one-family dwellings converted to owner occupied bed and breakfast dwellings with five or fewer guest rooms are permitted to comply with the provisions of the 2015 IRC.
2. Fuel gas piping systems in existing buildings that are undergoing repairs, alterations, or changes in occupancy or construction of additions shall be permitted to comply with provisions of the 2015 IEBC.

101.2.5.1 Gaseous hydrogen systems. Gaseous hydrogen systems shall be regulated by Chapter 7 of 2015 IFGC.

101.2.5.2 Piping systems. These regulations cover piping systems for natural gas with an operating pressure of 125 pounds per square inch gauge (psig) (862 kPa gauge) or less, and for LP-gas with an operating pressure of 20 psig (140 kPa gauge) or less, except as provided in Section 402.6. Coverage shall extend from the point of delivery to the outlet of the appliance shutoff valves. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation and maintenance.

101.2.5.3 Gas appliances. Requirements for gas appliances and related accessories shall include installation, combustion and ventilation air and venting and connections to piping systems.

101.2.5.4 Systems and equipment outside the scope. 2015 IFGC shall not apply to the following:

1. Portable LP-gas appliances and equipment of all types that is not connected to a fixed fuel piping system.
2. Installation of farm appliances and equipment such as brooders, dehydrators, dryers and irrigation equipment.
3. Raw material (feedstock) applications except for piping to special atmosphere generators.
4. Oxygen-fuel gas cutting and welding systems.
5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.
6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.
7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by, or used in, chemical reactions.
8. LP-gas installations at utility gas plants.
9. Liquefied natural gas (LNG) installations.
10. Fuel gas piping in power and atomic energy plants.
11. Proprietary items of equipment, apparatus or instruments such as gas-generating sets, compressors and calorimeters.
12. LP-gas equipment for vaporization, gas mixing and gas manufacturing.
13. Temporary LP-gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.
14. Installation of LP-gas systems for railroad switch heating.
15. Installation of hydrogen gas, LP-gas and compressed natural gas (CNG) systems on vehicles.
16. Except as provided in Section 401.1.1, gas piping, meters, gas pressure regulators and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-gas.

17. Building design and construction, except as specified herein.
18. Piping systems for mixtures of gas and air within the flammable range with an operating pressure greater than 10 psig (69 kPa gauge).
19. Portable fuel cell appliances that are neither connected to a fixed piping system nor interconnected to a power grid.

101.2.5.5 Other fuels. The requirements for the design, installation, maintenance, alteration and inspection of mechanical systems operating with fuels other than fuel gas shall be regulated by the 2015 IMC.

101.2.6 The Fire Code. The provisions of the 2015 IFC shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression, automatic sprinkler and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

101.2.6.1 Construction and design provisions. The construction and design provisions of the 2015 IFC shall apply to:

1. Structures, facilities and conditions arising after the adoption of the 2015 IFC.
2. Existing structures, facilities and conditions not legally in existence at the time of adoption of the Fire Code.
3. Existing structures, facilities and conditions where identified in the Fire Code.

Exceptions:

1. Agricultural buildings, including barns, sheds, poultry houses and other buildings and equipment on the premises used directly and solely for agricultural purposes. “Agricultural building” shall mean a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products, excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

101.2.6.2 Administrative, operational and maintenance provisions. The administrative, operational and maintenance provisions of the 2015 IFC shall apply to:

1. Conditions and operations arising after the adoption of the Fire Code.
2. Existing conditions and operations.

101.2.6.3 Maintenance of required safeguards. Where any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of the Fire Code, or otherwise installed, such device, equipment, system, condition, arrangement, level of protection, or other feature shall thereafter be continuously maintained in accordance with the 2015 IFC, the 2015 IPMC and applicable referenced standards.

101.2.6.4 Existing non-required safeguards. Wherever any non-required device, equipment, system, condition, arrangement, level of protection, or any other feature is provided, such device, equipment, system, condition, arrangement, level of protection, or other feature shall, thereafter, be continuously maintained in accordance with the Fire Code and applicable referenced standards or shall be removed in its entirety.

Exceptions:

1. Non-required devices, equipment and systems are permitted to be removed in entirety;
2. Non-required devices, equipment and systems are permitted to be disabled, provided that all visible elements are removed;
3. Electrically charged devices, equipment and systems are permitted to be disabled, provided they are disconnected from power sources and all visible elements are labeled as not being energized; and
4. Non-required fire protection systems are permitted to be disabled, provided that sprinkler heads, exposed valves, fire department connections, initiating and notification devices and similar equipment are removed, and any remaining visible components are labeled as not being in service.

101.2.6.4.1 Fire protection systems at motor fuel-dispensing facilities. Existing fire extinguishing systems at motor fuel-dispensing facilities shall be permitted to be removed in their entirety only after all existing elements of the motor fuel-dispensing systems have been upgraded to comply with all of the safety requirements in the current 2015 IFC.

101.2.6.5 Testing and operation. Equipment requiring periodic testing or operation to ensure maintenance shall be tested or operated as specified in the 2015 IFC.

101.2.6.5.1 Test and inspection records. Required test and inspection records shall be available at all times.

101.2.6.5.2 Re-inspection and testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with the 2015 IFC.

101.2.6.6 Rendering equipment inoperable. Fire protection equipment or building systems and equipment that provide life safety functions shall not be rendered inoperative or inaccessible except as necessary during emergencies, maintenance, repairs, alterations, drills or prescribed testing.

101.2.6.7 Unsafe structures and equipment. If during the inspection of a premises, building or structure, or any building system or equipment, in whole or in part, there exists a clear and imminent threat to human life, safety or health, the authority having jurisdiction charged with the administration and enforcement of the Uniform Code shall exercise its powers in due and proper manner so as to extend to the public protection from the hazards of threat to human life, safety, or health.

101.2.6.7.1 Unsafe structures. An unsafe structure is one that is found to be dangerous to the life, health, property or safety of the public or to the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire; or because such structure contains unsafe equipment or is so damaged, decayed, dilapidated, or structurally unsafe; or is of such faulty construction or unstable foundation that partial or complete collapse is possible. A vacant structure that is not secured against unauthorized entry as required by Section 311 of the 2015 IFC shall be deemed unsafe.

101.2.6.7.2 Unsafe equipment. Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or any other equipment on the premises or within the structure that is in such disrepair or condition that the equipment is a hazard to life, health, property or safety of the public or occupants of the premises or structure.

101.2.6.7.3 Structure unfit for human occupancy. A structure is unfit for human occupancy whenever the structure is unsafe, unlawful, or because of the degree to which the structure is in disrepair or lacks maintenance or the location of the structure constitutes a hazard to the occupants of the structure or to the public.

101.2.6.7.4 Unlawful structure. An unlawful structure is one found in whole or in part to be occupied by more persons than are permitted under the 2015 IFC, or was erected, altered or occupied contrary to law.

101.2.6.7.5 Closing of vacant structures. If the structure is vacant and unfit for human habitation and occupancy, and is not in danger of structural collapse, a placard of condemnation shall be posted on the premises, and the structure shall be closed up so as not to be an unattractive nuisance.

101.2.6.7.6 Prohibited occupancy. No person shall occupy a placarded structure.

101.2.6.7.6.1 Placard removal. The placard shall be removed whenever the defect or defects on which the condemnation and placarding action were based have been eliminated.

101.2.6.7.7 Notice. Whenever a structure or equipment has been condemned under the provisions of this section, a notice shall be posted in a conspicuous place in or about the structure affected by such notice. If the notice pertains to equipment, it shall also be placed on the condemned equipment.

101.2.6.7.8 Imminent danger. The occupants shall vacate premises when there exists:

1. Imminent danger of failure or collapse of a building or structure which endangers life;
2. A structure where the entire or part of the structure has fallen and life is endangered by the occupation of the structure;

3. Actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes or vapors or the presence of toxic fumes, gases or materials; or
4. Operation of defective or dangerous equipment.

There shall be posted at each entrance to such structure a notice reading as follows: "This Structure is Unsafe and its Occupancy Has Been Prohibited by the code enforcement official." It shall be unlawful for any person to enter such structure except for the purpose of securing the structure, making the required repairs, removing the hazardous condition or demolishing the structure.

101.2.6.7.9 Fire department notification. The fire chief shall notify the code enforcement official of any fire or explosion involving any structural damage, fuel-burning appliance, chimney, flue or gas vent.

101.2.7 The Property Maintenance Code. The provisions of the 2015 IPMC shall apply to all existing residential and nonresidential structures and all existing premises and constitute minimum requirements and standards for premises, structures, equipment and facilities for light, ventilation, space, heating, sanitation, protection from the elements, a reasonable level of safety from fire and other hazards, and for a reasonable level of sanitary maintenance; the responsibility of owners, an owner's authorized agent, operators and occupants; the occupancy of existing structures and premises, and for administration, enforcement and penalties.

101.2.7.1 Application of other codes. Repairs, additions or alterations to a structure, or changes of occupancy, shall be done in accordance with the procedures and provisions of the 2015 IBC, IEBC, IECC, IFC, IFGC, IMC, IRC, IPC, and NFPA 70.

101.2.7.2 Maintenance of equipment and systems. Equipment, systems, devices and safeguards required by the 2015 IPMC, or a previous regulation or code under which the structure or premises was constructed, altered or repaired shall be maintained in good working order. The requirements of the 2015 IPMC are not intended to provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures. Except as otherwise specified herein, the owner or the owner's designated agent shall be responsible for the maintenance of buildings, structures and premises.

101.2.7.3 Existing non-required equipment and systems. Whenever or wherever any non-required device, equipment, system, condition, arrangement, level of protection or any other feature is provided, such device, equipment, system, condition, arrangement, level of protection or other feature shall thereafter be continuously maintained in accordance with the 2015 IPMC and applicable referenced standards.

Exception: Non-required devices, equipment and systems are permitted to be removed or disabled as provided herein.

1. Non-required devices, equipment and systems are permitted to be removed

- in entirety;
2. Non-required devices, equipment and systems are permitted to be disabled, provided that all visible elements are removed;
 3. Electrically charged devices, equipment and systems are permitted to be disabled, provided that they are disconnected from power sources and all visible elements are labeled as not being energized; and
 4. Non-required fire protection systems are permitted to be disabled, provided that sprinkler heads, exposed valves, fire department connections, initiating and notification devices and similar equipment are removed, and any remaining visible components are labeled as not being in service.

101.2.7.4 Unsafe structures and equipment. If during the inspection of a premises, building or structure, or any building system or equipment, in whole or in part, constitutes a clear and imminent threat to human life, safety or health, the authority having jurisdiction charged with the administration and enforcement of the Uniform Code shall exercise its powers in due and proper manner so as to extend to the public protection from the hazards of threat to human life, safety, or health.

101.2.7.4.1 Unsafe structures. An unsafe structure is one that is found to be dangerous to the life, health, property or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains unsafe equipment or is so damaged, decayed, dilapidated, structurally unsafe, or of such faulty construction or unstable foundation, that partial or complete collapse is possible.

101.2.7.4.2 Unsafe equipment. Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the premises or within the structure that is in such disrepair or condition that such equipment is a hazard to life, health, property or safety of the public or occupants of the premises or structure.

101.2.7.4.3 Structure unfit for human occupancy. A structure is unfit for human occupancy whenever such structure is unsafe, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by the 2015 IPMC, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

101.2.7.4.4 Unlawful structure. An unlawful structure is one found in whole or in part to be occupied by more persons than permitted under the 2015 IPMC, or was erected, altered or occupied contrary to law.

101.2.7.5 Vacant structures. Vacant structures shall comply with the 2015 IPMC and the 2015 IFC.

101.2.7.6 Notice. Whenever a structure or equipment has been condemned under the provisions of the 2015 IPMC, a notice shall be posted in a conspicuous place in or about the structure affected by such notice. If the notice pertains to equipment, it shall also be placed on the condemned equipment.

101.2.7.7 Prohibited occupancy. No person shall occupy placarded premises or shall operate placarded equipment.

101.2.7.8 Placard removal. The placard shall be removed whenever the defect or defects upon which the condemnation and placarding action were based have been eliminated.

101.2.7.9 Imminent danger. The authority having jurisdiction is authorized to order and require the occupants to vacate premises when there exists:

1. Imminent danger of failure or collapse of a building or structure which endangers life;
2. A structure in which any part of the structure has fallen and life is endangered by the occupation of the structure; or
3. An actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes or vapors or the presence of toxic fumes, gases or materials; or
4. Operation of defective or dangerous equipment.

The Authority Having Jurisdiction shall require the posting at each entrance to such structure a notice reading as follows: "This Structure is Unsafe and its Occupancy Has Been Prohibited by the Code Enforcement Official." It shall be unlawful for any person to enter such structure except for the purpose of securing the structure, making the required repairs, removing the hazardous condition or of demolishing the same.

101.2.8 The Existing Building Code. The provisions of the 2015 IEBC shall apply to all matters governing the repairs, alterations, change of occupancy, additions and relocation of existing buildings. The intent of the Existing Building Code is to provide flexibility to permit the use of alternative approaches to achieve compliance with minimum requirements to safeguard the public health, safety and welfare insofar as they are affected by the repair, alteration, change of occupancy, additional and relocation of existing buildings.

Exceptions:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, their accessory structures not more than three stories above grade plane in height, and one-family dwellings converted to owner occupied bed and breakfast dwellings with five or fewer guest rooms shall comply with the provisions of the 2015 IRC.

2. Agricultural buildings, including barns, sheds, poultry houses and other buildings and equipment on the premises used directly and solely for agricultural purposes. “Agricultural building” shall mean a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products, excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

101.2.8.1 Compliance Methods. The repair, alteration, change of occupancy, addition, or relocation of all existing buildings shall comply with one of the methods listed in Section 301 of the 2015 IEBC. Projects that involve more than one classification of work must comply with the requirements of each appropriate chapter.

Exception: Alterations complying with laws in existence at the time the building or affected portion of the building was constructed shall be considered in compliance with the provisions of the 2015 IEBC, unless the building has sustained substantial structural damage as defined in Section 606.2, or the building is undergoing more than a limited structural alteration as defined in Section 907.4.4. New structural members added as part of the repair or alteration shall comply with the 2015 IBC. Repairs and alterations of existing buildings in flood hazard areas shall comply with Section 701.3

101.2.8.2 Energy Conservation. Energy conservation measures in existing buildings shall be in conformance with Chapter 5 CE or Chapter 5 RE of the Energy Conservation Code, as applicable.

101.2.8.3 Addition, alterations and repairs. Additions, alterations or repairs to any structure shall conform to that required by the 2015 IEBC without requiring the existing structure to comply with all the requirements of said code, unless otherwise stated. Additions, alterations or repairs shall not cause an existing structure to become unsafe or adversely affect the performance of the building

101.2.8.4 Carbon monoxide alarms and detectors in existing buildings. Carbon monoxide alarms and detectors shall comply with the 2015 IFC.

101.3 Purpose. The Uniform Code is intended to provide minimum requirements to safeguard public safety, health and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation and safety to life and property from fire and other hazards attributed to the built environment.

SECTION 102 APPLICABILITY

102.1 General. Where, in any specific case, different sections of the Uniform Code specify different materials, methods of construction or other requirements, the most restrictive shall be applicable. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

102.2 Other laws and regulations. The Uniform Code is promulgated pursuant to Article 18 of the New York State Executive Law. The provisions of the Uniform Code shall not be deemed to nullify any federal, state or local law, ordinance, administrative code, rule or regulation relating to any matter as to which the Uniform Code does not provide. However:

1. Pursuant to Section 383(1) of the Executive Law, and except as otherwise provided in subparagraphs a, b and c of Section 383 of the Executive Law, the provisions of the Uniform Code supersede any other provision of a general, special or local law, ordinance, administrative code, rule or regulation inconsistent or in conflict with the Uniform Code;
2. Pursuant to Section 379(3) of the Executive Law, no city, town, village, county or other municipality shall have the power to supersede, void, repeal, or make less restrictive any provision of the Uniform Code; and
3. The ability of any city, town, or village, or the County of Nassau, to enact or adopt, and to enforce, a local law or ordinance imposing higher or more restrictive standards for construction within the jurisdiction of such city, town, village, or county than are applicable generally to such city, town, village, or county in the Uniform Code is subject to the provisions and requirements of Section 379 of the Executive Law.

Nothing in this Section 102.2 shall be construed: (1) as affecting the authority of the State Labor Department to enforce a safety or health standard issued under provisions of Sections 27 and 27-a of the Labor Law; (2) to relieve a person from complying with a stricter standard issued pursuant to the Occupational Safety and Health Act of 1970, as amended; or, (3) as superseding, limiting, impairing or otherwise affecting any provision in Parts 1219 to 1227 of Title 19 of the New York Codes, Rules and Regulations, as now in effect and as hereafter amended from time to time.

102.3 Change of use or occupancy. No change shall be made in the use or occupancy of any structure that would place the structure in a different division of the same group or occupancy or in a different group of occupancies, unless such structure is made to comply with the requirements of the 2015 IRC or 2015 IEBC, as applicable.

102.4 Application of references. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of the applicable code.

All references made to Sections 101 through 117, or subsections of Sections 101 through 117, in the 2015 IRC, 2015 IBC, 2015 IPC, 2015 IMC, 2015 IFGC, 2015 IFC, 2015 IPMC, and

2015 IEBC shall not apply. However, this shall not limit the administration and enforcement duties and powers of the building official allowed by Section 107.1.

102.5 Referenced standards. The standards referenced in the Uniform Code shall be considered part of the requirements of the same, to the prescribed extent of each such reference. Where differences occur between provisions of the Uniform Code and referenced standards, the provisions of the Uniform Code shall apply.

102.6 Appendices. The following appendices have been adopted and are made part of the Uniform Code:

The Residential Code

1. Appendix E – Manufactured Housing Used as Dwellings
2. Appendix H – Patio Covers
3. Appendix J – Existing Buildings and Structures

The Building Code

1. Appendix E – Supplemental Accessibility Requirements
2. Appendix F – Rodent Proofing
3. Appendix I – Patio Covers

The Plumbing Code

1. Appendix C – Structural Safety

The Fire Code

1. Appendix D – Fire Apparatus Access Roads

The Existing Building Code

1. Appendix A – Guidelines for the Seismic Retrofit of Existing Buildings
2. Resource A – Guidelines on Fire Ratings of Archaic Materials and Assemblies

102.7 Partial invalidity. In the event that any part or provision of the Uniform Code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

102.8 Existing structures. The legal occupancy of any structure existing on the date of adoption of Uniform Code or its amendments shall be permitted to continue without change, except as is specifically addressed by the provisions of the Uniform Code.

SECTION 103
MATERIALS, EQUIPMENT AND METHODS OF CONSTRUCTION

103.1 Approved materials and equipment. Materials, equipment and devices approved by the code enforcement official for use shall be constructed and installed in accordance with such approval. Materials, equipment and devices tested by an approved testing laboratory shall be permitted to be constructed and installed in accordance with such approval.

103.2 Used materials and equipment. Material, equipment and devices shall not be reused unless they meet the requirements of Uniform Code for new materials.

103.3 Alternate materials, design and methods of construction and equipment. The Uniform Code is not intended to prevent the use of any material not specifically prescribed by Uniform Code or to prohibit any design or method of construction not specifically prescribed by Uniform Code, provided that any such alternative material, design or method of construction has been approved by the code enforcement official or the State Fire Prevention and Building Code Council. An alternative material, design or method of construction may be approved only when the code enforcement official or the State Fire Prevention and Building Code Council shall have determined, in writing, that such alternative material, design or method of construction (1) complies with the intent of the provisions of Uniform Code and (2) is at least equivalent of that prescribed in Uniform Code in quality, strength, effectiveness, fire resistance, durability and safety. Nothing in this Section 103.3 shall be construed as permitting any code enforcement official, or any town, village, city, county, or state agency charged with the administration and enforcement of the Uniform Code, to waive, vary, modify or otherwise alter any provision or requirement of Uniform Code. Provisions or requirements of the Uniform Code may be varied or modified only pursuant to procedures established by the Secretary of State pursuant to Section 381(1)(f) of the Executive Law.

103.4 Safeguards during construction. All construction work covered in Uniform Code, including any demolition, shall comply with the requirements of the 2015 IFC and Chapter 33 of the 2015 IBC.

103.5 Workmanship. Repairs, maintenance work, alterations or installations which are caused directly or indirectly by the enforcement of the Uniform Code shall be executed and installed in accordance with Uniform Code and the manufacturer's installation instructions.

SECTION 104
SERVICE UTILITIES

104.1 Connection of service utilities. Connections from a utility, source of energy, fuel or power to any building or system which is regulated by Uniform Code shall be made in accordance with the regulations of the public utility or other authority having jurisdiction.

104.2 Temporary power. Temporary power shall comply with the requirements of Chapter 27 of the 2015 IBC.

**SECTION 105
TEMPORARY STRUCTURES**

105.1 Conformance. Temporary structures shall conform to Chapter 31 of the 2015 IBC, and Chapter 31 of the 2015 IFC.

**SECTION 106
MODULAR BUILDINGS**

106.1 Modular buildings. Such buildings shall be constructed and installed in accordance with the requirements of Uniform Code and shall bear the Insignia of Approval by the Secretary of State. Modular building shall mean a building wholly or in substantial part manufactured in a manufacturing facility, intended or designed for permanent installation or assembly on a building site, and whereby all portions may not be reasonably inspected at the installation site without disassembly or destruction thereof.

Exception: An Insignia of Approval shall not be required for the following buildings:

1. Modular buildings with structural components that cannot be inspected at the installation site but can be inspected in accordance with Section 1704 of the 2015 IBC at the manufacturing facility in which it was built.
2. Buildings of Group S or U occupancy having an area not exceeding 400 square feet and not customarily used for human occupancy.

**SECTION 107
ADMINISTRATION AND ENFORCEMENT**

107.1 Administration and enforcement. In this Chapter 1, the governmental unit or agency responsible for administration and enforcement of the Uniform Code with respect to a building or structure is referred to as the “authority having jurisdiction.”

The identity of the authority having jurisdiction in a given situation is determined in accordance with Article 18 of the Executive Law and the regulations promulgated pursuant to Executive Law § 381(1). In general, the authority having jurisdiction is the local government (as that term is defined in Executive Law § 372(11)) in which the building or structure is located. In certain situations, the authority having jurisdiction may be the county in which the building or structure is located. In certain other cases, a State agency may be the authority having jurisdiction.

Administration and enforcement of the Uniform Code shall be in accordance with the following, as applicable:

1. Each city, town, village or county that is responsible for administration and enforcement of the Uniform Code shall provide for such administration and enforcement by local law, ordinance or other appropriate regulation, and shall administer and enforce the Uniform

Code in accordance with the code enforcement program established by such local law, ordinance or other appropriate regulation, or combination thereof. Such code enforcement program must include the features described in 19 NYCRR 1203.3 and must satisfy all other requirements of 19 NYCRR Part 1203 (“Uniform Code: Minimum Standards for Administration and Enforcement”).

2. Each State agency accountable under 19 NYCRR section 1201.2(d) for administration and enforcement of the Uniform Code shall provide for such administration and enforcement in accordance with 19 NYCRR Part 1204.
3. Each governmental agency accountable under 19 NYCRR section 1201.2 for administration and enforcement of the Uniform Code and not otherwise included in the two preceding paragraphs shall provide for such administration and enforcement in regulation, and shall administer and enforce the Uniform Code in accordance with such regulation. Such regulation must include the features described in 19 NYCRR 1203.3.

Every governmental unit or agency thereof charged with administration and enforcement of the Uniform Code shall exercise its powers in due and proper manner so as to extend to the public protection from the hazards of fire and inadequate building construction.

107.1. Due process. Nothing in this Chapter 1, or elsewhere in the Uniform Code, or in any regulation promulgated pursuant to Executive Law § 381(1), shall be construed as authorizing any governmental unit or agency responsible for administration and enforcement of the Uniform Code to do so in a manner that deprives any person or entity of due process of law. In particular, but not by way of limitation, nothing in this Chapter 1 relating to posting, placarding and/or condemnation of buildings or structures that are unsafe, unfit for human occupancy or unlawful shall be construed as authorizing any governmental unit or agency responsible for administration and enforcement of the Uniform Code to post, placard or condemn any such building or structure and/or to remove any owner or occupant or cause any owner or occupant to be removed from any such building or structure without providing such notice and opportunity to be heard (and, if applicable, right of appeal) as may be required under the applicable circumstances by applicable Constitutional provisions.

107.1.2 Imminent danger. In cases of imminent danger, posting, placarding, and condemning a building or structure and removing owners and occupants or causing owners and occupants to be removed without first providing an opportunity to be heard shall be permitted to the extent consistent with applicable Constitutional provisions, provided that the affected persons and entities are afforded the opportunity for a post-action hearing to the extent required by applicable Constitutional provisions.

107.2 Modification. No town, village, city or county, nor any state agency charged with the administration and enforcement of Uniform Code may waive, modify or otherwise alter any provision of this code unless approved by the State Fire Prevention and Building Code Council in accordance with Section 379 of Article 18 of the Executive Law.

107.3 Application for variance or appeal. Variance or appeal of any provision of Uniform Code shall be in accordance with the provisions of the 19 NYCRR Part 1205, "Variance Procedures."

CHAPTER 2
Amendments to the 2015 IRC

For the purposes of applying the 2015 IRC in this State, the 2015 IRC shall be deemed to be amended in the manner specified in this Chapter.

1. 2015 IRC Section R202 (Definitions).

The definition of the term “*manufactured home*” in Section R202 of the 2015 IRC shall be deemed to be amended, and new definitions of the terms “*access roof*”, “*bed and breakfast dwelling*”, “*CSST*”, “*factory manufactured home (modular home)*”, “*freeboard*”, “*ground access area*”, “*hospice residence*”, “*insignia of approval*”, “*listed conductive jacketed CSST (or listed CJ-CSST)*”, “*roof access point*”, “*sleeping area*”, and “*unvented room heater*”, shall be deemed to be added to Section R202 of the 2015 IRC; said amended definition and said new definitions to read as follows:

ACCESS ROOF. A roof surface which provides access to the ridge or peak of an adjoining roof surface containing solar panels, modules, or arrays; and

1. Is relatively free of vents, skylights, and other such obstructions, and
2. Does not contain solar panels, modules, or arrays; or is a single ridge roof where the total edge width of the solar panels, modules, or arrays does not exceed 33% of the ridge length.

BED AND BREAKFAST DWELLING. An owner-occupied residence resulting from a conversion of a one-family dwelling, used for providing overnight accommodations and a morning meal to not more than ten transient lodgers and containing not more than five bedrooms for such lodgers.

CSST. Corrugated stainless steel tubing.

FACTORY MANUFACTURED HOME (MODULAR HOME). A structure designed primarily for residential occupancy, constructed by a method or system of construction whereby the structure or its components are wholly or in substantial part manufactured in manufacturing facilities, intended or designed for permanent installation, or assembly and permanent installation, on a building site.

FREEBOARD. A factor of safety expressed in feet above the design flood elevation.

GROUND ACCESS AREA. A ground area relatively clear of obstructions that can be used to establish ground ladders for gaining entry to the access roof or roof access point.

HOSPICE RESIDENCE. A one- or two-family dwelling operated for the purpose of providing care to more than two but not more than eight hospice patients, created pursuant to Article 40 of the Public Health Law, and as defined in §4002 of said law.

INSIGNIA OF APPROVAL. The certificate, tab or tag issued by the New York State Department of State Division of Building Standards and Codes to indicate compliance with the standards, rules and regulations established for factory manufactured homes.

LISTED CONDUCTIVE JACKETED CSST (or LISTED CJ-CSST). CSST which is:

1. Encased in a conductive jacket, and
2. Listed in a currently effective evaluation report issued by a nationally recognized building product evaluation service as having been:
 - i. tested in accordance with the published National Standard ANSI LC 1-2014 including the performance criteria of Section 5.16 and
 - ii. shown by such testing to satisfy such published performance criteria and to provide, without additional bonding, protection against damage from indirect lightning strikes that is at least equivalent to that provided by direct bonding as prescribed in Section 310.1 of the IFGC.

MANUFACTURED HOME. A factory-manufactured dwelling unit built on or after June 15, 1976, and conforming to the requirements of the Department of Housing and Urban Development (HUD), Manufactured Home Construction and Safety Standards, 24 CFR Part 3208, 4/1/93, transportable in one or more sections, which in the traveling mode, is 8 feet (2438 mm) or more in width or 40 feet (12192 mm) or more in length, or, when erected on site, is 320 square feet (29.7 m²) minimum, constructed on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities and includes the plumbing, heating, air conditioning and electrical systems contained therein. The term "*manufactured home*" shall also include any structure that meets all the requirements of this definition except the size requirements and with respect to which the manufacturer voluntarily files a certification required by the Federal Department of Housing and Urban Development and complies with the standards established under the national Manufactured Housing Construction and Safety Act of 1974, as amended. The term "manufactured home" shall not include any self-propelled recreational vehicle.

ROOF ACCESS POINT. The beginning of the roof access pathway at the eave.

SLEEPING AREA. A room or space that can be used, either on an occasional or permanent basis, for sleeping.

UNVENTED ROOM HEATER. An unvented heating appliance designed for stationary installation and utilized to provide comfort heating. Such appliances provide radiant heat or

convection heat by gravity or fan circulation directly from the heater and do not utilize ducts. A wall-mounted unvented room heater would be of the type designed for insertion in or attachment to a wall or partition. A wall-mounted unvented room heater does not incorporate concealed venting arrangements in its construction and discharges all products of combustion through the front into the room being heated. [Required by General Business Law (322.2)]

2. 2015 IRC Table R301.2(1) (Climatic and geographical design criteria).

Table R301.2(1) of the 2015 IRC shall be deemed to be amended by the modification of footnote “g” and the addition of footnote “n.” Footnotes to read as follows:

g. To establish flood hazard areas, each community regulated under Title 19, Part 1203 of the Official Compilation of Codes, Rules and Regulations of the State of New York (NYCRR) shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, special flood hazard areas as identified by the Federal Emergency Management Agency in the Flood Insurance Study for the community, as amended or revised with:

- i. The accompanying Flood Insurance Rate Map (FIRM),
- ii. Flood Boundary and Floodway Map (FBFM), and
- iii. Related supporting data along with any revisions thereto.

The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

n. The ground snow loads to be used in determining the design snow loads for roofs are given in Figure R301.2(5) for sites at elevations up to 1000 feet. Sites at elevations above 1000 feet shall have their ground snow load increased from the mapped value by 2 psf for every 100 feet above 1000 feet.

3. 2015 IRC Figure R301.2(5) (Ground snow loads, Pg, for the United States).

Figure R301.2(5) of the 2015 IRC shall be replaced with a new Figure R301.2(5) as follows:

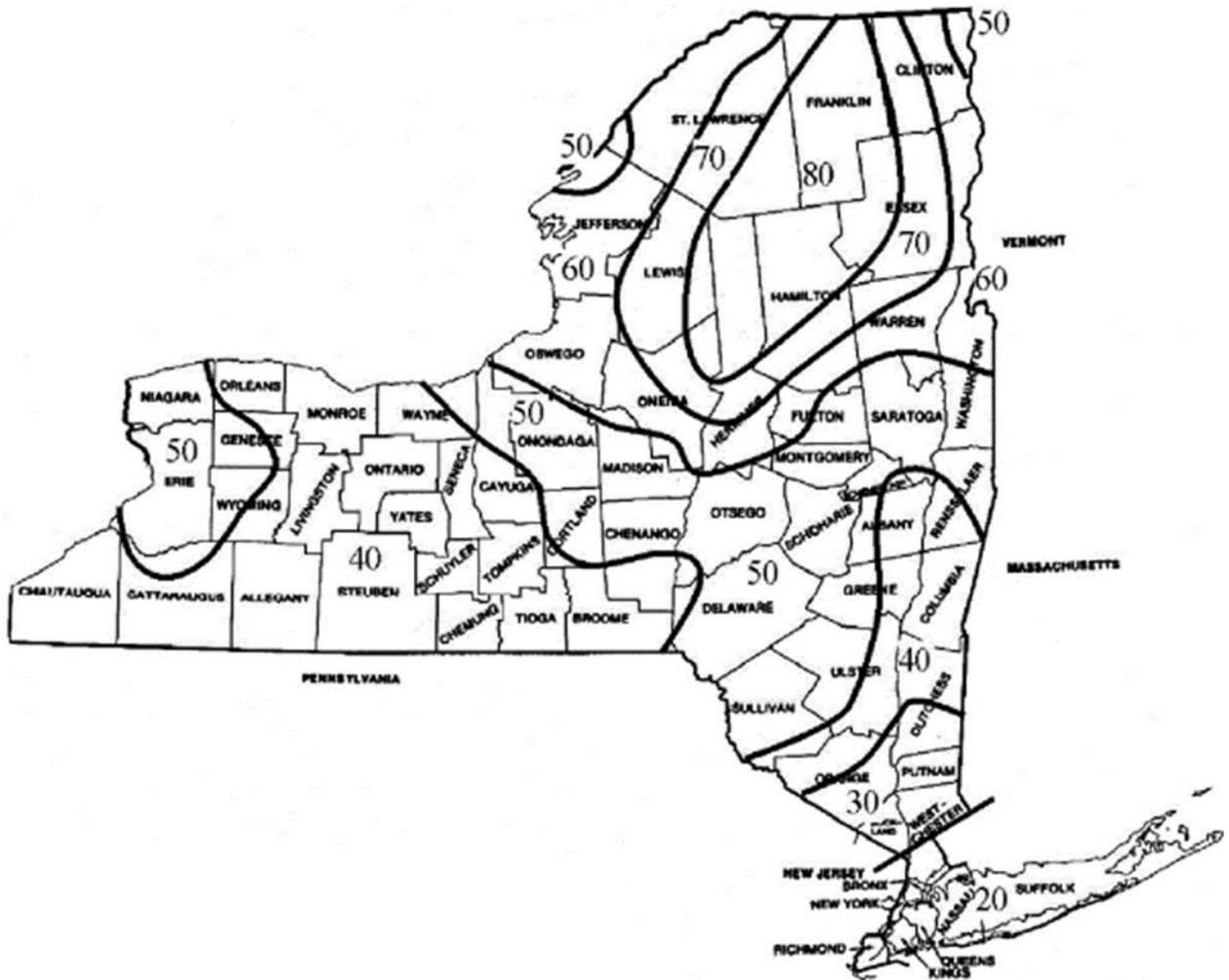


Figure R301.2(5) Ground Snow Loads, P_g, for New York State (psf)

4. 2015 IRC Section R303.1 (Habitable rooms).

Section R303.1, exception 1 and exception 2 of the 2015 IRC shall be deemed to be amended by the addition of a new sentence at the end of exception 1 and exception 2 to read as follows:

This exception shall not be allowed to owner-occupied dwellings not supplied with electrical

power in accordance with Section E3401.2.1.

5. 2015 IRC Section R303.3 (Bathrooms).

Section R303.3, exception 1 of the 2015 IRC shall be deemed to be amended by the addition of a new sentence at the end of the exception to read as follows:

This exception shall not be allowed to owner-occupied dwellings not supplied with electrical power in accordance with Section E3401.2.1.

6. 2015 IRC Section R303.7 (Interior stairway illumination).

Section R303.7 of the 2015 IRC shall be deemed to be amended by adding an exception 2 to read as follows:

2. Owner-occupied dwellings not supplied with electrical power in accordance with Section E3401.2.1.

7. 2015 IRC Section R303.8 (Exterior stairway illumination).

Section R303.8 of the 2015 IRC shall be deemed to be amended by adding an exception to read as follows:

Exception. Owner-occupied dwellings not supplied with electrical power in accordance with Section E3401.2.1.

8. 2015 IRC Section R303.10 (Required heating).

Section R303.10 of the 2015 IRC shall be deemed to be amended to read as follows:

R303.10 Required heating. Where the winter design temperature in Table R301.2(1) is below 60°F (16°C), every dwelling unit intended to be occupied between September 15 and May 15 shall be provided with heating facilities capable of maintaining a minimum room temperature of 68°F (20°C) at a point 3 feet (914 mm) above the floor and 2 feet (610 mm) from exterior walls in habitable rooms at the design temperature. The installation of one or more portable space heaters shall not be used to achieve compliance with this section.

Exception: Owner-occupied dwellings subject to the approval of the code enforcement

official.

9. 2015 IRC Section R306.1 (Toilet facilities).

Section R306.1 of the 2015 IRC shall be deemed to be amended by adding an exception to read as follows.

Exception: Owner-occupied one-family dwellings subject to the approval of the code enforcement official.

10. 2015 IRC Section R306.2 (Kitchen).

Section R306.2 of the 2015 IRC shall be deemed to be amended by adding an exception to read as follows:

Exception: Owner-occupied one-family dwellings subject to the approval of the code enforcement official.

11. 2015 IRC Section R311.7.5.1 (Risers).

Section R311.7.5.1 of the 2015 IRC shall be deemed to be amended to read as follows:

R311.7.5.1 Risers. The riser height shall be not more than 8 ¼ inches (209 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the openings located more than 30 inches (762 mm), as measured vertically, to the floor or grade below do not permit the passage of a 4-inch-diameter (102 mm) sphere.

Exceptions:

1. The opening between adjacent treads is not limited on spiral stairways.
2. The riser height of spiral stairways shall be in accordance with Section R311.7.10.1.

12. 2015 IRC Section R311.7.5.2 (Treads).

Section R311.7.5.2 of the 2015 IRC shall be deemed to be amended to read as follows:

R311.7.5.2 Treads. The tread depth shall be not less than 9 inches (229 mm). The tread depth

shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than $\frac{3}{8}$ inch (9.5 mm).

13. 2015 IRC Section R313 (Automatic fire sprinkler systems).

Section R313 of the 2015 IRC shall be deemed to be amended to read as follows:

SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS

R313.1 Townhouse automatic fire sprinkler system. Townhouses having a height of three stories above grade shall be equipped throughout with an automatic sprinkler system.

R313.1.1 Design and installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with Section P2904 or NFPA 13D.

R313.2 One- and two-family dwellings automatic fire sprinkler system. One- and two-family dwellings having a height of three stories above grade shall be equipped throughout with an automatic sprinkler system.

R313.2.1 Design and installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D.

14. 2015 IRC Section R314.2.2 (Alterations, repairs and additions).

Section R314.2.2 of the 2015 IRC shall be deemed to be amended to read as follows:

R314.2.2 Smoke alarms in existing dwellings. Existing dwellings undergoing repair, alteration, change of occupancy, addition or relocation shall be provided with smoke alarms as required by Appendix J.

15. 2015 IRC Section R315.1 (General).

Section R315.1 of the 2015 IRC shall be amended to read as follows:

R315.1 General. Carbon monoxide alarms shall be provided in accordance with Section 915 of the 2015 IFC as amended by this supplement.

16. 2015 IRC Section R322.1.4 (Establishing the design flood elevation).

Section R322.1.4 of the 2015 IRC shall be deemed to be amended to read as follows:

R322.1.4 Establishing the design flood elevation. The design flood elevation shall be used to define flood hazard areas. At a minimum, the design flood elevation shall be the higher of the following:

1. The base flood elevation at the depth of peak elevation of flooding, including wave height, that has a 1 percent (100-year flood) or greater chance of being equaled or exceeded in any given year; or
2. The elevation of the design flood associated with the area designated on a flood hazard map adopted by the community, or otherwise legally designated.

R322.1.4.1 Determination of design flood elevations. If design flood elevations are not specified, the code official is authorized to require the applicant to comply with either of the following:

1. Obtain and reasonably use data available from a federal, state or other source;
2. Determine the design flood elevation in accordance with accepted hydrologic and hydraulic engineering practices used to define special flood hazard areas. Determinations shall be undertaken by a registered design professional who shall document that the technical methods used reflect currently accepted engineering practice. Studies, analyses and computations shall be submitted in sufficient detail to allow thorough review and approval.

Where it is not possible to obtain a design flood elevation from a method established above, the design flood elevation shall be three feet above the highest adjacent grade. Highest adjacent grade is the highest natural ground elevation within the perimeter of the proposed building prior to construction.

R322.1.4.2 Freeboard. A freeboard of two feet shall be added where the design flood elevation or other elevation requirements are specified.

Exception: A freeboard shall not be required where it is not possible to obtain a design flood elevation from the FIRM or from any method established above and the design flood elevation is three feet above the highest adjacent grade.

17. 2015 IRC Section R324.3 (Photovoltaic systems).

Section R324.3 of the 2015 IRC shall be deemed to be amended to read as follows:

R324.3 Photovoltaic systems. Photovoltaic systems shall be designed and installed in accordance with Sections R324.3.1 through R324.7.2.5 and NFPA 70. Inverters shall be listed and labeled in accordance with UL 1741. Systems connected to the utility grid shall use inverters listed for utility interaction.

18. 2015 IRC Section R324 (Solar energy systems).

Section R324 of the 2015 IRC shall be deemed to be amended by the addition of a new Section 324.7 to read as follows:

R324.7 Access and pathways. Roof access, pathways and spacing requirements for solar photovoltaic systems shall be provided in accordance with Sections R324.7.1 through R324.7.6.

Exceptions:

1. Roof access, pathways and spacing requirements need not be provided where an alternative ventilation method has been provided, or where vertical ventilation techniques will not be employed.
2. Detached garages and accessory structures.

R324.7.1 Size of solar photovoltaic array. Each photovoltaic array shall not exceed 150 feet (45 720 mm) in any direction.

R324.7.2 Roof access points. Roof access points shall be located:

1. In areas that establish access pathways which are independent of each other and as remote from each other as practicable so as to provide escape routes from all points along the roof;
2. In areas that do not require the placement of ground ladders over openings such as windows or doors or areas that may cause congestion or create other hazards;
3. At strong points of building construction, such as corners, pilasters, hips, and valleys, and other areas capable of supporting the live load from emergency responders;
4. Where the roof access point does not conflict with overhead obstructions such as tree limbs, wires or signs;
5. Where the roof access point does not conflict with ground obstructions such as decks, fences, or landscaping; and
6. In areas that minimize roof tripping hazards such as vents, skylights, satellite dishes, antennas, or conduit runs.

R324.7.3 Ground access areas. Ground access areas shall be located directly beneath access roofs and roof access points. The minimum width of the ground access area shall be the full width of the access roof or roof access point, measured at the eave. The minimum depth shall allow for the safe placement of ground ladders for gaining entry to the access roof.

R324.7.4 Single ridge roofs. Panels, modules, or arrays installed on roofs with a single ridge shall be located in a manner that provides two, 36 inches wide (914 mm) access pathways extending from the roof access point to the ridge. Access pathways on opposing

roof slopes shall not be located along the same plane as the truss, rafter, or other such framing system that supports the pathway.

Exceptions:

1. Roofs with slopes of 2 units vertical in 12 units horizontal (16.6 percent) and less.
2. Structures where an access roof fronts a street, driveway, or other area readily accessible to emergency responders.
3. One access pathway shall be required when a roof slope containing panels, modules or arrays is located not more than 24 inches (610 mm) vertically from an adjoining roof which contains an access roof.

R324.7.5 Hip roofs. Panels, modules, and arrays installed on dwellings with hip roofs shall be located in a manner that provides a clear access pathway not less than 36 inches wide (914 mm), extending from the roof access point to the ridge or peak, on each roof slope where panels, modules, or arrays are located.

Exceptions:

1. Roofs with slopes of 2 units vertical in 12 units horizontal (16.6 percent) and less.
2. Structures where an access roof fronts a street, driveway, or other area readily accessible to emergency responders.

R324.7.6 Roofs with valleys. Panels and modules shall not be located less than 18 inches (457 mm) from a valley.

Exception: Roofs with slopes of 2 units vertical in 12 units horizontal (16.6 percent) and less.

R324.7.7 Allowance for smoke ventilation operations. Panels and modules shall not be located less than 18 inches (457 mm) from a ridge or peak.

Exceptions:

1. Where an alternative ventilation method has been provided or where vertical ventilation methods will not be employed between the upper most portion of the solar photovoltaic system and the roof ridge or peak.
2. Detached garages and accessory structures.

19. 2015 IRC Section R326 (Swimming pools, spas and hot tubs).

Section R326 of the 2015 IRC shall be deemed to be amended to read as follows:

**SECTION R326
SWIMMING POOLS, SPAS AND HOT TUBS**

**SECTION R326.1
GENERAL**

R326.1 General. The provisions of this Section shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

**SECTION R326.2
DEFINITIONS**

R326.2 Definitions. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See "Swimming pool".

BARRIER, PERMANENT. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

BARRIER, TEMPORARY. An approved temporary fence, permanent fence, the wall of a permanent structure, any other structure, or any combination thereof that prevents access to the swimming pool by any person not engaged in the installation or construction of the swimming pool during its installation or construction.

HOT TUB. See "Swimming pool".

IN-GROUND POOL. See "Swimming pool".

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling or a one-family townhouse not more than three stories in height.

SPA, NONPORTABLE. See "Swimming pool".

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SUBSTANTIAL DAMAGE. For the purpose of determining compliance with the pool alarm provisions of this appendix, damage of any origin sustained by a swimming pool whereby the

cost of restoring the swimming pool to its before-damaged condition would equal or exceed 50 percent of the market value of the swimming pool before the damage occurred.

SUBSTANTIAL MODIFICATION. For the purpose of determining compliance with the pool alarm provisions of this appendix, any repair, alteration, addition or improvement of a swimming pool, the cost of which equals or exceeds 50 percent of the market value of the swimming pool before the improvement or repair is started. If a swimming pool has sustained substantial damage, any repairs are considered substantial modification regardless of the actual repair work performed.

SWIMMING POOL. Any structure, basin, chamber or tank which is intended for swimming, diving, recreational bathing or wading and which contains, is designed to contain, or is capable of containing water more than 24 inches (610 mm) deep at any point. This includes in-ground, above-ground and on-ground pools; indoor pools; hot tubs; spas; and, fixed-in-place wading pools.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION R326.3 SWIMMING POOLS

R326.3.1 In-ground pools. In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5.

R326.3.2 Above-ground and on-ground pools. Above- ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4.

SECTION R326.4 SPAS AND HOT TUBS

R326.4.1 Permanently installed spas and hot tubs. Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section R326.8.

R326.4.2 Portable spas and hot tubs. Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6.

SECTION R326.5 BARRIER REQUIREMENTS

R326.5.1 Application. The provisions of this section shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drowning and near- drowning by restricting access to swimming pools, spas and hot tubs.

R326.5.2 Temporary barriers. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a temporary barrier during installation or construction and shall remain in place until a permanent barrier in compliance with Section R326.5.3 is provided.

Exceptions:

1. Above-ground or on-ground pools where the pool structure is the barrier in compliance with Section R326.5.3.
2. Spas or hot tubs with a safety cover which complies with ASTM F 1346, provided that such safety cover is in place during the period of installation or construction of such hot tub or spa. The temporary removal of a safety cover as required to facilitate the installation or construction of a hot tub or spa during periods when at least one person engaged in the installation or construction is present is permitted.

R326.5.2.1 Height. The top of the temporary barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool.

R326.5.2.2 Replacement by a permanent barrier. A temporary barrier shall be replaced by a complying permanent barrier within either of the following periods:

1. 90 days of the date of issuance of the building permit for the installation or construction of the swimming pool; or
2. 90 days of the date of commencement of the installation or construction of the swimming pool.

R326.5.2.2.1 Replacement extension. Subject to the approval of the code enforcement official, the time period for completion of the permanent barrier may be extended for good cause, including, but not limited to, adverse weather conditions delaying construction.

R326.5.3 Permanent barriers. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the

- barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
 3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
 4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed $1\frac{3}{4}$ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed $1\frac{3}{4}$ inches (44 mm) in width.
 5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed $1\frac{3}{4}$ inches (44 mm) in width.
 6. Maximum mesh size for chain link fences shall be a $2\frac{1}{4}$ -inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than $1\frac{3}{4}$ inches (44 mm).
 7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than $1\frac{3}{4}$ inches (44 mm).
 8. Gates shall comply with the requirements of Section R3265.2, Items 1 through 7, and with the following requirements:
 - 8.1. All gates shall be self-closing. In addition, if the gate is a pedestrian access gate, the gate shall open outward, away from the pool.
 - 8.2. All gates shall be self-latching, with the latch handle located within the enclosure (i.e., on the pool side of the enclosure) and at least 40 inches (1016 mm) above grade. In addition, if the latch handle is located less than 54 inches (1372 mm) from the bottom of the gate, the latch handle shall be located at least 3 inches (76 mm) below the top of the gate, and neither the gate nor the barrier shall have any opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the latch handle.
 - 8.3. All gates shall be securely locked with a key, combination or other child proof lock sufficient to prevent access to the swimming pool through such gate when the swimming pool is not in use or supervised.
 9. Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:
 - 9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or
 - 9.2. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if
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present, are opened. The alarm shall be listed in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touch pad or switch, to temporarily deactivate the alarm for a single opening. Deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or

- 9.3. Other means of protection, such as self-closing doors with self-latching devices, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.
10. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:
 - 10.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access; or
 - 10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section R326.5.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

R326.5.4 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Section R326.5.2, Item 9.

R326.5.5 Prohibited locations. Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them.

R326.5.6 Barrier exceptions. Spas or hot tubs with a safety cover which complies with ASTM F 1346 shall be exempt from the provisions of this appendix.

SECTION R326.6 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

R326.6.1 General. Suction outlets shall be designed to produce circulation throughout the pool or spa. Single-outlet systems, such as automatic vacuum cleaner systems, or multiple suction outlets, whether isolated by valves or otherwise, shall be protected against user entrapment.

R326.6.1.1 Compliance alternative. Suction outlets may be designed and installed in accordance with ANSI/APSP-7.

R326.6.2 Suction fittings. Pool and spa suction outlets shall have a cover that conforms to ANSI/ASME A112.19.8M, or an 18 inch by 23 inch (457mm by 584 mm) drain grate or larger, or an approved channel drain system.

Exception: Surface skimmers.

R326.6.3 Atmospheric vacuum relief system required. Pool and spa single- or multiple-outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. This vacuum relief system shall include at least one approved or engineered method of the type specified herein, as follows:

1. Safety vacuum release system conforming to ASME A112.19.17; or
2. An approved gravity drainage system.

R326.6.4 Dual drain separation. Single or multiple pump circulation systems have a minimum of two suction outlets of the approved type. A minimum horizontal or vertical distance of 3 feet (914 mm) shall separate the outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum-relief-protected line to the pump or pumps.

R326.6.5 Pool cleaner fittings. Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least 6 inches (152 mm) and not more than 12 inches (305 mm) below the minimum operational water level or as an attachment to the skimmer(s).

SECTION R326.7 SWIMMING POOL AND SPA ALARMS

R326.7.1 Applicability. A swimming pool or spa installed, constructed or substantially modified after December 14, 2006, shall be equipped with an approved pool alarm.

Exceptions:

1. A hot tub or spa equipped with a safety cover which complies with ASTM F1346.
2. A swimming pool (other than a hot tub or spa) equipped with an automatic power safety cover which complies with ASTM F1346.

Pool alarms shall comply with ASTM F2208, and shall be installed, used and maintained in accordance with the manufacturer's instructions and this section.

R326.7.2 Multiple alarms. A pool alarm must be capable of detecting entry into the water at any point on the surface of the swimming pool. If necessary to provide detection capability at every point on the surface of the swimming pool, more than one pool alarm shall be provided.

R326.7.3 Alarm activation. Pool alarms shall activate upon detecting entry into the water and shall sound poolside and inside the dwelling.

R326.7.4 Prohibited alarms. The use of personal immersion alarms shall not be construed as compliance with this section.

**SECTION R326.8
STANDARDS**

R326.8.1 General. The following table lists the standards that are referenced in Section R326. The standards are listed by the promulgating agency of the standard, the standard identification, the effective date and title, and the section(s) of Section R326 that reference the standard. The application of the reference standards shall be as specified in Section 102.5.

Standard number-	Title	Code Section where referenced
ANSI	American National Standards Institute 11 West 42nd Street, New York, NY 10036	
ANSI/APSP 7-13	Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins	R326.6.1
ANSI/NSPI-3-99	Standard for Permanently Installed Residential Spas	R326.4.1
ANSI/NSPI-4-99	Standard for Above-ground/On-ground Residential Swimming Pools	R326.3.2
ANSI/NSPI-5-03	Standard for Residential In-ground Swimming Pools	R326.3.1
ANSI/NSPI-6-99	Standard for Residential Portable Spas	R326.4.2
ANSI/ASME A112.19.8M-1987 (R1996)	Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathing Appliances	R326.6.2
-	-	-
APSP	Association of Pool and Spa Professionals 2111 Eisenhower Avenue, Suite 500, Alexandria, VA 22314-4695	
ANSI/APSP 7-13	Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins	R326.6.1
-	-	-
ASME	American Society of Mechanical Engineers Three Park Avenue, New York, NY 10016-5990	
ANSI/ASME A112.19.8 2007	Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathing Appliances	R326.6.2
ASME A112.19.17-2002	Manufacturers Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub and Wading Pool	R326.6.3
-	-	-
ASTM	ASTM International	

	100 Barr Harbor Drive, West Conshohocken, PA 19428	
ASTM F 1346-91 (1996)	Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs	R326.5.2, R326.5.3, R326.5.6, R326.7.1
ASTM F2208-2008	Standard Specification for Pool Alarms	AG107.1
- -	- -	-
NSPI*	National Spa and Pool Institute 2111 Eisenhower Avenue, Alexandria, VA 22314	
ANSI/NSPI-3-99	Standard for Permanently Installed Residential Spas	R326.4.1
ANSI/NSPI-4-99	Standard for Above-ground/On-ground Residential Swimming Pools	R326.3.2
ANSI/NSPI-5-03	Standard for Residential In-ground Swimming Pools	R326.3.1
ANSI/NSPI-6-99	Standard for Residential Portable Spas	R326.4.2
- -	- -	-
UL	Underwriters Laboratories, Inc. 333 Pfingsten Road, Northbrook, Illinois 60062-2096	
UL2017-2000	Standard for General-purpose Signaling Devices and Systems with Revisions through June 2004	R326.5.3

* The NSPI documents are available through APSP.

20. 2015 IRC Sections R404.2.1 (Identification), R502.1.1 (Sawn lumber), R602.2.1 (Sawn lumber) and R802.1.1 (Sawn lumber).

Sections R404.2.1, R502.1.1, R602.2.1 and R802.1.1 of the 2015 IRC shall be deemed to be amended by the addition of an exception after Sections R404.2.1, R502.1.1, R602.2.1 and R802.1.1 to read as follows:

- Exception:** Dimension lumber which is neither identified by a grade mark nor issued a certificate of inspection by a lumber grading or inspection agency may be used for load-bearing purposes under the following conditions when authorized by the authority having jurisdiction:
1. The producing mill shall sell or provide the lumber directly to the ultimate consumer or the consumer's contract builder for use in an approved structure.
 2. The producing mill shall certify in writing to the consumer or contract builder on a

form to be produced by the authority having jurisdiction that the quality and safe working stresses of such lumber are equal to or exceed No. 2 grade of the species in accordance with the conditions set forth in DOC PS 20. Such certification shall be filed as part of the building permit application.

21. 2015 IRC Section N1101.1 (Scope).

Section N1101.1 of the 2015 IRC shall be deemed to be amended by the addition of an exception to read as follows:

Exception: The provisions of this chapter shall not be applicable to building systems which are demonstrated to derive energy solely from renewable energy sources.

22. 2015 IRC Chapter 14 (Heating and cooling equipment and appliances).

Chapter 14 of the 2015 IRC shall be deemed to be amended by the addition of Section M1416 to read as follows:

**SECTION M1416
PORTABLE KEROSENE HEATER**

M1416.1 General. Unvented portable kerosene-fired heaters tested and listed in accordance with UL 647 are approved by the Secretary of State for use in New York State if packaged for sale with all provisions required in New York State Real Property Law Article 7A Section 239-a(7). Unvented portable kerosene-fired heaters shall not be located in, or obtain combustion air from, any of the following rooms or spaces: sleeping rooms, bathrooms, toilet rooms, or storage closets. Portable kerosene heaters shall be prohibited in buildings of occupancy groups A, E, I, R-1, R-2, R-3 and R-4 (except for one- and two-family homes and townhouses). The use of unvented portable kerosene-fired heaters is further regulated by New York State Real Property Law Article 7A.

23. 2015 IRC Section G2411.1.1 (310) (CSST).

Section G2411.1.1 of the 2015 IRC shall be deemed to be deleted.

24. 2015 IRC Section G2411 (310) (Electrical bonding).

Section G2411 of the 2015 IRC shall be deemed to be amended by the addition of new

Sections G2411.2 and G2411.3 to read as follows:

G2411.2 (310.2) Gas pipe bonding – CSST. A gas piping system that contains any CSST shall be electrically continuous and shall be directly bonded to the electrical service grounding electrode system. No portion of the gas piping system shall be used as or considered to be a grounding electrode or a grounding electrode conductor. CSST shall be installed and bonded in accordance with Section 2411.2, and the stricter of:

1. The requirements set forth in the CSST manufacturer’s installation instructions, or
2. The requirements set forth Sections 2411, and 2415.7 of this code.

Exception: Where all of the CSST contained in a gas piping system is listed CJ-CSST and the gas piping system satisfies all of the other criteria set forth in Section 2411.3 of this code, such gas piping system shall comply with said Section 2411.3 for CJ-CSST.

G2411.2.1 (310.2.1) Bonding jumper. Where the electric service for the individual installation is 200 amperes or less, the bonding jumper shall not be smaller than 6 AWG copper wire or 4 AWG aluminum or copper-clad aluminum wire, and shall be permanently connected to the grounding electrode system. Where the electric service for the individual installation is more than 200 amperes, the bonding jumper size shall be determined in accordance with Table 250.66 and Sections 250.66(A) through 250.66(C) of NFPA 70, and shall be permanently connected to the grounding electrode system.

G2411.2.2 (310.2.2) Bonding clamp. The bonding jumper shall be connected to the gas piping system with a bonding clamp that is listed for the material of the bonding jumper and for the material of the component of the gas piping system to which the bonding clamp is attached. The bonding clamp shall be attached to the gas piping system on the downstream side of the gas meter or regulator, in an unconcealed and readily accessible space, as close as practicable to the point where the bonding jumper is connected to the electrical service grounding electrode system, and shall not exceed 75 feet. Any additional grounding electrodes used shall be bonded to the electrical service grounding electrode system.

G2411.2.2.1 (310.2.2.1) Bonding connections. Bonding connections shall be in accordance with NFPA 70.

G2411.2.2.2 (310.2.2.2) Connection devices. Devices used for making the bonding connections shall be listed for the application in accordance with UL 467.

G2411.2.2.3 (310.2.3) Prohibited uses. CSST shall not be supported on or by other electrically conductive systems including copper water pipe, electric power cables, air-conditioning and heating ducts, communication cables and structural steel beams. Electrical wiring, including the bonding conductor, shall be supported and secured independently of the CSST so that it does not come in contact with the CSST.

G2411.3 (310.3) Gas pipe bonding – listed CJ-CSST. Where:

1. All of the CSST contained in a gas piping system consists of listed CJ-CSST,
2. Such gas piping system is electrically continuous, and
3. At least one appliance is:
 - i. Connected to such gas piping system,
 - ii. Connected to a grounded electrical circuit, and
 - iii. Connected to the equipment grounding conductor of such electrical circuit by a bonding conductor that is 14 AWG (or larger) copper,

Such gas piping system shall be installed and bonded in accordance with the stricter of:

1. The requirements set forth in the listed CJ-CSST manufacturer's installation instructions, or
2. The requirements set forth in Sections G2411.3.1, G2411.3.2, G2411.3.3, and G2415.7.

G2411.3.1 (310.3.1) Bonding. A gas piping system that contains only listed CJ-CSST and satisfies all the other criteria specified in Section 2411 of this code shall be considered to be bonded to an effective ground-fault current path, and shall not be required to be directly bonded as prescribed by Section 2411.3 of this code. However, nothing in this Section 2411.3.1 shall prohibit the bonding any such gas piping system in any manner described in Section 250.104(B) of NFPA 70.

G2411.3.2 (310.3.2) Grounding electrodes. No portion of the gas piping system shall be used as or considered to be a grounding electrode or a grounding electrode conductor.

G2411.3.3 (310.3.3) Prohibited uses. The listed CJ-CSST shall not be supported on or by other electrically conductive systems including copper water pipe, electric power cables, air-conditioning and heating ducts, communication cables and structural steel beams. Electrical wiring shall be supported and secured independently of the listed CJ-CSST so that it does not come in contact with the listed CJ-CSST.

25. 2015 IRC Section G2415.7 (404.7) (Protection against physical damage).

Section G2415.7 of the 2015 IRC shall be deemed to be amended to read as follows:

G2415.7 (404.7) Protection against physical damage. In concealed locations, where piping other than black or galvanized steel is installed through holes or notches in wood studs, joists, rafters or similar members less than 1.75 inches (44.45 mm) from the nearest edge of the member, the pipe shall be protected by shield plates. Such shield plates shall comply with the requirements of Section 2415.7.1, shall cover the area of the pipe where the member is notched or bored, and shall extend a minimum of 4 inches (102 mm) above sole plates, below top plates and to each side of a stud, joist or rafter. The movement of piping made of CSST (including, but not limited to, piping made of listed CJ-CSST) shall not be otherwise constrained by straps, clips or other support devices. In addition, where CSST (including, but not limited to, listed CJ-CSST) is installed in a concealed location and parallel to any joist, rafter, or similar

member, the CSST shall be protected by shield plates in any area where the CSST is not:

1. Physically supported in a manner that ensures the CSST will always be at least 1.75 inches (44.45 mm) away from the nearest edge of any member, or
2. Encased in a protective metal pipe made of schedule 40 steel or iron pipe or in a protective pipe sleeve made of a material approved by the code enforcement official as the equivalent of schedule 40 steel or iron pipe.

Such shield plates shall comply with the requirements of Section 2415.7.1, shall cover the area where the CSST is located, and shall extend a minimum of 4 inches (102 mm) to each side of the CSST.

G2415.7.1 (404.7.1) Shield plates. In all cases, shield plates shall be certified or listed as complying with ANSI LC-1. In addition, in the case of piping made of CSST, shield plates shall be listed for use with the manufacturer's CSST system.

26. 2015 IRC Section G2431 (General).

Section G2431 (601) of the 2015 IRC shall be deemed to be amended by adding Section G2431.2 to read as follows:

G2431.2 Flame safeguard device. All fuel gas space heating appliances installed or used in a building occupied as a residence shall be equipped with an automatic flame safeguard device that shall shut off the fuel supply to the main burner or group of burners when the flame or pilot light thereof is extinguished.

27. 2015 IRC Section P2602 (Individual water supply and sewage disposal).

Section P2602 of the 2015 IRC shall be deemed to be amended by adding Section P2602.1.1 and P2602.1.2 to read as follows:

P2602.1.1 Individual water supplies. Individual water supplies (private wells) shall be installed by a well driller registered with the Department of Environmental Conservation and be in compliance with the provisions of Appendix 5-B of the New York State Department of Health regulations (10NYCRR Appendix 5-B.)

P2602.1.2 Individual sewage treatment system. Individual sewage treatment systems shall be constructed in conformance with the provisions of Appendix 75-A (Wastewater Treatment Standards-Individual Household Systems) of the New York State Department of Health, Sanitary Code (10 NYCRR).

28. 2015 IRC Section P2902.1 (General).

Section P2902.1 of the 2015 IRC shall be deemed to be amended to read as follows:

P2902.1 General. A potable water supply system shall be designed and installed as to prevent contamination from non-potable liquids, solids or gases being introduced into the potable water supply. Connections shall not be made to a potable water supply in a manner that could contaminate the water supply or provide a cross-connection between the supply and a source of contamination unless an approved backflow-prevention device is provided. Cross-connections between an individual water supply and a potable public water supply shall be prohibited, except where an appropriate cross control connection device is installed in accordance with Subpart 5-1.31 of the New York State Sanitary Code (10 NYCRR 5-1).

29. 2015 IRC Section P2902.3 (Backflow prevention).

Section P2902.3 of the 2015 IRC shall be deemed to be amended to read as follows:

P2902.3 Backflow protection. A means of protection against backflow shall be provided in accordance with Sections P2902.3.1 through P2902.3.6. Backflow prevention applications shall conform to Table P2902.3, except as specifically stated in Sections P2902.4 through P2902.5.5. On-site containment is regulated by Subpart 5-1.31 of the New York State Sanitary Code (10 NYCRR) and may be required by the provider of public water, depending on the degree of hazard, to protect public water systems through the use of appropriate backflow prevention device installations.

30. 2015 IRC Section E3401.2 (Scope).

Section E3401.2 of the IRC shall be deemed to be amended by adding Section E3401.2.1

to read as follows:

E3401.2.1 Owner Occupied one-family dwellings. Owner occupied one-family dwellings and accessory structures shall not be required to be provided with electrical power, wiring, devices and equipment, subject to the approval of the code enforcement official. If an on-site electrical power system is installed or used, all electrical wiring, devices and equipment in such system shall comply with Part VIII – Electrical of the IRC.

31. 2015 IRC Section E3609.7 (Bonding other metal piping).

Section E3609.7 of the 2015 IRC shall be deemed to be amended by the addition of an exception to read as follows:

Exception: Gas piping systems that contain corrugated stainless steel tubing (CSST) shall be installed and bonded in accordance with Section G2411 of this code.

32. 2015 IRC Appendix E (Manufactured housing used as dwellings).

Appendix E of the 2015 IRC shall be deemed to be amended to read as follows:

**SECTION AE101
SCOPE**

AE101.1 General. These provisions shall be applicable only to a manufactured home used as a single dwelling unit and shall apply to the following:

1. Construction, alteration and repair of any foundation system which is necessary to provide for the installation of a manufactured home unit.
2. Construction, installation, addition, alteration, repair or maintenance of the building service equipment which is necessary for connecting manufactured homes to water, fuel, or power supplies and sewage systems.
3. Alterations, additions or repairs to existing manufactured homes. The construction, alteration, moving, demolition, repair and use of accessory buildings and structures and their building service equipment shall comply with the requirements of this code.

These provisions shall not be applicable to the design and construction of manufactured homes and shall not be deemed to authorize either modifications or additions to manufactured homes where otherwise prohibited.

Exception: In addition to these provisions, new and replacement manufactured homes to be located in flood hazard areas as established by Table R301.2(1) of the 2015 IRC shall meet the applicable requirements of Section R324 of the 2015 IRC.

**SECTION AE102
APPLICATION TO EXISTING MANUFACTURED HOMES AND BUILDING
SERVICE EQUIPMENT**

AE102.1 General. Manufactured homes and their building service equipment to which additions, alterations or repairs are made shall comply with all the requirements of these provisions for new facilities, except as specifically provided in this section.

AE102.2 Additions, alterations or repairs. Additions made to a manufactured home shall conform to one of the following:

1. Be certified under the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. Section 5401, et seq.).

2. Be designed and constructed to conform to the applicable provisions of the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. Section 5401, et seq.).
3. Be designed and constructed in conformance with new construction requirements of this code.

Additions shall be structurally separated from the manufactured home.

Exception: A structural separation need not be provided when structural calculations are provided to justify the omission of such separation.

Alterations or repairs may be made to any manufactured home or to its building service equipment without requiring the existing manufactured home or its building service equipment to comply with all the requirements of these provisions, provided the alteration or repair conforms to Appendix J of this code, and provided further that no hazard to life, health or safety will be created by such additions, alterations or repairs.

Alterations or repairs to an existing manufactured home which are nonstructural and do not adversely affect any structural member or any part of the building or structure having required fire protection may be made with materials equivalent to those of which the manufactured home structure is constructed.

Exception: The installation or replacement of glass shall be required for new installations.

AE102.3 Existing installations. Building service equipment lawfully in existence at the time of the adoption of the applicable codes may have their use, maintenance or repair continued if the use, maintenance or repair is in accordance with the original design and no hazard to life, health or property has been created by such building service equipment.

AE102.4 Existing occupancy. Manufactured homes which are in existence at the time of the adoption of these provisions may have their existing use or occupancy continued if such use or occupancy was legal at the time of the adoption of these provisions, provided such continued use is not dangerous to life, health and safety.

The use or occupancy of any existing manufactured home shall not be changed unless such change in use or occupancy is made to conform to all applicable provisions of this code. Upon any change in use or occupancy, the manufactured home shall cease to be classified as such within the intent of these provisions.

AE102.5 Maintenance. All manufactured homes and their building service equipment, existing and new, and all parts thereof shall be maintained in a safe and sanitary condition. All device or safeguards which are required by applicable codes or by the Manufactured Home Standards shall be maintained in conformance with the code or standard under which it was installed. The owner or the owner's designated agent shall be responsible for the maintenance of manufactured homes, accessory buildings, structures and their building service equipment. To determine compliance with this subsection, the building official may cause any

manufactured home, accessory building or structure to be re-inspected.

AE102.6 Relocation. Manufactured homes which are to be relocated within this jurisdiction shall have a manufacturer's label certifying compliance with applicable Department of Housing and Urban Development (HUD) Manufactured Home Construction and Safety Standards, and a data plate, affixed in the manufacturing facility, bearing not less than the following information:

1. The statement: "This manufactured home is designed to comply with the federal mobile home construction and safety standards in force at the time of manufacture."
2. Reference to the structural zone and wind zone for which the home is designed.
3. Data relative to the heating and insulation zone and outdoor design temperature.

Exception: Mobile homes manufactured before June 15, 1976, need not comply with these provisions if they have been inspected by an agency or individual acceptable to the code enforcement official to determine that they are:

1. Structurally sound;
2. Free of heating and electrical system hazards.

Written documentation signed by the agency or individual performing the inspection shall be submitted to the code enforcement official.

SECTION AE201 DEFINITIONS

AE201.1 General. For the purpose of these provisions, certain abbreviations, terms, phrases, words and their derivatives shall be construed as defined or specified herein.

ACCESSORY BUILDING. Any building or structure, or portion thereto, located on the same property as a manufactured home which does not qualify as a manufactured home as defined herein.

BUILDING SERVICE EQUIPMENT. Refers to the plumbing, mechanical and electrical equipment including piping, wiring, fixtures and other accessories which provide sanitation, lighting, heating ventilation, cooling, fire protection and facilities essential for the habitable occupancy of a manufactured home or accessory building or structure for its designated use and occupancy.

MANUFACTURED HOME. A structure transportable in one or more sections that, in the traveling mode, is 8 feet (2438 mm) or more in width or 40 feet (12192 mm) or more in length or, when erected on site, is 320 square feet (29.7m²) minimum, and that was built on or after June 15, 1976, on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities and includes the plumbing, heating, air conditioning and electrical systems contained therein. The term "*manufactured home*" shall also include any structure that meets all the requirements of this definition except

the size requirements and with respect to which the manufacturer voluntarily files a certification required by the federal department of housing and urban development and complies with the standards established under the national manufactured housing construction and safety act of 1974, as amended. The term "*manufactured home*" shall not include any self-propelled recreational vehicle.

A label certifying compliance with the Standard for Mobile Homes, NFPA 501, ANSI 119.1, in effect at the time of manufacture is deemed acceptable. For the purpose of these provisions, a mobile home shall be considered a manufactured home.

MANUFACTURED HOME INSTALLATION. Construction which is required for the installation of a manufactured home, including the construction of the foundation system, required structural connections thereto and the installation of on-site water, gas, electrical and sewer systems and connections thereto which are necessary for the normal operation of the manufactured home.

MANUFACTURED HOME STANDARDS. The Manufactured Home Construction and Safety Standards as promulgated by the United States Department of Housing and Urban Development.

MOBILE HOME. A moveable or portable dwelling unit that was built prior to June 15, 1976, and designed and constructed to be towed on its own chassis, composed of frame and wheels, connected to utilities, and designed and constructed without a permanent foundation for year-round living, excluding travel trailers.

SECTION E301 RESERVED

SECTION E302 RESERVED

SECTION E303 RESERVED

SECTION E304 RESERVED

SECTION E305 RESERVED

SECTION E306 RESERVED

SECTION E307 RESERVED

**SECTION E401
OCCUPANCY CLASSIFICATION**

AE401.1 Manufactured homes. A manufactured home shall be limited in use to use as a single dwelling unit.

AE401.2 Accessory buildings. Accessory buildings shall be classified as to occupancy by the code enforcement official as set forth in this code.

SECTION AE402 LOCATION ON PROPERTY

AE402.1 General. Manufactured homes and accessory buildings shall be located on the property in accordance with Section R302 of this code.

SECTION AE501 DESIGN

AE501.1 General. A manufactured home shall be installed on a foundation system which is designed and constructed to sustain within the stress limitations specified in this code and all loads specified in this code, and the installation instructions included within the consumer manual(s) provided by the manufacturer.

Exception: Where installation instructions are not provided, foundation and anchorage systems which are constructed in accordance with the methods specified in Section AE600 of these provisions, or applicable provisions of the NCSBCS/ANSI A225-1 standards, or which are designed by a registered design professional, shall be deemed to meet the requirements of this code.

AE501.2 Installation instructions. The installation instructions as included in the consumer manual(s) provided by the manufacturer of the manufactured home shall be used to determine permissible points of support for vertical loads and points of attachment for anchorage systems used to resist horizontal and uplift forces. Where manufactured homes are relocated, and the installation instructions are not available, such points of support and attachment shall be determined in accordance with applicable provisions of the NCSBCS/ANSI A225-1 standards or by a registered design professional.

SECTION AE502 FOUNDATION SYSTEMS

AE502.1 General. Foundation systems designed and constructed in accordance with this section may be considered as a permanent installation.

AE502.2 Soil classification. The classification of the soil at each manufactured home site shall be determined in accordance with the requirements of Section R401 of this code.

When required by the code enforcement official, the soil classification design bearing capacity and lateral pressure shall be shown on the plans.

AE502.3 Footings and foundations. Footings and foundations, unless otherwise specifically provided, shall be constructed of materials specified by this code for the intended use and in all cases shall extend below the frost line. Footings of concrete and masonry shall be of solid material. Foundations supporting untreated wood shall extend at least 8 inches (203 mm) above the adjacent finish grade. Footings shall have a minimum depth below finished grade of 12 inches (305 mm) unless a greater depth is recommended by a foundation investigation.

Exception: Where a foundation system is designed by a registered design professional so that it will otherwise be protected from the effects of frost, such foundation system is not required to extend below the frost line.

Piers and bearing walls shall be supported on masonry or concrete foundations or piles, or other systems identified in the installation instructions included in the consumer manual(s) provided by the manufacturer, or in the referenced standard, NCSBCS/ANSI A225-1-1994 American National Standard Manufactured Home Installations or other approved foundation systems which shall be of sufficient capacity to support all loads.

AE502.4 Foundation design. When a design is provided, the foundation system shall be designed in accordance with the applicable structural provisions of this code and shall be designed to minimize differential settlement. Where a design is not provided, the minimum foundation requirements shall be as set forth in this code.

AE502.5 Drainage. Provisions shall be made for the control and drainage of surface water away from the manufactured home.

AE502.6 Under-floor clearances—ventilation and access. A minimum clearance of 12 inches (305 mm) shall be maintained beneath the lowest member of the floor support framing system. Clearances from the bottom of wood floor joists or perimeter joists shall be as specified in this code.

Under-floor spaces shall be ventilated with openings as specified in Section 408 of this code. If combustion air for one or more heat-producing appliances is taken from within the under-floor spaces, ventilation shall be adequate for proper appliance operation.

Under-floor access openings shall be provided. Such openings shall be not less than 18 inches (457 mm) in any dimension and not less than 3 square feet (0.279 m²) in area and shall be located so that any water supply and sewer drain connections located under the manufactured home are accessible.

SECTION AE503 SKIRTING AND PERIMETER ENCLOSURES

AE503.1 Skirting and permanent perimeter enclosures. Skirting and permanent perimeter enclosures shall be installed only where specifically required by other laws or ordinances.

Skirting, when installed, shall be of material suitable for exterior exposure and contact with the ground. Permanent perimeter enclosures shall be constructed of materials as required by this code for regular foundation construction.

Skirting shall be installed in accordance with the installation instructions included in the consumer manual(s) provided by the manufacturer. Skirting shall be adequately secured to assure stability, to minimize vibration and susceptibility to wind damage, and to compensate for possible frost heave.

AE503.2 Retaining walls. Where retaining walls are used as a permanent perimeter enclosure, they shall resist the lateral displacements of soil or other materials and shall conform to this code as specified for foundation walls. Retaining walls and foundation walls shall be constructed of approved treated wood, concrete, masonry or other approved materials or combination of materials as for foundations as specified in this code. Siding materials shall extend below the top of the exterior of the retaining or foundation wall or the joint between siding and enclosure wall shall be flashed in accordance with this code.

SECTION AE504 STRUCTURAL ADDITIONS

AE504.1 General. Accessory buildings shall not be structurally supported by or attached to a manufactured home unless engineering calculations are submitted to substantiate any proposed structural connection.

SECTION AE505 BUILDING SERVICE EQUIPMENT

AE505.1 General. The installation, alteration, repair, replacement, addition to or maintenance of the building service equipment within the manufactured home shall conform to regulations set forth in the Manufactured Home Standards. Such work which is located outside the manufactured home shall comply with this code.

SECTION AE506 EXITS

AE506.1 Site development. Exterior stairways and ramps which provide egress to the public way shall comply with applicable provisions of this code.

AE506.2 Accessory buildings. Every accessory building or portion thereof shall be provided with exits as required by this code.

**SECTION AE507
OCCUPANCY, FIRE SAFETY AND ENERGY CONSERVATION STANDARDS**

AE507.1 General. Alterations made to a manufactured home subsequent to its initial installation shall conform to the occupancy, fire-safety and energy conservation requirements set forth in the Manufactured Home Standards.

**SECTION AE600
SPECIAL REQUIREMENTS FOR FOUNDATION SYSTEMS**

AE600.1 General. Section AE600 through Section AE605 are applicable only when installation instructions included in the consumer manual(s) provided by the manufacturer are not provided.

**SECTION AE601
FOOTINGS AND FOUNDATIONS**

AE601.1 General. The capacity of individual load-bearing piers and their footings shall be sufficient to sustain all loads specified in this code within the stress limitations specified in this code. Footings shall be placed level on firm, undisturbed soil or an engineered fill which is free of organic material, such as weeds and grasses. Where used, an engineered fill shall provide a minimum load-bearing capacity of not less than 1,000 psf (48 kN/m²). Continuous footings shall conform to the requirements of this code. Section AE502 of this code shall apply to footings and foundations constructed under the provisions of this section.

**SECTION AE602
PIER CONSTRUCTION**

AE602.1 General. Piers shall be designed and constructed to distribute loads evenly. Multiple section homes may have concentrated roof loads which will require special consideration. Load-bearing piers may be constructed utilizing one of the methods listed below. Such piers shall be considered to resist only vertical forces acting in a downward direction. They shall not be considered as providing any resistance to horizontal loads induced by wind or earthquake forces.

1. A prefabricated load-bearing device that is listed and labeled for the intended use.
2. Mortar shall comply with ASTM C 270 Type M, S or N; this may consist of one part Portland cement, one-half part hydrated lime and four parts sand by volume. Lime shall not be used with plastic or waterproof cement
3. A cast-in-place concrete pier with concrete having specified compressive strength at 28 days of 2,500 psi (17 225 kPa).

Alternate materials and methods of construction may be used for piers which have been

designed by a registered design professional.

Caps and leveling spacers may be used for leveling of the manufactured home. Spacing of piers shall be as specified in the installation instructions included in the consumer manual(s) provided by the manufacturer, if available, or by a registered design professional.

SECTION AE603 HEIGHT OF PIERS

AE603.1 General. Piers constructed as indicated in Section AE602 may have heights as follows:

1. Except for corner piers, piers 36 inches (914 mm) or less in height may be constructed of masonry units, placed with cores or cells vertically. Piers shall be installed with their long dimension at right angles to the main frame member they support and shall have a minimum cross-sectional area of 128 square inches (82 560 mm²). Piers shall be capped with minimum 4-inch (102 mm) solid masonry units or equivalent.
2. Piers between 36 and 80 inches (914 mm and 2032 mm) in height and all corner piers over 24 inches (610 mm) in height shall be at least 16 inches by 16 inches (406 mm by 406 mm) consisting of interlocking masonry units and shall be fully capped with minimum 4-inch (102 mm) solid masonry units or equivalent.
3. Piers over 80 inches (2032 mm) in height may be constructed in accordance with the provisions of Item 2 above, provided the piers shall be filled solid with grout and reinforced with four continuous No. 5 bars. One bar shall be placed in each corner cell of hollow masonry unit piers or in each corner of the grouted space of piers constructed of solid masonry units.
4. Cast-in-place concrete piers meeting the same size and height limitations of Items 1, 2 and 3 above may be substituted for piers constructed of masonry units.

SECTION AE604 ANCHORAGE INSTALLATIONS

AE604.1 Ground anchors. Ground anchors shall be designed and installed to transfer the anchoring loads to the ground. The load-carrying portion of the ground anchors shall be installed to the full depth called for by the manufacturer's installation directions and shall extend below the established frost line into undisturbed soil.

Manufactured ground anchors shall be listed and installed in accordance with the terms of their listing and the anchor manufacturer's instructions and shall include means of attachment of ties meeting the requirements of Section AE605. Ground anchor manufacturer's installation instructions shall include the amount of preload required and load capacity in various types of soil. These instructions shall include tensioning adjustments which may be needed to prevent damage to the manufactured home, particularly damage that can be caused by frost heave. Each ground anchor shall be marked with the manufacturer's identification and listed model

identification number which shall be visible after installation. Instructions shall accompany each listed ground anchor specifying the types of soil for which the anchor is suitable under the requirements of this section.

Each approved ground anchor, when installed, shall be capable of resisting an allowable working load at least equal to 3,150 pounds (14 kN) in the direction of the tie plus a 50 percent overload [4,725 pounds (21 kN) total] without failure. Failure shall be considered to have occurred when the anchor moves more than 2 inches (51 mm) at a load of 4,725 pounds (21 kN) in the direction of the tie installation. Those ground anchors which are designed to be installed so that loads on the anchor are other than direct withdrawal shall be designed and installed to resist an applied design load of 3,150 pounds (14 kN) at 40 to 50 degrees from vertical or within the angle limitations specified by the home manufacturer without displacing the tie end of the anchor more than 4 inches (102 mm) horizontally. Anchors designed for connection of multiple ties shall be capable of resisting the combined working load and overload consistent with the intent expressed herein.

When it is proposed to use ground anchors and the soil characteristics at a given site are such as to render the use of ground anchors advisable, or when there is doubt regarding the ability of the ground anchors to obtain their listed capacity, a representative field installation shall be made at the site in question and tested to demonstrate ground anchor capacity.

AE604.2 Anchoring equipment. Anchoring equipment, when installed as a permanent installation, shall be capable of resisting all loads as specified within these provisions. When the stabilizing system is designed by an engineer or architect licensed by the state to practice as such, alternative designs may be used, providing the anchoring equipment to be used is capable of withstanding a load equal to 1.5 times the calculated load. All anchoring equipment shall be listed and labeled as being capable of meeting the requirements of these provisions. Anchors as specified in this code may be attached to the main frame of the manufactured home by an approved ³/₁₆-inch-thick (4.76 mm) slotted steel plate anchoring device.

Anchoring systems shall be so installed as to be permanent. Anchoring equipment shall be so designed to prevent self-disconnection with no hook ends used.

AE604.3 Resistance to weather deterioration. All anchoring equipment, tension devices and ties shall have a resistance to deterioration as required by this code.

AE604.4 Tensioning devices. Tensioning devices, such as turnbuckles or yoke-type fasteners, shall be ended with clevis or welded eyes.

SECTION AE605 TIES, MATERIALS AND INSTALLATION

AE605.1 General. Steel strapping, cable, chain or other approved materials shall be used for ties. All ties shall be fastened to ground anchors and drawn tight with turnbuckles or other

adjustable tensioning devices or devices supplied with the ground anchor. Tie materials shall be capable of resisting an allowable working load of 3,150 pounds (14 kN) with no more than 2 percent elongation and shall withstand a 50 percent overload [4,750 pounds (21 kN)]. Ties shall comply with the weathering requirements of Section AE604.3. Ties shall connect the ground anchor and the main structural frame. Ties shall not connect to steel outrigger beams which fasten to and intersect the main structural frame unless specifically stated in the installation instructions included in the consumer manual(s) provided by the manufacturer. Connection of cable ties to main frame members shall be ⁵/₈-inch (15.9 mm) closed-eye bolts affixed to the frame member in an approved manner. Cable ends shall be secured with at least two U-bolt cable clamps with the "U" portion of the clamp installed on the short (dead) end of the cable to assure strength equal to that required by this section.

Wood floor support systems shall be fixed to perimeter foundation walls in accordance with provisions of this code. The minimum number of ties required per side shall be sufficient to resist the wind load stated in this code. Ties shall be evenly spaced as practicable along the length of the manufactured home with the distance from each end of the home and the tie nearest that end not exceeding 8 feet (2438 mm). When continuous straps are provided as vertical ties, such ties shall be positioned at rafters and studs. Where a vertical tie and diagonal tie are located at the same place, both ties may be connected to a single anchor, provided the anchor used is capable of carrying both loadings. Multi-section manufactured homes require diagonal ties only. Diagonal ties shall be installed on the exterior main frame and slope to the exterior at an angle of 40 to 50 degrees from the vertical or within the angle limitations specified by the home manufacturer. Vertical ties which are not continuous over the top of the manufactured home shall be attached to the main frame.

**SECTION AE606
REFERENCE STANDARDS**

Standard Number	Title	Referenced in code section number
ASTMC 270-04	Specification for Mortar for Unit Masonry	AE602
NFPA 501-2013	Standard on Manufactured Housing	AE201

33. 2015 IRC Appendix J (Existing buildings and structures).

Appendix J of the 2015 IRC shall be deemed to be amended to read as follows:

**APPENDIX J
EXISTING BUILDINGS AND STRUCTURES**

**AJ1
ADMINISTRATION**

**SECTION AJ101
PURPOSE AND INTENT**

AJ101.1 Scope. The provisions of this appendix shall apply to the repair, alteration, change of occupancy, addition and relocation of existing buildings.

AJ101.1.1 Buildings not previously occupied. A building or portion of a building that has not been previously occupied or used for its intended purpose shall comply with the provisions of this code for new construction.

AJ101.1.2 Compliance with other codes. Repairs, alterations, change of occupancy, existing buildings to which additions are made, historic buildings and relocated buildings complying with the provisions of the 2015 IRC, IBC, IPC, IMC, IFGC, and IFC, as applicable, shall be considered in compliance with the provisions of this appendix.

AJ101.2 Intent. The purpose of these provisions is to encourage the continued use or reuse of legally existing buildings and structures. These provisions are intended to permit work in existing buildings that is consistent with the purpose of the 2015 IRC. Compliance with these provisions shall be deemed to meet the requirements of the 2015 IRC.

**SECTION AJ102
COMPLIANCE**

AJ102.1 Existing buildings. The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the 2015 IFC or the 2015 IPMC.

AJ102.1.1 Additions, alterations and repairs. Additions, alterations or repairs to any structure shall conform to that required by this code without requiring the existing structure to comply with all the requirements of this code, unless otherwise stated. Additions, alterations or repairs shall not cause an existing structure to become unsafe or adversely affect the performance of the building.

AJ102.2 Existing installations. Provisions in this code shall not require the removal, alteration

or abandonment of, or prevent the continued use and maintenance of, an existing building envelope, mechanical, service water-heating, electrical distribution or illumination system lawfully in existence at the time of the adoption of this code.

AJ102.3 Nonconforming features. Nothing in this appendix shall be construed to permit the continuation of existing building features which were installed in conflict with any codes or laws in effect at the time of construction or installation. Additions or alterations shall not be made to an existing building or structure which will cause the existing building or structure to be in violation with any of the provisions of this code.

AJ102.4 Correction of violations of other codes. Repairs or alterations mandated by any property, housing or fire safety maintenance code or mandated by any licensing rule or ordinance adopted pursuant to law shall conform only to the requirements of that code, rule or ordinance and shall not be required to conform to this code unless the code requiring such repair or alteration so provides.

AJ102.5 Home occupations. It shall be prohibited to conduct a home occupation in a dwelling unit except as provided for in Section AJ102.5.1. A home occupation shall be conducted wholly within the primary structure on the premises. No provision of this section shall be construed to repeal, modify or constitute an alternative to any lawful zoning regulation which is more restrictive than this section.

AJ102.5.1 Conditions.

1. The home occupation shall meet all requirements for habitable space and shall not exceed 15 percent of the floor area of the primary structure.
2. No more than one person not residing in the dwelling unit may be employed in the home occupation.
3. Inventory and supplies shall not occupy more than 50 percent of the area permitted to be used as a home occupation.
4. The home occupation shall not involve any operation considered to be hazardous.

AJ102.6. Lead -based paint. In addition to requirements of this code, 40 CFR 745 (titled “Lead-based Paint Poisoning Prevention in Certain Residential Structures”), a regulation issued and enforced by the Federal Environmental Protection Agency, applies to certain activities in buildings that may contain lead-based paint, including renovations performed for compensation in “target housing” and “child-occupied facilities,” “abatement” of lead-based paint hazards and other “lead-based paint activities” (as those terms are defined in 40 CFR Part 745).

SECTION AJ103 APPLICABILITY

AJ103.1 General. Where in any specific case, different sections of this appendix specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

AJ103.2 Other laws. The provisions of this appendix shall not be deemed to nullify any provisions of local, state or federal law.

AJ103.3 Referenced codes and standards. The codes and standards referenced in this appendix shall be considered part of the requirements of this appendix to the prescribed extent of each such reference. Where differences occur between provisions of this appendix and referenced codes and standards, the provisions of this appendix shall apply.

AJ103.4 Partial invalidity. In the event that any part or provision of this appendix is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

SECTION AJ104 ENERGY EFFICIENCY

AJ104.1 General. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. The provisions of Article 11 of the New York State Energy Law shall apply as to limit any applicability as found therein.

AJ104.1.1 Additions, alterations, or renovations. Additions, alterations, or renovations to an existing building, building system or portion thereof shall conform to the provisions of Section N1107 of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with this chapter. An addition shall be deemed to comply with this chapter if the addition alone complies or if the existing building and addition comply with this chapter as a single building. Additions, alterations, or renovations shall not create an unsafe or hazardous condition or overload existing building systems.

Exception: The following need not comply provided the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Glass only replacements in an existing sash and frame provided the U-factor and the solar heat gain coefficient (SHGC) will be equal to or lower than before the glass replacement.

3. Alterations, renovations or repairs to roof/ceiling, wall or floor cavities which are insulated to full depth with insulation having a minimal nominal value of R-3.0/inch.
4. Alterations, renovations or repairs to walls and floors, where the existing structure is without framing cavities and no new framing cavities are created.
5. Reroofing where neither the sheathing nor the insulation is exposed. Roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing.
6. Replacement of existing doors that separate conditioned space from the exterior shall not require the installation of a vestibule or revolving door, provided, however, that an existing vestibule that separates a conditioned space from the exterior shall not be removed.
7. An alteration that replaces less than 50 percent of the luminaires in a space, provided that such alteration does not increase the installed interior lighting power.
8. An alteration that replaces only the bulb and ballast within the existing luminaires in a space provided that such alteration does not increase the installed interior lighting power.

AJ104.1.2 Change in occupancy or use. Spaces undergoing a change in occupancy that would result in an increase in demand for either fossil fuel or electrical energy shall comply with Section N1111 of this code.

AJ104.1.3 Change in space conditioning. Any non-conditioned space that is altered to become conditioned space shall comply with the provisions of this chapter for an addition.

SECTION AJ105 PRELIMINARY MEETING

AJ105.1 Preliminary meeting. The code enforcement official is authorized to require that the prospective applicant meet to discuss plans for the proposed work or change of occupancy under these provisions prior to the issuance of a permit in order to establish the specific applicability of the provisions of this appendix.

SECTION AJ106 EVALUATION OF AN EXISTING BUILDING

AJ106.1 Building evaluation. The code enforcement official is authorized to require an existing building to be investigated and evaluated by a registered design professional based upon the circumstances agreed upon at the preliminary meeting to determine the existence of any potential nonconformance with the provisions of this code. The building evaluation shall include, but not be limited to, structural, mechanical, plumbing and electrical systems. The evaluation shall be limited to those areas of the existing dwelling that are directly affected by

the type of work under consideration. The building evaluation shall be certified by the design professional.

The evaluation shall utilize the following sources of information, as applicable:

1. Available documentation of the existing building.
 - 1.1. Field surveys.
 - 1.2. Tests (nondestructive and destructive).
 - 1.3. Laboratory analysis.

AJ2 DEFINITIONS

SECTION AJ201 GENERAL

AJ201.1 General. For purposes of this appendix, the terms used shall be defined as follows.

SECTION AJ202 GENERAL DEFINITIONS

ADDITION. An extension or increase in floor area, number of stories, or height of a building or structure.

ALTERATION. Any construction or renovation to an existing structure other than repair or addition. Alterations are classified as Level 1 and Level 2.

BED AND BREAKFAST DWELLING. Owner-occupied residence, resulting from the conversion of a one-family dwelling, used for providing overnight accommodations and a morning meal to not more than 10 transient lodgers, and containing not more than five bedrooms for such lodgers.

CHANGE OF OCCUPANCY. A change in the occupancy or use of a building, such as a change from a one-family dwelling to a two-family dwelling, or from an occupancy regulated by the 2015 IBC to a detached one- or two-family dwelling or multiple single-family dwellings (townhouses) regulated by this code.

CONVERSION. A change of occupancy or use of a building from a one-family dwelling to a bed and breakfast dwelling.

DANGEROUS. Any building or structure or any individual member with any of the structural conditions or defects described below shall be deemed dangerous:

1. The stress in a member or portion thereof due to all factored dead and live loads is more than one and one third the nominal strength allowed in this code for new buildings of similar structure, purpose or location.

2. Any portion, member or appurtenance thereof likely to fail, or to become detached or dislodged, or to collapse and thereby injure persons.
3. Any portion of a building, or any member, appurtenance or ornamentation on the exterior thereof is not of sufficient strength or stability, or is not anchored, attached or fastened in place so as to be capable of resisting a wind pressure of two thirds of that specified in this code for new buildings of similar structure, purpose or location without exceeding the nominal strength permitted in this code for such buildings.
4. The building, or any portion thereof, is likely to collapse partially or completely because of dilapidation, deterioration or decay; construction in violation of the Uniform Code; the removal, movement or instability of any portion of the ground necessary for the purpose of supporting such building; the deterioration, decay or inadequacy of its foundation; damage due to fire, earthquake, wind or flood; or any other similar cause.
5. The exterior walls or other vertical structural members list, lean or buckle to such an extent that a plumb line passing through the center of gravity does not fall inside the middle one third of the base.

EQUIPMENT OR FIXTURE. Any plumbing, heating, electrical, ventilating, air conditioning, refrigerating and fire protection equipment, and elevators, dumb waiters, boilers, pressure vessels, and other mechanical facilities or installations that are related to building services.

EXISTING BUILDING. A building or structure that has been issued a certificate of occupancy or has been legally occupied.

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

1. The area within a flood plain subject to a 1-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.

HISTORIC BUILDING. Any building or structure that is listed in the State or National Register of Historic Places; designated as a historic property under local or state designation law or survey; certified as a contributing resource within a National Register listed or locally designated historic district; or with an opinion or certification that the property is eligible to be listed on the National or State Registers of Historic Places either individually or as a contributing building to a historic district by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places.

HOME OCCUPATION. The use of a portion of a dwelling unit for nonresidential purposes by a resident thereof.

LOAD-BEARING ELEMENT. Any column, girder, beam, joist, truss, rafter, wall, floor or roof sheathing that supports any vertical load in addition to its own weight, or any lateral load.

MATERIALS AND METHODS REQUIREMENTS. Those requirements in this code that

specify material standards; details of installation and connection; joints; penetrations; and continuity of any element, component or system in the building. The required quantity, fire resistance, flame spread, acoustic or thermal performance, or other performance attribute is specifically excluded from materials and methods requirements.

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

RELOCATION. Relocated buildings include any building or structure which is relocated from its existing foundation to a new foundation.

REPAIR. The restoration to good or sound condition of any part of an existing building for the purpose of its maintenance.

REPLACEMENT. The reconstruction of a building on an existing foundation or support system.

SUBSTANTIAL DAMAGE. For the purpose of determining compliance with the flood provisions of this code, damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT. For the purpose of determining compliance with the flood provisions of this code, any repair, alteration, addition or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the code official and that is the minimum necessary to assure safe living conditions, or
2. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

SUBSTANTIAL STRUCTURAL DAMAGE. A condition where:

1. In any story, the vertical elements of the lateral-force-resisting system, in any direction and taken as a whole, have suffered damage such that the lateral load-carrying capacity has been reduced by more than 20 percent from its pre-damaged condition, or
2. The vertical load-carrying components supporting more than 30 percent of the structure's floor or roof area have suffered a reduction in vertical load-carrying capacity to below 75 percent of the required strength levels of this code.

UNSAFE BUILDINGS OR EQUIPMENT. Buildings or existing equipment that is insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or that constitutes a fire hazard, or that is otherwise dangerous to human life or the

public welfare or that involves illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition.

WORK AREA. That portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this appendix.

AJ3 CLASSIFICATION OF WORK

SECTION AJ301 GENERAL

AJ301.1 Scope. The work performed on an existing building shall be classified in accordance with this section.

AJ301.2 Work area. The work area, as defined in Section AJ202, shall be identified on the construction documents.

SECTION AJ302 REPAIRS

AJ302.1 Scope. Repairs, as defined in Section AJ202, include the patching or restoration of materials, elements, equipment, or fixtures for the purpose of maintaining such materials, elements, equipment or fixtures in good or sound condition.

AJ302.2 Application. Repairs shall comply with the provisions of Section AJ4.

SECTION AJ303 ALTERATIONS - LEVEL 1

AJ303.1 Scope. Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment or fixtures using new materials, elements, equipment or fixtures that serve the same purpose, without reconfiguring the space.

AJ303.2 Application. Level 1 alterations shall comply with the provisions of Section AJ5.

**SECTION AJ304
ALTERATIONS - LEVEL 2**

AJ304.1 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.

AJ304.2 Application. Level 2 alterations shall comply with the provisions of Section AJ5 for Level 1 alterations as well as the provisions of Section AJ6.

Exception: Work areas in which the alteration work is exclusively plumbing, mechanical or electrical shall not be included in the computation of total area of all work areas.

**SECTION AJ305
CHANGE OF OCCUPANCY**

AJ305.1 Scope. Change of occupancy provisions apply where the activity is classified as a change of occupancy as defined in Section AJ202.

AJ305.2 Application. Changes of occupancy shall comply with the provisions of Section AJ7.

**SECTION AJ306
ADDITIONS**

AJ306.1 Scope. Provisions for additions shall apply where work is classified as an addition as defined in Section AJ202.

AJ306.2 Application. Additions to existing buildings shall comply with the provisions of Section AJ8.

**SECTION AJ307
HISTORIC BUILDINGS**

AJ307.1 Scope. Historic buildings provisions shall apply to buildings classified as historic as defined in Section AJ202.

AJ307.2 Application. Except as specifically provided for in Section AJ9, historic buildings shall comply with applicable provisions of this appendix for the type of work being performed.

**SECTION AJ308
RELOCATED BUILDINGS**

AJ308.1 Scope. Relocated buildings provisions shall apply to relocated buildings as defined in Section AJ202.

AJ308.2 Application. Relocated buildings shall comply with the provisions of Section AJ10.

**SECTION AJ309
REPLACEMENT**

AJ309.1 Scope. Replaced buildings provisions shall apply to replaced buildings as defined in Section AJ202.

AJ309.2 Application. Replaced buildings shall comply with the provisions of Section AJ11.

**AJ4
REPAIRS**

**SECTION AJ401
GENERAL**

AJ401.1 Scope. Repairs as described in Section AJ302 shall comply with the requirements of this section. Repairs to historic buildings shall comply with this section, except as modified in Section AJ9.

AJ401.2 Permitted materials. Except as otherwise required herein, work shall be done using materials permitted by the applicable code for new construction or using like materials such that no hazard to life, health or property is created.

AJ401.3 Flood hazard areas. In flood hazard areas, repairs that constitute substantial improvement shall require that the building comply with Section R322 of this code.

**SECTION AJ402
BUILDING ELEMENTS AND MATERIALS**

AJ402.1 Hazardous materials. Hazardous materials that are no longer permitted, such as asbestos and lead-based paint, not be used.

AJ402.2 Glazing in hazardous locations. Replacement glazing in hazardous locations shall comply with the safety glazing requirements of Section R308 as applicable.

Exceptions:

1. Glass block walls, louvered windows, and jalousies repaired with like materials.
2. Replacement glazing in historic buildings.

AJ402.3 Reroofing. Existing roof assemblies undergoing repair shall comply with the applicable requirements of Section AJ502.4 of this appendix.

**SECTION AJ403
FIRE AND LIFE SAFETY PROTECTION**

AJ403.1 General. Repairs shall be done in a manner that maintains the level of fire protection provided.

AJ403.2 Smoke alarms. When repairs requiring a permit occur, the individual dwelling unit shall be provided with smoke alarms located as required for new dwellings; the smoke alarms shall be interconnected and hard wired.

Exceptions:

1. Repairs to the exterior surfaces of dwellings are exempt from the requirements of this section.
2. Except for bed and breakfast dwellings, smoke alarms in existing areas shall not be required to be interconnected and hard wired where interior wall or ceiling finishes are not removed to expose the structure.

AJ403.2.1 Power source. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure.

AJ403.2.2 Interconnection. Smoke alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ403.3 Carbon monoxide alarms. When repairs of fuel-fired appliances and equipment, solid-fuel burning appliances and equipment, or fireplaces and chimneys occur, the individual dwelling unit shall be provided with carbon monoxide alarms as required for new dwellings.

Exception: In other than bed and breakfast dwellings, carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure. Carbon monoxide alarms shall not be required to be interconnected where battery operated alarms are permitted.

SECTION AJ404 STRUCTURAL

AJ404.1 General. Repairs of structural elements shall comply with this section.

AJ404.2 Reduction of strength. Repairs shall not reduce the structural strength or stability of the building, structure or any individual member thereof.

Exception: Such reduction shall be allowed, provided the capacity is not reduced to below the levels required by this code.

AJ404.3 Damaged buildings. Damaged buildings shall be repaired in accordance with this section.

AJ404.3.1 New structural frame members. New structural frame members used in the repair of damaged buildings, including anchorage and connections, shall comply with this code.

AJ404.3.2 Substantial structural damage. Buildings that have sustained substantial structural damage shall comply with this section.

AJ404.3.2.1 Engineering evaluation and analysis. An engineering evaluation and analysis that establishes the structural adequacy of the damaged building shall be prepared by a registered design professional and submitted to the code official. The evaluation and analysis may assume that all damaged structural elements and systems have their original strength and stiffness.

AJ404.3.2.1.1 Extent of repair. The evaluation and analysis shall demonstrate that the building, once repaired, complies with the applicable wind and seismic provisions of this code.

AJ404.3.3 Below substantial structural damage. Repairs to buildings damaged to a level below the substantial structural damage level as defined in Section AJ202 shall be allowed to be made with the materials, methods and strengths in existence prior to the damage unless such existing conditions are dangerous as defined in Section AJ202. New structural frame members as defined in Section AJ202 shall comply with Section AJ404.3.1.

AJ404.3.4 Other uncovered structural elements. Where in the course of conducting repairs other uncovered structural elements are found to be unsound or otherwise structurally deficient, such elements shall be made to conform to the requirements of Section AJ404.3.2.1.1.

AJ404.3.5 Flood hazard areas. In flood hazard areas, damaged buildings that sustain substantial damage shall be brought into compliance with provisions of this code for flood resistant construction of new structures.

**SECTION AJ405
MECHANICAL**

AJ405.1 General. Repairs to existing mechanical systems shall be permitted in the same manner and arrangement as in the existing system, provided that such repairs or replacement are not hazardous and are approved.

**SECTION AJ406
PLUMBING**

AJ406.1 General. Repairs to existing plumbing systems shall be permitted in the same manner and arrangement as in the existing system, provided that such repairs or replacement are not hazardous and are approved.

AJ406.2 Materials. The following plumbing materials and supplies shall not be used:

1. All-purpose solvent cement, unless listed for the specific application;
2. Flexible traps and tailpieces, unless listed for the specific application; and
3. Solder having more than 0.2-percent lead in the repair of potable water systems.

AJ406.3 Water closet replacement. When any water closet is replaced, the replacement water closet shall comply with Section P2903.2.

**SECTION AJ407
ELECTRICAL**

AJ407.1 Material. Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material.

Exceptions:

1. Replacement of electrical receptacles shall comply with the applicable requirements of the NFPA 70 or Chapter 39 of this code.
2. Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering and shall comply with requirements of Chapter 37 this code applying for conductor sizing and overcurrent protection code.
3. 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 as allowed and described in Part VIII - Electrical of this code.
4. 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 Part VIII - Electrical of this code.

AJ5 ALTERATIONS - LEVEL 1

SECTION AJ501 GENERAL

AJ501.1 Scope. Level 1 alterations as described in Section AJ303 shall comply with the requirements of this section. Level 1 alterations to historic buildings shall comply with this section, except as modified in Section AJ9.

AJ501.2 Conformance. An existing building or portion thereof shall not be altered such that the building becomes less safe than its existing condition.

Exception. Where the current level of safety or sanitation is proposed to be reduced, the portion altered shall conform to the requirements of this code.

AJ501.3 Flood hazard areas. In flood hazard areas, alterations that constitute substantial improvement shall require that the building comply with Section R322 of this code.

SECTION AJ502 BUILDING ELEMENTS AND MATERIALS

AJ502.1 Interior finishes. All newly installed interior finishes shall comply with the flame spread and smoke density requirements of Chapter 3 of this code.

AJ502.2 Materials and methods. All new work shall comply with materials and methods requirements of this code.

AJ502.3 Replacement door and window dimensions. Minor reductions in the clear opening dimensions of replacement doors and windows that result from the use of different materials shall be allowed.

AJ502.3.1 Replacement windows. The replacement of emergency escape and rescue opening windows in conformance with the code in effect at the time of construction shall not require compliance with Section R310.

AJ502.4 Reroofing. Where alteration work includes recovering or replacing an existing roof covering, the provisions of this section shall apply.

AJ502.4.1 General. Materials and methods of application used for recovering or replacing

an existing roof covering shall comply with the requirements of Chapter 9.

Exception: Reroofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2 percent slope) in Section R905 for roofs that provide positive roof drainage.

AJ502.4.2 Structural and construction loads. The 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 roof covering system.

AJ502.4.3 Re-covering versus replacement. New roof coverings shall not be installed without first removing existing roof coverings 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 wood shake or shingle, slate, clay, cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.
4. For asphalt shingles, when the building is located in an area subject to moderate or severe hail exposure according to Figure R903.5.

Exceptions:

1. Complete and separate roofing systems, such as standing-seam metal roof 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.
2. Installation of metal panel, metal shingle, and concrete and clay tile roof coverings over existing wood shake or shingle roofs shall be permitted when the application is in accordance with Section J502.4.4.
3. The application of new protective coating over existing spray polyurethane foam roofing systems shall be permitted without tear-off of existing roof coverings.

AJ502.4.4 Roof recovering. 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, mineral fiber, or glass fiber securely fastened in place.

AJ502.4.5 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 counter flashings shall not be reinstalled where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled.

AJ502.4.6 Flashings. Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions. Metal flashing to which bituminous materials are

to be adhered shall be primed prior to installation

SECTION AJ503 MEANS OF EGRESS

AJ503.1 General. Means of egress for buildings undergoing alteration shall comply with the requirements of Section 702 of the 2015 IPMC.

SECTION AJ504 FIRE AND LIFE-SAFETY PROTECTION

AJ504.1 General. Alterations shall be done in a manner that maintains the level of fire protection provided.

AJ504.2 Smoke alarms. When interior alterations occur in existing dwellings, the individual dwelling unit shall be provided with smoke alarms located as required for new dwellings; the smoke alarms shall be interconnected and hard wired.

Exception: Except for bed and breakfast dwellings, smoke alarms in existing areas shall not be required to be interconnected and hard wired where interior wall or ceiling finishes are not removed to expose the structure.

AJ504.2.1 Power source. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure.

AJ504.2.2 Interconnection. Smoke alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ504.3 Carbon monoxide alarms. When level 1 alterations occur, the individual dwelling unit shall be provided with carbon monoxide alarms as required for new dwellings.

Exception: In other than bed and breakfast dwellings, carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure. Carbon monoxide alarms shall not be required to be interconnected where battery operated alarms are permitted.

SECTION AJ505 STRUCTURAL

AJ505.1 General. Where alteration work includes replacement of equipment that is supported by the building, the structural provisions of this section shall apply.

AJ505.2 Design criteria. Existing structural components supporting alteration work shall comply with this section.

AJ505.2.1 Replacement of equipment. Where replacement of equipment results in additional dead loads, structural components supporting such equipment shall comply with the load requirements of this code.

Exception: Buildings constructed in accordance with this code and where the additional dead load from the equipment is not increased by more than 5 percent.

AJ505.3 Reroofing structural and construction loads. The 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 roof covering system.

SECTION AJ506 MECHANICAL

AJ506.1 General. Alterations to any mechanical system shall conform to the requirements of Chapter 12 for a new mechanical system without requiring the existing mechanical system to comply with all of the requirements of this code.

SECTION AJ507 PLUMBING

AJ507.1 General. Alterations to any plumbing system shall conform to the requirements for a new plumbing system without requiring the existing plumbing system to comply with all the requirements of this code.

AJ507.2 Materials. The following plumbing materials and supplies shall not be used:

1. All-purpose solvent cement, unless listed for the specific application;
2. Flexible traps and tailpieces, unless listed for the specific application; and
3. Solder having more than 0.2-percent lead in the repair of potable water systems.

AJ507.3 Water closet replacement. When any water closet is replaced, the replacement water closet shall comply with Section P2903.2.

**SECTION AJ508
ELECTRICAL**

AJ508.1 General. Any alteration to an existing electrical system shall be made in conformity with the provisions of Chapter E33 through Chapter E42.

**AJ6
ALTERATIONS - LEVEL 2**

**SECTION AJ601
GENERAL**

AJ601.1 Scope. Level 2 alterations as described in Section AJ304 shall comply with the requirements of this section. Level 2 alterations to historic buildings shall comply with this section, except as modified in Section AJ9. The requirements of this section are limited to work areas in which Level 2 alterations are being performed, and shall apply beyond the work area where specified.

AJ601.2 Alteration Level 1 compliance. In addition to the requirements of this section, all work shall comply with the requirements of Section AJ5.

AJ601.3 Compliance. All newly constructed elements, components, systems and spaces shall comply with the requirements of this code.

Exceptions:

1. Space created in basements may have a ceiling that projects to within 6 feet, 8 inches of the finished floor; and beams, girders and ducts in such space or other obstructions may project to within 6 feet, 4 inches of the finished floor. Existing finished ceiling heights in spaces in basements shall not be reduced.
2. Existing stairs not otherwise being altered shall be permitted to maintain their current clear width at, above, and below existing handrails.
3. Existing stairs not otherwise being altered shall be permitted to maintain their current riser heights and tread depths.
4. Headroom height on existing stairs being altered shall not be reduced below the existing stairway finished headroom. Existing stairs not otherwise being altered shall be permitted to maintain the current finished headroom.
5. Landings for existing stairs not otherwise being altered shall be permitted to maintain their current width.

AJ601.4 Nonconformities. The work performed shall not increase the extent of noncompliance with the requirements of this code or create nonconformity with those requirements which did not previously exist.

AJ601.5 Flood hazard areas. In flood hazard areas, alterations that constitute substantial improvement shall require that the building comply with Section R322 of this code.

SECTION AJ602 BUILDING ELEMENTS AND MATERIALS

AJ602.1 Separation required. Where the work area is in a two-family dwelling or multiple single-family dwelling (townhouse) and exceeds 50 percent of the aggregate area of the dwelling unit, all walls separating dwelling units that are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. Work shall only be required to be performed on the side of the wall of the dwelling unit that is part of the work area.

Exception: Where alterations or repairs do not result in the removal of wall or ceiling finishes exposing the structure, walls are not required to be continuous through concealed floor spaces.

AJ602.2 Wall and ceiling finish. Where the work area exceeds 50 percent of the aggregate area of the dwelling, the interior finish of walls and ceilings in any work area shall comply with the requirements of Section R315. All existing interior finish materials that do not comply with those requirements shall be removed or shall be treated with an approved fire retardant coating in accordance with the manufacturer's instructions to secure compliance with the requirements of this section.

AJ602.3 Guards. In work areas, guards designed and installed in accordance with Section R312 shall be provided on every open portion of a floor, stair, landing, porch, deck, porch or deck enclosed with insect screening, or balcony that is more than 30 inches above the floor or grade below, or where the existing guards are judged to be in danger of collapsing.

SECTION AJ603 MEANS OF EGRESS

AJ603.1 Scope. The means of egress in work areas where alterations are being performed shall comply with the requirements of this section.

AJ603.2 Exit doors. Exit doors in any work area shall comply with Section R311.4.

AJ603.3 Handrails. Every stairway having four or more risers from a work area floor shall be provided with handrails designed and installed in accordance with Section R311.5.6.

**SECTION AJ604
FIRE AND LIFE SAFETY PROTECTION**

AJ604.1 Smoke alarms. When interior alterations occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be provided with smoke alarms located as required for new dwellings; the smoke alarms shall be interconnected and hard wired.

Exception: In other than bed and breakfast dwellings, smoke alarms in existing areas shall not be required to be interconnected and hard wired where interior wall or ceiling finishes are not removed to expose the structure.

AJ604.1.1 Power source. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure.

AJ604.1.2 Interconnection. Smoke alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ604.2 Carbon monoxide alarms. When level 2 alterations occur, the individual dwelling unit shall be provided with carbon monoxide alarms as required for new dwellings.

Exception: With the exception of bed and breakfast dwellings, carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure. Carbon monoxide alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ604.3 Automatic sprinkler systems. A third story above grade may be created in an existing attic without requiring the installation of a sprinkler system throughout the entire dwelling, provided all of the following conditions are met:

1. The building was legally occupied before January 1, 1984.
2. The finished space and its means of egress to the exterior are equipped with a limited area sprinkler system installed in accordance with NFPA 13D.
3. The finished space is provided with:
 - 3.1 A second exit stair meeting the requirements of Section R311.5, or
 - 3.2 An emergency escape and rescue opening, meeting the requirements of Section R310, located directly above a roof or other structural appurtenance from which access to grade does not exceed a vertical distance of 14 feet.
4. The entire dwelling is equipped with smoke alarms in compliance with Section R313 and monitored by an approved supervising station in accordance with NFPA 72.

SECTION AJ605 STRUCTURAL

AJ605.1 General. The minimum design criteria for existing portions of the structure shall be the loads applicable at the time the building was constructed, provided that no dangerous condition is created. Structural elements which are uncovered during the course of the alteration and which are found to be unsound or dangerous shall be made to comply with the applicable requirements of this code.

AJ605.2 Increased loads. Where alteration work includes installation of additional equipment that is structurally supported by the building or reconfiguration of space such that portions of the building become subjected to higher dead or live loads, all structural members affected by such increase shall meet the load requirements of this code.

Exception: Structural elements whose stress is not increased by more than 5 percent.

AJ605.3 Reduction of strength. Alterations shall not reduce the structural strength or stability of the building, structure or any individual member thereof.

Exception: Such reduction shall be allowed as long as the strength and the stability of the building are not reduced to below the levels required by this code.

AJ605.4 New structural members. New structural members in alterations, including connections and anchorage, shall comply with this code.

SECTION AJ606 MECHANICAL

AJ606.1 General. Alterations to any mechanical system shall conform to the requirements of Chapter 12 for a new mechanical system without requiring the existing mechanical system to comply with all the requirements of this code. Alterations shall not cause an existing mechanical system to become unsafe, hazardous or overloaded.

AJ606.2 Reconfigured spaces. Mechanically ventilated reconfigured spaces shall comply with Section M1506 as applicable.

SECTION AJ607 PLUMBING

AJ607.1 General. Alterations to any plumbing system shall conform to the requirements for a new plumbing system without requiring the existing plumbing system to comply with all the requirements of this code. Alterations shall not cause an existing system to become unsafe, insanitary or overloaded.

AJ607.2 Increased demand. Where any alteration subjects any portion of an existing plumbing system to increased loads, such portion shall be made to comply with Chapters 25 through 32.

SECTION AJ608 ELECTRICAL

AJ608.1 General. Any alteration to an existing electrical system relating to work done in any work area shall be made in conformity with the provisions of Chapters 33 through 42.

AJ608.2 Increased loads. Where alterations subject portions of existing electrical systems to increased loads, such portions shall be made to comply with Chapter 33 through Chapter 42.

AJ608.3 Electrical service. Service to dwelling units shall be a minimum of 100 ampere, three-wire capacity, and service equipment shall be dead front having no live parts exposed whereby accidental contact could be made. Type “S” fuses shall be installed when fused equipment is used.

Exception: Existing service of 60 ampere, three-wire capacity, and feeders of 30 ampere or larger two-or three-wire capacity shall be accepted if adequate for the electrical load being served.

AJ608.3.1 Clearance. Clearance for electrical service equipment shall be provided in accordance with Section E3305.

AJ608.4 Ground-fault and arc-fault circuit-interrupter protection. Ground-fault and arc-fault circuit-interrupter protection shall be provided on newly installed receptacle outlets as required by Section E3802.

AJ608.5 Additional electrical requirements. When the work area includes any of the following areas within a dwelling unit, the requirements of Sections AJ608.5.1 through AJ608.5.3 shall apply.

AJ608.5.1 Enclosed areas. All enclosed areas other than closets, kitchens, basements, garages, hallways, laundry areas and bathrooms shall have a minimum of two duplex receptacle outlets, or one duplex receptacle outlet and one ceiling or wall type lighting outlet.

AJ608.5.2 Kitchen and laundry areas. Kitchen areas shall have a minimum of two duplex receptacle outlets. Laundry areas shall have a minimum of one duplex receptacle outlet located near the laundry equipment and installed on an independent circuit.

AJ608.5.3 Bathrooms, hallways, stairways, attached and detached garages. At least one lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage

and detached garage with electric power to illuminate outdoor entrances and exits, and in utility rooms and basements where these spaces are used for storage or contain equipment requiring service.

AJ7 CHANGE OF OCCUPANCY

SECTION AJ701 GENERAL

AJ701.1 Scope. Where the character or use of an existing building is changed, as described in Section AJ305, to a one- or two-family dwelling or multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress, or where an owner-occupied one-family dwelling is converted for use as a Bed and Breakfast Dwelling, the building shall comply with this section. Alterations performed in connection with a change of occupancy shall comply with Section AJ5 or AJ6 as applicable. Changes of occupancy to historic buildings shall comply with this section, except as modified in Section AJ9. Owner-occupied one-family dwellings converted for use as a Bed and Breakfast Dwellings shall also comply with Section AJ704.

SECTION AJ702 COMPLIANCE

AJ702.1 General. The building shall comply with the provisions of this code.

Exception: Compliance with the provisions of this code is not required where the change of occupancy is from a two-family dwelling to a one-family dwelling; smoke alarms and carbon monoxide alarms shall be provided as required in Section AJ703.

AJ702.2 Existing emergency escape and rescue openings. Emergency escape and rescue openings need not meet the requirements of this code where such openings were lawfully in existence at the time of the adoption of this code.

AJ702.3 Existing stairs. Existing stairs are permitted to remain, provided all of the following conditions are met:

1. The product obtained by multiplying the height of the riser by the depth of the tread shall be not less than 70 inches or more than 80 inches. Riser height shall not exceed 9 inches.
2. Stairs shall have minimum headroom of 6 feet 6 inches, except that stairs for occasional use to basements and attics are permitted to have minimum headroom of 6 feet 4 inches.
3. Variations in riser height in a run of stairs shall not exceed 3/8 inch.
4. Width shall be not less than 30 inches.

AJ702.4 Existing ceiling heights. Existing ceiling heights shall be permitted to remain if they equal or exceed the following:

1. Habitable space shall have a ceiling height of not less than 6 feet 8 inches, measured from the finished floor to the lowest projection from the ceiling.
2. Space, other than habitable, shall have a ceiling height of not less than 6 feet 6 inches, measured from the finished floor to the lowest projection from the ceiling.

AJ702.5 Existing foundations. Existing foundations are permitted to remain where the change in use will increase the soil bearing pressure by no more than 5 percent.

AJ702.6 Seismic load provisions. Specific seismic load detailing provisions required for new structures are not required to be met where it can be shown that an acceptable level of performance and seismic safety is obtained for the applicable seismic design category.

SECTION AJ703 FIRE AND LIFE-SAFETY PROTECTION

AJ703.1 Smoke alarms. Smoke alarms, located as required for new dwellings, shall be provided; the smoke alarms shall be interconnected and hard wired.

Exception: In other than bed and breakfast dwellings, smoke alarms in existing areas shall not be required to be interconnected and hard wired where interior wall or ceiling finishes are not removed to expose the structure.

AJ703.1.1 Power source. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure.

AJ703.1.2 Interconnection. Smoke alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ703.2 Carbon monoxide alarms. Where the character or use of an existing building is changed, carbon monoxide alarms shall be provided as required for new dwellings.

Exception: In other than bed and breakfast dwellings, carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure. Carbon monoxide alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ704 Bed and breakfast dwellings.

AJ704.1 Scope. Owner-occupied one-family dwellings converted for use as bed and breakfast dwellings as defined in Section J202 shall comply with this section.

AJ704.2 Occupancy. A residence converted to a bed and breakfast dwelling shall have no more than five sleeping rooms for accommodating up to 10 transient lodgers.

AJ704.3 Special conditions. A one-family dwelling is permitted to be converted for use as a bed and breakfast dwelling under the following conditions:

1. No sleeping rooms for transient use shall be located above the second story.
2. A fire-safety notice shall be affixed to the occupied side of the entrance door of each bedroom for transient use indicating:
 - a. Means of egress;
 - b. Location of means for transmitting fire alarms, if any; and
 - c. Evacuation procedures to be followed in the event of a fire or smoke condition or upon activation of a fire or smoke-detecting or other alarm device.

AJ704.4 Means of egress. Means of egress shall include at least one of the following alternatives:

1. A limited area sprinkler system installed in conformance with NFPA 13D protecting all interior stairs serving as a means of egress;
2. An exterior stair conforming to the requirements of R311.7 of this code, providing a second means of egress from all above grade stories or levels; or
3. An opening for emergency use conforming to the requirements of Section R310 of this code within each bedroom for transient use, such opening to have a sill not more than 14 feet above level grade directly below and, as permanent equipment, a portable escape ladder that attaches securely to such sill. Such ladder shall be constructed with rigid rungs designed to stand off from the building wall, shall be capable of sustaining a minimum load of 1,000 pounds, and shall extend to and provide unobstructed egress to open space at grade.

AJ8 ADDITIONS

SECTION AJ801 GENERAL

AJ801.1 Scope. Additions as described in Section AJ306 shall comply with the requirements of this section.

AJ801.2 Compliance. Additions shall comply with the provisions of this code. Except where required by this section, unaltered portions of the existing building shall not be required to comply with this code.

AJ801.3 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 height, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing or electrical systems.

A801.4 Other work. Any repair or alteration work within an existing building to which an addition is being made shall comply with the applicable requirements for the work as classified in Section AJ3.

SECTION AJ802 FIRE AND LIFE-SAFETY PROTECTION

AJ802.1 Smoke alarms. When additions requiring a permit occur, the individual dwelling unit shall be provided with smoke alarms located as required for new dwellings; the smoke alarms shall be interconnected and hard wired.

Exceptions:

1. Exterior additions to dwellings, such as decks, are exempt from the requirements of this section.
2. In other than bed and breakfast dwellings, smoke alarms in existing areas shall not be required to be interconnected and hard wired where interior wall or ceiling finishes are not removed to expose the structure.

AJ802.1.1 Power source. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in existing areas of buildings where existing interior wall or ceiling finishes are not removed to expose the structure.

AJ802.1.2 Interconnection. Smoke alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ802.2 Carbon monoxide alarms. Where additions requiring a permit occur, carbon monoxide alarms shall be provided as required for new dwellings.

Exceptions:

1. Exterior additions to dwellings, such as decks, are exempt from the requirements of this section.
2. In other than bed and breakfast dwellings, carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure. Carbon monoxide alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ802.3 Automatic sprinkler systems. Whenever a vertical addition is made to a building to create a third story above grade, or when the floor area of a legally existing third story is increased more than 10 percent, the building shall be equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13D.

SECTION AJ803 STRUCTURAL

AJ803.1 Additional loads. Existing structural elements supporting any additional loads as a result of additions shall comply with this code.

Exception: Structural elements whose stress is not increased by more than 5 percent.

AJ803.2 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 R322 of this code.
 - 1.2. If the addition constitutes substantial improvement, the existing building and the addition shall comply with Section R322.
2. For horizontal additions that are not structurally interconnected to the existing building:
 - 2.1. The addition shall comply with Section R322.
 - 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 R322.
3. For vertical additions and all other proposed work that, when combined, constitute substantial improvement, the existing building shall comply with Section R322.
4. For a new, replacement, 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 R322.

SECTION AJ804 MECHANICAL

AJ804.1 General. Additions to any mechanical system shall conform to the requirements of Chapter 12 for a new mechanical system without requiring the existing mechanical system to comply with all of the requirements of this code. The existing mechanical system shall be evaluated for adequacy by qualified industry personnel or a registered design professional. Additions shall not cause an existing system to become unsafe, hazardous or overloaded.

**SECTION AJ805
PLUMBING**

AJ805.1 General. Additions to any plumbing system shall conform to the requirements for a new plumbing system without requiring the existing plumbing system to comply with all the requirements of this code. Additions shall not cause an existing system to become unsafe, insanitary or overloaded.

AJ805.2 Sanitary disposal system. Where an addition results in an increase in the number of bedrooms, the capacity of the existing sanitary disposal system shall be determined and any required expansion or replacement shall comply with this code.

**SECTION AJ806
ELECTRICAL**

AJ806.1 General. Any addition to an existing electrical system shall be made in conformity with the provisions of Chapters 33 through 42. Where additions subject portions of existing systems to loads exceeding those permitted herein, such portions shall be made to comply with Chapters 33 through 42.

**AJ9
HISTORIC BUILDINGS**

**SECTION AJ901
GENERAL**

AJ901.1 Scope. It is the intent of this section to provide means for the preservation of historic buildings. Historical buildings as described in Section AJ307 shall comply with the provisions of this section relating to their repair, alteration, change of occupancy or relocation.

AJ901.2 Report. A historic building undergoing repair, alteration or change of occupancy shall be investigated and evaluated. If it is intended that the building meet the requirements of this section, a written report shall be prepared and filed with the code enforcement official by a registered design professional when such a report is necessary in the opinion of the code official. Such report shall identify each required safety feature that is in compliance with this section and where compliance with other sections of these provisions would be damaging to the contributing historic features. The report shall describe 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.

AJ901.3 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 R322.

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.

AJ901.4 Dangerous buildings. When a historic building is determined to be dangerous, no work shall be required except as necessary to correct identified unsafe conditions.

SECTION AJ902 FIRE AND LIFE-SAFETY PROTECTION

AJ902.1 Scope. Historic buildings undergoing repairs, alterations, changes of occupancy or that are relocated shall comply with this section.

AJ902.2 Smoke alarms. Smoke alarms, located as required for new dwellings, shall be provided; the smoke alarms shall be interconnected and hard wired.

Exception: In other than bed and breakfast dwellings, smoke alarms in existing areas shall not be required to be interconnected and hard wired where interior wall or ceiling finishes are not removed to expose the structure.

AJ902.2.1 Power source. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure.

AJ902.2.2 Interconnection. Smoke alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ902.3 Carbon monoxide alarms. Carbon monoxide alarms shall be provided as required for new dwellings.

Exception: In other than bed and breakfast dwellings, carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure. Carbon monoxide alarms shall not be required to be interconnected where battery operated alarms are permitted. At least one carbon monoxide alarm shall be provided in each dwelling unit in compliance with Section R313.4.

**SECTION AJ903
BUILDING ELEMENTS AND MATERIALS**

AJ903.1 Means of egress. Existing door openings and corridor and stairway widths less than those specified elsewhere in this code may be approved, provided that there is sufficient width and height for a person to pass through the opening or traverse the corridor or stairway.

AJ903.2 Interior finishes. The existing finishes of walls and ceilings shall be accepted when it is demonstrated that they are the historic finishes.

AJ903.3 Fire-resistant assemblies. Where fire-resistance-rated construction is required by this code, it need not be provided where the existing wall and ceiling finish is wood or metal lath and plaster.

AJ903.4 Stairway railings. Stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairs shall be permitted to remain, provided they are not structurally dangerous.

AJ903.5 Guard openings. The spacing between existing intermediate railings or openings in existing ornamental patterns shall be accepted. Missing elements or members of a guard may be replaced in a manner that will preserve the historic appearance of the building or structure.

**SECTION AJ904
STRUCTURAL**

AJ904.1 General. Historic buildings shall comply with the applicable structural provisions for the work as classified in Section AJ3.

Exception: The code official shall be authorized to accept existing floors and approve operational controls that limit the live load on any such floor.

AJ904.2 Unsafe structural elements. Where the code official determines that a component or a portion of a building or structure is dangerous as defined in this code and is in need of repair, strengthening or replacement by provisions of this code, only that specific component or portion shall be required to be repaired, strengthened or replaced.

**SECTION AJ905
REPAIRS**

AJ905.1 General. Repairs to any portion of a historic building or structure shall be permitted with original or like materials and original methods of construction, subject to the provisions of this section.

AJ905.2 Section AAJ4 compliance. Historic buildings undergoing repairs shall comply with all of the applicable requirements of Section AJ4.

Exception: Replacement of existing or missing features using original materials shall be permitted. Partial replacement for repairs that match the original in configuration, height and size shall be permitted. Such replacements shall not be required to meet the materials and methods requirements of Section AJ401.2.

SECTION AJ906 ALTERATIONS

AJ906.1 Level 1 alterations. Historic buildings undergoing Level 1 alterations as described in Section AJ303 shall comply with the applicable provisions of Section.AJ5, except as specifically permitted in Section AJ9.

AJ906.2 Level 2 alterations. Historic buildings undergoing Level 2 alterations as described in Section AJ303 shall comply with the applicable provisions of Section.AJ6, except as specifically permitted in Section AJ9.

SECTION AJ907 CHANGE OF OCCUPANCY

AJ907.1 General. Historic buildings undergoing a change of occupancy shall comply with the applicable provisions of Section AJ7, except as specifically permitted in this Section.

AJ907.2 Location on property. Historic structures undergoing a change of use may use alternative methods to comply with the requirements of Section R302. Such alternatives shall comply with Section AJ901.2.

AJ907.3 Dwelling unit separation. Required dwelling unit separations may be omitted when the building is equipped throughout with an approved automatic sprinkler system.

AJ907.4 Light, ventilation and heating. When it is determined by the code official that compliance with the light, ventilation and heating requirements of Section R303 will lead to loss of historic character or historic materials in the building, the existing level of light, ventilation and heating shall be considered acceptable.

**SECTION AJ908
RELOCATED BUILDINGS**

AJ908.1 General. Relocated historic buildings shall continue to be considered historic buildings for the purposes of this code.

AJ908.2 Compliance. Historic buildings shall comply with the applicable provisions for the work as classified in Section AJ3, except as specifically permitted in Section AJ9.

AJ908.3 Location on the lot. Relocated historic buildings and structures shall be sited so that exterior walls and openings comply with Section R302 of this code.

AJ908.4 Foundation. Foundations of relocated historic buildings and structures shall comply with this code.

**AJ10
RELOCATED OR MOVED BUILDINGS**

**SECTION AJ1001
GENERAL**

AJ1001.1 Scope. Relocated or moved buildings as described in Section AJ308 shall comply with this section. Relocated or moved historic buildings shall comply with Section AJ9.

AJ1001.2 Compliance. The building shall comply with the provisions of the 2015 IFC and the 2015 IPMC as applicable. Any repair, alteration, or change of occupancy undertaken within the moved structure shall comply with the requirements of this appendix applicable to the work being performed. Any field-fabricated elements shall comply with the requirements of this code as applicable.

AJ1001.3 Location on the lot. The building shall be located on the lot in accordance with the requirements of Section R302.

AJ1001.4 Flood hazard areas. If relocated or moved into a flood hazard area, buildings shall comply with Section R322.

**SECTION AJ1002
BUILDING ELEMENTS AND MATERIALS**

AJ1002.1 Foundation. The foundation system of relocated buildings shall comply with this code as applicable.

AJ1002.1.1 Connection to the foundation. The connection of the relocated building to

the foundation shall comply with this code as applicable.

SECTION AJ1003 FIRE AND LIFE SAFETY PROTECTION

AJ1003.1 Scope. Relocated or moved buildings shall comply with this section.

AJ1003.2 Smoke alarms. Smoke alarms, located as required for new dwellings, shall be provided; the smoke alarms shall be interconnected and hard wired.

Exception: In other than bed and breakfast dwellings, smoke alarms in existing areas shall not be required to be interconnected and hard wired where interior wall or ceiling finishes are not removed to expose the structure.

AJ1003.2.1 Power source. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure.

AJ1003.2.2 Interconnection. Smoke alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ1003.3 Carbon monoxide alarms. At least one carbon monoxide alarm shall be provided in each dwelling unit in compliance with Section R313.4.

SECTION AJ1004 STRUCTURAL

AJ1004.1 Required inspection and repairs. The 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 code official as a result of such inspection shall be made prior to the final approval.

AJ1004.2 Wind loads. Buildings shall comply with the wind provisions of this code as applicable.

Exceptions:

1. Detached one- and two-family dwellings where wind loads at the new location are not higher than those at the previous location.
2. Structural elements whose stress is not increased by more than 5 percent.

AJ1004.3 Seismic loads. Buildings shall comply with the seismic provisions of this code at

the new location as applicable.

Exceptions:

1. Where the seismic loads at the new location are not higher than those at the previous location.
2. Structural elements whose stress is not increased by more than 5 percent.

AJ1004.4 Snow loads. Buildings shall comply with the snow loads provisions of this code as applicable where snow loads at the new location are higher than those at the previous location.

Exception: Structural elements whose stress is not increased by more than 5 percent.

**AJ11
REPLACEMENT**

**SECTION AJ1101
GENERAL**

AJ1101.1 Scope. Buildings that are replaced as described in Section AJ309 shall comply with the requirements of this section.

AJ1101.2 Compliance. Buildings that are replaced shall comply with the provisions of this code.

AJ1101.3 Sanitary disposal system. Where a building replacement results in an increase in the number of bedrooms, the capacity of the existing sanitary disposal system shall be determined and any required expansion or replacement shall comply with this code.

CHAPTER 3
Amendments to the 2015 IBC

For the purposes of applying the 2015 IBC in this State, the 2015 IBC shall be deemed to be amended in the manner specified in this Chapter.

1. 2015 IBC Section 202 (Definitions).

The definition of the terms “*international symbol of accessibility*”, “*children’s overnight camp*”, and “*summer camp cabin*” shall be deemed to be added to Section 202 of the 2015 IBC; said new definitions to read as follows:

INTERNATIONAL SYMBOL OF ACCESSIBILITY. A sign or symbol that conforms to the accessibility symbol identified in the “Official Compilation of Codes Rules and Regulations of the State of New York,” 19 NYCRR Part 300, “Universal Symbol of Access.”

CHILDREN’S OVERNIGHT CAMP. A property consisting of a tract of land and any tents, vehicles, buildings or other structures that may be pertinent to its use, any part of which may be occupied by persons under eighteen years of age under general supervision for the purpose of outdoor or indoor organized activities and on which provisions are made for overnight occupancy of children. However, the term “children’s overnight camp” shall not include any place or facility which has been excepted from the State Sanitary Code by the Commissioner of the New York State Department of Health pursuant to Section 1392(1) of the Public Health Law.

SUMMER CAMP CABIN. A sleeping quarter which:

1. Is located in a children’s overnight camp;
2. Has a sleeping capacity of fewer than twenty-five occupants, with a total combined sleeping room floor area of 1200 square feet or less for all sleeping rooms;
3. Is one story;
4. Is used and occupied only between June 1 and September 14;
5. Has no cooking facilities, no heating systems, and no solid fuel heating or burning systems;
6. Has only sleeping rooms (including the necessary area for storing occupant belongings) and bathrooms;
7. Has no interior corridors or separate common area rooms;
8. Has at least two exits per sleeping room which are remote from each other and which discharge directly to the building’s exterior;
9. Has exit doors that open in the direction of, and are non-locking against egress; and
10. Has smoke alarms in each sleeping room that are interconnected such that the activation of one alarm will activate all of the alarms in the cabin.

2. 2015 IBC Section 307.7 (High-hazard Group H-5).

Section 307.7 of the 2015 IBC shall be deemed to be amended to read as follows:

307.7 High-hazard Group H-5. Semiconductor fabrication facilities and comparable research and development areas in which hazardous production materials (HPM) are used and the aggregate quantity of materials is in excess of those listed in Tables 307.1(1) and 307.1(2) shall be classified as Group H-5. Such facilities and areas shall be designed and constructed in accordance with Section 415.11.

3. 2015 IBC Chapter 4 (Special detailed requirements based on use and occupancy).

Chapter 4 of the 2015 IBC shall be deemed to be amended by the addition of a new Section 427 to read as follows:

**SECTION 427
HEALTHCARE FACILITIES**

427.1 General. Health care facilities located in special flood hazard areas shall comply with the provisions of this section and other applicable provisions of this code.

427.2 Temporary external generators, boilers and chillers. Connections for temporary external generators, boilers and chillers shall be provided in accordance with Sections 427.2.1 and 427.2.2.

427.2.1 Group I-1, I-2, and group R-4 condition 2 occupancies. An occupancy that is classified as Group I-1, I-2, or R-4 condition 2 occupancy shall comply with the following:

Exception: Hospitals and nursing homes shall comply with Section 427.2.2.

1. **Connections for temporary external generators.** Electrical connections shall be provided to allow for the connection of temporary external generators. The generators shall be capable of providing power for at least 72 hours to the following systems:
 - 1.1 Exit signs and means of egress illumination required by Chapter 10;
 - 1.2 Fire alarm systems;
 - 1.3 For buildings having occupied floors located 75 feet (22 860 mm) above the lowest level of fire department access, at least one elevator that serves all floors; and,
 - 1.4 Lighting sufficient to maintain illumination in accordance with Section 1205.3, for:

- i. Spaces primarily used to provide medical services to persons, including, but not limited to consultation, evaluation, monitoring and treatment services and
- ii. Spaces intended to be used by persons for sleeping purposes.

Exception: Connections for temporary external generators shall not be required for buildings with emergency or standby power systems that are permanently installed above the design flood elevation specified in Section 1612.4.1 and capable of providing power for at least 72 hours to the systems identified in Item 1 above. Natural gas shall be a permitted fuel supply.

- 2. **Flood protection for temporary external generator connections.** Electrical connections installed in accordance with Item 1 of Section 427.2.1 shall be located at or above the design flood elevation specified in Section 1612.4.1.
- 3. **Emergency connection plan.** A plan shall be submitted to the building official that identifies how the temporary external generators will be connected and capable of providing power to the occupancy in accordance with Item 1 of Section 427.2.1.

427.2.2 Hospitals and Nursing Homes. An occupancy that is a hospital or nursing home shall comply with the following:

Exception: Nursing homes are not required to comply with Items 1.2, 2 or 4.2.

- 1. **Connections for temporary external generators.** Electrical connections shall be provided to allow for the connection of temporary generators. The generators shall be capable of providing power for at least 72 hours to the following systems:
 - 1.1 All electrical services serving such occupancy for which emergency or standby power must be provided in accordance with Chapter 27 and any other applicable local, state or federal law or rule; and,
 - 1.2 Air conditioning and cooling systems serving such occupancy, sufficient to maintain temperature in accordance with Section 1204, for:
 - i. Spaces primarily used for the provision of medical services to persons, including, but not limited to consultation, evaluation, monitoring and treatment services and
 - ii. Spaces intended to be used by persons for sleeping purposes.

Exception: Connections for temporary external generators shall not be required for buildings that have emergency or standby power systems that are permanently installed above the design flood elevation specified in Section 1612.4.1 and serve:

- i. Spaces primarily used for the provision of medical services to persons, including, but not limited to, consultation, evaluation, monitoring and treatment services or
- ii. Spaces intended to be used by persons for sleeping purposes.

2. **Connections for temporary external boilers and chillers.** Where boiler and chiller plants are located below the design flood elevation specified in Section 427.2.1, connections shall be provided to allow for the connection of temporary external boilers and chillers plants. Temporary external boiler and chiller plants shall be capable of maintaining temperature in accordance with Section 1204 for at least 72 hours.

Exceptions: Connections for temporary external boiler and chiller plants shall not be required where such plants do not serve:

- i. Spaces primarily used for the provision of medical services to persons, including, but not limited to, consultation, evaluation, monitoring and treatment services or
 - ii. Spaces intended to be used by persons for sleeping purposes.
3. **Flood protection for temporary external generator, boiler and chiller connections.** Electrical connections installed in accordance with Item 1 of Section 427.2.2 and connections installed in accordance with Item 2 of Section 427.2.2 shall be located at or above the design flood elevation specified in Section 1612.4.1.
 4. **Emergency connection plan.** An emergency connection plan shall be submitted to the building official for approval. The plan shall include the following:
 - 4.1 For an occupancy required to comply with Item 1 of Section 427.2.2, a plan that identifies how the temporary external generators will be connected and capable of providing power for the occupancy in accordance with such Item; and,
 - 4.2 For an occupancy required to comply with Item 2 of Section 427.2.2, a plan that identifies how the temporary external boilers and chillers will be connected and capable of maintaining temperature in accordance with such Item.

4. 2015 IBC Table 602 (Fire-resistance rating requirements for exterior walls based on fire separation distance).

Table 602 of the 2015 IBC shall be amended by the deletion of footnote h in its entirety.

5. 2015 IBC Table 705.8 (Maximum Area of Exterior Wall Openings Based on Fire Separation Distance and Degree of Opening Protection).

Table 705.8 of the 2015 IBC shall be amended by the deletion of footnote j in its entirety.

6. 2015 IBC Section 716.6.7.1 (Where 3/4-hour fire protection window assemblies permitted).

Section 716.6.7.1 of the 2015 IBC shall be deemed to be amended to read as follows:

716.6.7.1 Where 3/4-hour fire protection window assemblies permitted. Fire-protection-rated glazing requiring 45-minute opening protection in accordance with Table 716.6 shall be limited to fire partitions designed in accordance with Section 708 and fire barriers utilized in the applications set forth in Sections 707.3.6, 707.3.7, 707.3.8 and 707.3.9 where the fire-resistance rating does not exceed 1 hour. Fire-resistance-rated glazing assemblies tested in accordance with ASTM E119 or UL 263 shall not be subject to the limitations of this section.

7. 2015 IBC Section 903.2.8 (Group R).

Section 903.2.8 of the 2015 IBC shall be amended by the addition of an exception following Section 903.2.8 to read as follows:

Exception: Summer camp cabins located in children’s overnight camps.

8. 2015 IBC Section 1106 (Parking and passenger loading facilities).

Section 1106 of the 2015 IBC shall be amended by the addition of Section 1106.8 to read as follows:

1106.8 Signage. Each accessible parking space shall be provided with signage displaying the International Symbol of Accessibility. Each access aisle shall be provided with signage reading “NO PARKING ANYTIME”. Signs shall be permanently installed at a clear height of between 60 inches (1525mm) and 84 inches (2185mm) above grade and shall not interfere with an accessible route from an access aisle.

9. 2015 IBC Section 1106.1 (Required).

Section 1106.1 of the 2015 IBC shall be deemed to be amended by the addition of Section 1106.1.1 to read as follows:

1106.1.1 Access aisles. Accessible parking spaces shall be in conformance with ICC A117.1 except that spaces shall be provided with access aisles at least 8 feet (2440 mm) in width.

10. 2015 IBC Section 1107.2 (Design).

Section 1107.2 of the 2015 IBC shall be deemed to be amended by the addition of sections 1107.2.1 and 1107.2.2 after Section 1102.2 to read as follows:

1107.2.1 Type B unit doors. Clear width and maneuvering clearances required by Sections 404.2.2 and 404.2.3 of ICC/ANSI A117.1 shall be provided at the primary entrance door to the dwelling or sleeping unit and at all other doors within the dwelling or sleeping unit meant for human passage.

Exception: Maneuvering clearances shall not be required at doors of a room containing only a lavatory and a water closet, provided the room does not contain the only lavatory or water closet on the accessible level of the unit.

1107.2.2 Type B unit toilet and bathing facilities. At least one toilet and bathing facility in the dwelling or sleeping unit shall be constructed in accordance with the toilet and bathing facilities requirements of Section 1003.11 of ICC/ANSI A117.1 (Type A Unit Toilet and Bathing Facilities).

11. 2015 IBC Section 1107.6.2.2 (Apartment houses, monasteries and convents).

Section 1107.6.2.2 of the 2015 IBC shall be deemed to be amended to read as follows:

1107.6.2.2 Apartment houses, monasteries and convents. Type B units shall be provided in apartment houses, monasteries and convents in accordance with Section 1107.6.2.2.1.

1107.6.2.2.1 Type B units. Where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a type B unit.

Exception: The number of Type B units is permitted to be reduced in accordance with Section 1107.7.

12. 2015 IBC Section 1107.6.4 (Group R-4).

Section 1107.6.4 of the 2015 IBC shall be deemed to be amended to read as follows:

1107.6.4 Group R-4. Accessible units and Type B units shall be provided in Group R-4 occupancies in accordance with Sections 1107.6.4.1 and 1107.6.4.2.

13. 2015 IBC Section 1608.2 (Ground snow loads).

Section 1608.2 of the 2015 IBC shall be deemed to be amended to read as follows:

1608.2 Ground snow loads. The ground snow loads to be used in determining the design snow loads for roofs shall be determined in accordance with ASCE 7 or Figure 1608.2. When using Figure 1608.2 for sites at elevations above 1,000 feet (304.8 m), the ground snow load shall be increased from the mapped value by 2 psf (0.096 kN/m²) for every 100 feet (30.48 m) above 1,000 feet (304.8 m). Site specific case studies may be made in lieu of snow loads in Figure 1608.2 or ASCE 7. Ground snow load determination for site-specific case studies shall be approved and shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2-percent annual probability of being exceeded (50-year mean recurrence interval).

Figure 1608.2 of the 2015 IBC shall be replaced with a new Figure 1608.2 as follows:

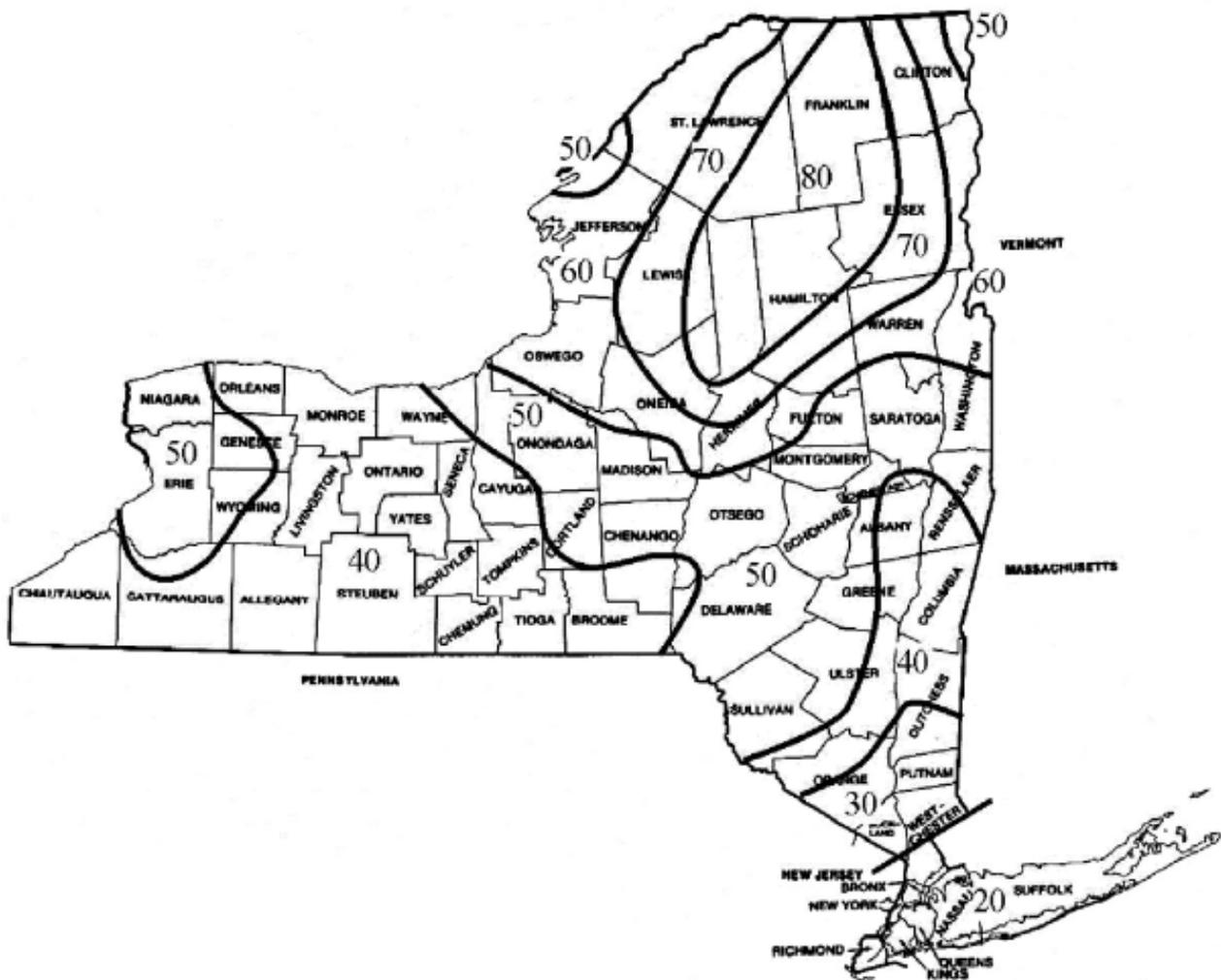


Figure 1608.2
Ground Snow Loads, p_g, for New York State (psf)

14. 2015 IBC Section 1612.3 (Establishment of flood hazard areas).

Section 1612.3 of the 2015 IBC shall be deemed to be amended to read as follows:

1612.3 Establishment of flood hazard areas. To establish flood hazard areas, each community regulated under Title 19, Part 1203 of the Official Compilation of Codes, Rules and Regulations of the State of New York (NYCRR) shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, special flood hazard areas as identified by the Federal Emergency Management Agency in the Flood Insurance Study for the community, as amended or revised with:

1. The accompanying Flood Insurance Rate Map (FIRM),
2. Flood Boundary and Floodway Map (FBFM), and
3. Related supporting data along with any revisions thereto.

The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

15. 2015 IBC Section 1612.4 (Design and construction).

Section 1612.4 of the 2015 IBC shall be deemed to be amended by the addition of a new Section 1612.4.1 to read as follows:

1612.4.1 Elevation Requirements. Two feet shall be added where the design flood elevation or other elevation requirements are specified in ASCE 24.

Exception: Where it is not possible to obtain a design flood elevation in accordance with Section 1612.3.1, the design flood elevation shall be three feet above the highest adjacent grade, where the highest adjacent grade is the natural ground elevation within the perimeter of the proposed building prior to construction.

16. 2015 IBC Section 2303.1.1 (Sawn lumber).

Section 2303.1.1 of the 2015 IBC shall be deemed to be amended by the addition of an exception after section 2303.1.1 to read as follows:

Exception: In lieu of compliance with Section 2303.1.1, lumber used for load-bearing purposes, which is neither identified by a grade mark nor issued a certificate of inspection by a lumber grading or inspection agency, may be used under the following conditions when authorized by the authority having jurisdiction:

1. The producing mill shall sell or provide the lumber directly to the ultimate consumer or the

- consumer's contract builder for use in an approved structure.
2. The producing mill shall certify in writing to the consumer or contract builder on a form to be produced by the authority having jurisdiction that the quality and safe working stresses of such lumber are equal to or exceed No. 2 grade of the species in accordance with the conditions set forth in DOC PS 20. Such certification shall be filed as part of the building permit application.
 3. The use of such lumber shall be in accordance with Section 503 of the 2015 IBC , limited to:
 - a. Buildings of residential Group R occupancy not exceeding three stories in height.
 - b. Buildings of assembly Group A, business Group B, educational Group E, factory industrial Group F, high-hazard Group H, institutional Group I, mercantile Group M, storage Group S, and utility miscellaneous Group U occupancies not exceeding 10,000 square feet (929 m²) of cumulative floor area or 35 feet (10 668 mm) in height.

17. 2015 IBC Chapter 29 (Plumbing systems).

Chapter 29 of the 2015 IBC shall be deemed to be amended by the addition of a new Section 2902.7 to read as follows:

2902.7 Buildings required to provide alternative potable water access. Buildings five or more stories in height that supply potable water from a public water main with the assistance of pumps to dwelling or sleeping units in Groups I-1, I-2, R-1, R-2, and R-4 occupancies shall provide emergency water fixtures. These fixtures shall, in an emergency when such pumps are inoperable, supply potable water from the public water main to the building using only the available pressure in the public water main. Such fixtures shall comply with Sections 2902.7.1 through 2902.7.4.

Exception: Buildings where the pumps used to supply the potable water are connected to an emergency or a standby power system that complies with the requirements of Chapter 27 of the IBC.

2902.7.1 Emergency water fixture. Fixtures capable of supplying an emergency source of potable water in accordance with this Section shall consist of either a faucet or a fixture suitable for supplying drinking water for human ingestion conforming to Sections 424.1 and 424.1.1 of the IPC. Waste fittings shall comply with IPC Section 424.1.2. Fixtures shall discharge to either:

1. A sink conforming to Section 418 of the IPC; or
2. A floor drain conforming to Section 412 of the IPC.

2902.7.2 Number of emergency water fixtures required. One such fixture shall be provided for each 100 occupants as determined by the occupant load of the building.

2902.7.3 Access to Emergency Water Fixtures. Fixtures capable of supplying an

emergency source of potable water in accordance with this section shall comply with all of the following:

1. Fixtures shall be located indoors, in one or more common areas of the building, and shall not be located in a bathroom or toilet room.
2. At least 5 percent but not less than one emergency Water fixture shall be accessible and on an accessible route complying with Section 1104.3 of the IBC. Accessible sinks and fixtures shall comply with ICC A117.1.
3. Floor drains shall not be used in conjunction with accessible emergency water fixtures.

2902.7.4 Signage. Fixtures capable of supplying an emergency source of potable water in accordance with this section shall be identified by a legible sign stating: “EMERGENCY DRINKING WATER.” Signs shall be readily visible and located near such fixtures and on the door to any room or closet in which such a fixture is located.

18. 2015 IBC Section 3109 (Swimming pools, spas and hot tubs).

Section 3109 of the 2015 IBC shall be deemed to be amended in its entirety to read as follows:

3109.1 General. Swimming pools shall comply with the requirements of this section and other applicable sections of this code. The requirements of this section and of the other applicable sections of this code shall be in addition to, and not in replacement of or substitution for, the requirements of other applicable federal, state and local laws and regulations, including, but not necessarily limited to,

1. The requirements of Subpart 6-1 (Swimming pools) of Title 10 of the Official Compilation of Codes, Rules and Regulations of the State of New York (NYCRR), where applicable, and
2. The requirements of Section 8003 (Federal swimming pool and spa drain cover standard) of Title 15 of the United States Code, where applicable.

3109.2 Definitions. The following words and terms shall, for the purposes of this section, and as used elsewhere in this code, have the meanings shown herein.

BARRIER, TEMPORARY. An approved temporary fence, permanent fence, the wall of a permanent structure, any other structure, or any combination thereof that prevents access to the swimming pool by any person not engaged in the installation or construction of the swimming pool during its installation or construction.

SUBSTANTIAL DAMAGE. For the purpose of determining compliance with the pool alarm provisions of this Section, damage of any origin sustained by a swimming pool whereby the cost of restoring the swimming pool to its before-damaged condition would equal or exceed 50 percent of the market value of the swimming pool before the damage occurred.

SUBSTANTIAL MODIFICATION. For the purpose of determining compliance with the pool alarm provisions of this Section, any repair, alteration, addition or improvement of a swimming pool, the cost of which exceeds 50 percent of the market value of the swimming pool before the improvement or repair is started. If a swimming pool sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed.

SWIMMING POOLS. Any structure, basin, chamber or tank which is intended for swimming, diving, recreational bathing or wading and which contains, is designated to contain, or is capable of containing water more than 24 inches (610 mm) deep at any point. This includes in-ground, above-ground and on-ground pools; indoor pools; hot tubs; spas and fixed-in-place wading pools.

3109.3 Public Swimming Pools. Public swimming pools shall be completely enclosed by a fence at least 4 feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not permit the passage of a 4-inch-diameter (102 mm) sphere. The fence or screen enclosure shall be equipped with gates.

3109.3.1 Gates. Gates shall comply with the following requirements.

3109.3.1.1 Self-closing; Opening Configuration. All gates shall be self-closing. In addition, if the gate is a pedestrian access gate, the gate shall open outward, away from the pool.

3109.3.1.2 Self-latching; Location of Latch Handle. All gates shall be self-latching, with the latch handle located within the enclosure (i.e., on the pool side of the enclosure) and at least 40 inches (1,016 mm) above grade. In addition, if the latch handle is located less than 54 inches (1,372 mm) from the bottom of the gate, the latch handle shall be located at least 3 inches (76 mm) below the top of the gate and neither the gate nor barrier shall have any opening greater than 0.5 inch (12.7) within 18 inches (457 mm) of the latch handle.

3109.3.1.3 Locking. All gates shall be securely locked with a key, combination or other child proof lock sufficient to prevent access to the swimming pool through such gate when the swimming pool is not in use or supervised.

3109.4 Residential swimming pools. Residential swimming pools shall be completely enclosed by a barrier complying with Sections 3109.4.1 through 3109.4.3.

Exception: A swimming pool with a power safety cover or a spa with a safety cover complying with ASTM F 1346 need not comply with this section.

3109.4.1 Barrier height and clearances. The top of the barrier shall be not less than 48 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The vertical clearance between grade and the bottom of the barrier shall be not greater than 2 inches (51 mm) measured on the side of the barrier that faces

away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, and the vertical clearance between the top of the pool structure and the bottom of the barrier shall be not greater than 4 inches (102 mm).

3109.4.1.1 Openings. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.

3109.4.1.2 Solid barrier surfaces. Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

3109.4.1.3 Closely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall be not greater than 1 ¾ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than 1 ¾ inches (44 mm) in width.

3109.4.1.4 Widely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall be not greater than 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than 1 ¾ inches (44 mm) in width.

3109.4.1.5 Chain link dimensions. Mesh size for chain link fences shall be not greater than a 2 ¼ inch square (57 mm square) unless the fence is provided with slats fastened at top or the bottom that reduce the openings to not more than 1 ¾ inches (44 mm).

3109.4.1.6 Diagonal members. Where the barrier is composed of diagonal members, the opening formed by the diagonal members shall be not greater than 1 ¾ inches (44 mm).

3109.4.1.7 Gates. Gates shall comply with the requirements of Sections 3109.4.1.1 through 3109.4.1.6 and with the following requirements.

3109.4.1.7.1 Self-closing; Opening Configuration. All gates shall be self-closing. In addition, if the gate is a pedestrian access gate, the gate shall open outward, away from the pool.

3109.4.1.7.2 Self-latching; Location of Latch Handle. All gates shall be self-latching, with the latch handle located within the enclosure (i.e., on the pool side of the enclosure) and at least 40 inches (1016 mm) above grade. In addition, if the

latch handle is located less than 54 inches (1372 mm) from the bottom of the gate, the latch handle shall be located at least 3 inches (76 mm) below the top of the gate, and neither the gate nor barrier shall have any opening greater than ½ inch (12.7) within 18 inches (457 mm) of the latch handle.

3109.4.1.7.3 Locking. All gates shall be securely locked with a key, combination or other child proof lock sufficient to prevent access to the swimming pool through such gate when the swimming pool is not in use or supervised.

3109.4.1.8 Dwelling wall as a barrier. Where a wall of a dwelling serves as part of the barrier, one of the following shall apply:

1. Doors with direct access to the pool through that wall shall be equipped with an alarm that produces an audible warning when the door or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. In dwellings not required to be Accessible units, Type A units or Type B units, the deactivation switch shall be located 54 inches (1372 mm) or more above the threshold of the door. In dwellings required to be Accessible units, Type A units or Type B units, the deactivation switch shall be located not higher than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the threshold of the door.
2. The pool shall be equipped with a power safety cover that complies with ASTM F 1346.
3. Other means of protection, such as self-closing doors with self-latching devices, which are approved, shall be accepted so long as the degree of protection afforded is not less than the protection afforded by Item 1 or 2 above.

3109.4.1.9 Pool structure as barrier. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then the ladder or steps either shall be capable of being secured, locked or removed to prevent access, or the ladder or steps shall be surrounded by a barrier that meets the requirements of Sections 3109.4.1.1 through 3109.4.1.8. Where the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

3109.4.2 Indoor swimming pools. Walls surrounding indoor swimming pools shall not be required to comply with Section 3109.4.1.8.

3109.4.3 Prohibited locations. Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

3109.5 Temporary Barriers. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a temporary barrier during installation or construction and shall remain in place until a permanent fence in compliance with Section 3109.3 or barrier in compliance with Section 3109.4 is provided.

Exceptions:

1. Above-ground or on-ground pools where the pool structure is the barrier in compliance with Section 3109.4.1.9.
2. Spas or hot tubs with a safety cover which complies with ASTM F 1346, provided that such safety cover is in place during the period of installation or construction of such hot tub or spa. The temporary removal of a safety cover as required to facilitate the installation or construction of a hot tub or spa during periods when at least one person engaged in the installation or construction is present is permitted.

3109.5.1 Height. The top of the temporary barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool.

3109.5.2 Replacement by a permanent barrier. A temporary barrier shall be replaced by a complying permanent barrier within either of the following periods:

1. 90 days of the date of issuance of the building permit for the installation or construction of the swimming pool;
2. 90 days of the date of commencement of the installation or construction of the swimming pool.

3109.5.2.1 Replacement extension. Subject to the approval of the code enforcement official, the time period for completion of the permanent barrier may be extended for good cause, including, but not limited to, adverse weather conditions delaying construction.

3109.6 Entrapment avoidance. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

3109.7 Swimming pool and spa alarms

3109.7.1 Applicability. A swimming pool or spa installed, constructed or substantially modified after December 14, 2006, shall be equipped with an approved pool alarm.

Exceptions:

1. A hot tub or spa equipped with a safety cover which complies with ASTM F 1346.
2. A swimming pool (other than a hot tub or spa) equipped with an automatic power safety cover which complies with ASTM F 1346.

Pool alarms shall comply with ASTM F2208 and shall be installed, used and maintained in accordance with the manufacturer's instructions and this section.

3109.7.2 Multiple alarms. A pool alarm must be capable of detecting entry into the water at any point on the surface of the swimming pool. If necessary to provide

detection capability at every point on the surface of the swimming pool, more than one pool alarm shall be provided.

3109.7.3 Alarm activation. Pool alarms shall activate upon detecting entry into the water and shall sound poolside and inside the building.

3109.7.4 Prohibited alarms. The use of personal immersion alarms shall not be construed as compliance with this section.

19. 2015 IBC Chapter 35 (Referenced standards).

The “ASTM” portion of Chapter 35 of the 2015 IBC shall be deemed to be amended to include the following Standard Specification:

Standard reference number	Title	Referenced in code section number
F2208-08	Standard Specification for Pool Alarms	3109.2, 3109.6.1, 3109.6.2, and 3109.6.3

CHAPTER 4
Amendments to the 2015 IPC

For the purposes of applying the 2015 IPC in this State, the 2015 IPC shall be deemed to be amended in the manner specified in this Chapter.

1. IPC Section 602.3 (Individual water supply).

Sections 602.3.1, 602.3.3, and 602.3.4 of the 2015 IPC shall be deemed to be amended to read as follows:

602.3.1 Private water supplies. Private water supplies (private wells) shall be installed by a well driller registered with the New York State Department of Environmental Conservation and shall be in compliance with the provisions of Appendix 5-B (Standards for Water Wells) or 5-D (Special Requirements for Wells Serving Public Water Systems), as applicable, of the New York State Department of Health (10 NYCRR).

602.3.3 Water quality. Water from an individual water supply shall be approved as potable by the authority having jurisdiction prior to connection to the plumbing system, in accordance with the applicable New York State Department of Health Regulations.

602.3.4 Disinfection of system. Private wells are regulated by the Department of Health in accordance with Appendix 5-B, Standards for Water Wells of Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York (NYCRR).

2. 2015 IPC Section 608.1 (General).

Section 608.1 of the 2015 IPC shall be deemed to be amended by the addition of a new Section 608.1.1, to read as follows:

608.1.1 Public water supply protection. On-site containment per Subpart 5-1.31 of the New York State Department of Health Sanitary Code (10 NYCRR) may be required by the provider of public water, depending on the degree of hazard, to protect public water systems through the use of appropriate backflow prevention device installations.

3. 2015 IPC Section 608.6.1 (Private water supplies).

Section 608.6.1 of the 2015 IPC shall be deemed to be amended to read as follows:

608.6.1 Private water supplies. Cross connections between a private water supply and a

potable public supply shall be prohibited, except where an appropriate cross-control connection device is installed in accordance with 10 NYCRR Subpart 5-1.31 (New York State Department of Health Sanitary Code).

4. 2015 IPC Section 610.1 (General).

Section 610.1 of the 2015 IPC shall be deemed to be amended to read as follows:

610.1 General. New or repaired potable water systems shall be purged of deleterious matter and disinfected prior to utilization. The method to be followed shall be in accordance with the applicable New York State Department of Health regulations.

5. 2015 IPC Section 903.1 (Roof extension).

Section 903.1 of the 2015 IPC shall be deemed to be amended to read as follows:

903.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than 18 inches (458 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

CHAPTER 5
Amendments to the 2015 IMC

For the purposes of applying the 2015 IMC in this State, the 2015 IMC shall be deemed to be amended in the manner specified in this Chapter.

1. 2015 IMC Section 922 (Kerosene and oil-fired stoves).

Sections 922 of the 2015 IMC shall be renamed “**Kerosene and Oil-Fired Stoves and Heaters**”.

2. 2015 IMC Section 922 (Kerosene and oil-fired stoves and heaters).

Section 922 of the 2015 IMC shall be deemed to be amended by the addition of a new Section 922.2 to read as follows:

922.2 Approved portable kerosene heater. Unvented portable kerosene-fired heaters tested and listed in accordance with UL 647 are approved by the Secretary of State for use in New York State if packaged for sale with all provisions required in New York State Real Property Law Article 7A Section 239-a(7). Unvented portable kerosene-fired heaters shall not be located in, or obtain combustion air from, any of the following rooms or spaces: sleeping rooms, bathrooms, toilet rooms, or storage closets. Portable kerosene heaters shall be prohibited in buildings of occupancy groups A, E, I, R-1, R-2, R-3 and R-4 (except for one- and two-family homes and townhouses). The use of unvented portable kerosene-fired heaters is further regulated by New York State Real Property Law Article 7A.

CHAPTER 6
Amendments to the 2015 IFGC

For the purposes of applying the 2015 IFGC in this State, the 2015 IFGC shall be deemed to be amended in the manner specified in this Chapter.

1. 2015 IFGC Section 202 (Definitions).

The definition of the term “*unvented room heater*” in Section 202 of the 2015 IFGC shall be deemed to be amended, and new definitions of the terms “*CSST*” and “*listed conductive jacketed CSST*”, shall be deemed to be added to Section 202 of the 2015 IFGC; said amended definition and said new definitions to read as follows:

CSST. Corrugated stainless steel tubing.

LISTED CONDUCTIVE JACKETED CSST (or LISTED CJ-CSST). CSST which is:

1. Encased in a conductive jacket, and
2. Listed in a currently effective evaluation report issued by a nationally recognized building product evaluation service as having been
 - i. Tested in accordance with the published National Standard ANSI LC 1-2014 including the performance criteria of Section 5.16 and
 - ii. Shown by such testing to satisfy such published performance criteria and to provide, without additional bonding, protection against damage from indirect lightning strikes that is at least equivalent to that provided by direct bonding as prescribed in Section 310 of this code.

UNVENTED ROOM HEATER. An unvented heating appliance designed for stationary installation and utilized to provide comfort heating. Such appliances provide radiant heat or convection heat by gravity or fan circulation directly from the heater and do not utilize ducts. A wall-mounted unvented room heater would be of the type designed for insertion in or attachment to a wall or partition. A wall-mounted unvented room heater does not incorporate concealed venting arrangements in its construction and discharges all products of combustion through the front into the room being heated.

2. 2015 IFGC Section 310.1.1 (CSST).

Section 310.1.1 of the 2015 IFGC shall be deemed to be deleted.

3. 2015 IFGC Section 310 (Electrical bonding).

Section 310 of the 2015 IFGC shall be deemed to be amended by the addition of new Sections 310.2 and 310.3 to read as follows:

310.2 Gas pipe bonding – CSST. A gas piping system that contains any CSST shall be electrically continuous and shall be directly bonded to the electrical service grounding electrode system. No portion of the gas piping system shall be used as or considered to be a grounding electrode or a grounding electrode conductor. CSST shall be installed and bonded in accordance with Section 310.2, and the stricter of:

1. The requirements set forth in the CSST manufacturer’s installation instructions, or
2. The requirements set forth Sections 310.2.1, 310.2.2, 310.2.3, and 404.7 of this code.

Exception: Where all of the CSST contained in a gas piping system is listed CJ-CSST and the gas piping system satisfies all of the other criteria set forth in Section 310.3 of this code, such gas piping system shall comply with said Section 310.3.

310.2.1 Bonding jumper. Where the electric service for the individual installation is 200 amperes or less, the bonding jumper shall not be smaller than 6 AWG copper wire or 4 AWG aluminum or copper-clad aluminum wire, and shall be permanently connected to the grounding electrode system. Where the electric service for the individual installation is more than 200 amperes, the bonding jumper size shall be determined in accordance with Table 250.66 and Sections 250.66(A) through 250.66(C) of NFPA 70, and shall be permanently connected to the grounding electrode system.

310.2.2 Bonding clamp. The bonding jumper shall be connected to the gas piping system with a bonding clamp that is listed for the material of the bonding jumper and for the material of the component of the gas piping system to which the bonding clamp is attached. The bonding clamp shall be attached to the gas piping system, on the downstream side of the gas meter or regulator in an unconcealed and readily accessible space, and as close as practical to the point where the bonding jumper is connected to the electrical service grounding electrode system, and shall not exceed 75 feet. Any additional grounding electrodes used shall be bonded to the electrical service grounding electrode system.

310.2.2.1 Bonding connections. Bonding connections shall be in accordance with NFPA 70.

310.2.2.2 Connection devices. Devices used for making the bonding connections shall be listed for the application in accordance with UL 467.

310.2.3 Prohibited uses. CSST shall not be supported on or by other electrically conductive systems including copper water pipe, electric power cables, air-

conditioning and heating ducts, communication cables and structural steel beams. Electrical wiring, including the bonding conductor, shall be supported and secured independently of the CSST so that it does not come in contact with the CSST.

310.3 Gas pipe bonding - listed CJ-CSST. Where:

1. All of the CSST contained in a gas piping system consists of listed CJ-CSST,
2. Such gas piping system is electrically continuous, and
3. At least one appliance is:
 - i. Connected to such gas piping system,
 - ii. Connected to a grounded electrical circuit, and
 - iii. connected to the equipment grounding conductor of such electrical circuit by a bonding conductor that is 14 AWG (or larger) copper,

Such gas piping system shall be installed and bonded in accordance with the stricter of:

1. The requirements set forth in the listed CJ-CSST manufacturer's installation instructions, or
2. The requirements set forth in Sections 310.3.1, 310.3.2, 310.3.3, and 404.7 of this code.

310.3.1 Bonding. A gas piping system that contains only listed CJ-CSST and satisfies all the other criteria specified in Section 310.3 of this code shall be considered to be bonded to an effective ground-fault current path, and shall not be required to be directly bonded as prescribed by Section 310.2 of this code. However, nothing in this Section 310.3.1 shall prohibit the bonding any such gas piping system in any manner described in Section 250.104(B) of NFPA 70.

310.3.2 Grounding electrodes. No portion of the gas piping system shall be used as or considered to be a grounding electrode or a grounding electrode conductor.

310.3.3 Prohibited uses. The listed CJ-CSST shall not be supported on or by other electrically conductive systems including copper water pipe, electric power cables, air-conditioning and heating ducts, communication cables and structural steel beams. Electrical wiring shall be supported and secured independently of the listed CJ-CSST so that it does not come in contact with the listed CJ-CSST.

4. 2015 IFGC Section 404.7 (Protection against physical damage).

Section 404.7 of the 2015 IFGC shall be deemed to be amended to read as follows:

404.7 Protection against physical damage. In concealed locations, where piping other than black or galvanized steel is installed through holes or notches in wood studs, joists, rafters or similar members less than 1 ¾ inches (44.45 mm) from the nearest edge of the member, the pipe shall be protected by shield plates. Such shield plates shall comply with the requirements of Section 404.7.1, shall cover the area of the pipe where the member is notched or bored, and

shall extend a minimum of 4 inches (102 mm) above sole plates, below top plates and to each side of a stud, joist or rafter. The movement of piping made of CSST (including, but not limited to, piping made of listed CJ-CSST) shall not be otherwise constrained by straps, clips or other support devices. In addition, where CSST (including, but not limited to, listed CJ-CSST) is installed in a concealed location and parallel to any joist, rafter, or similar member, the CSST shall be protected by shield plates in any area where the CSST is not:

1. Physically supported in a manner that ensures the CSST will always be at least 1 ¾ inches (44.45 mm) away from the nearest edge of any member, or
2. Encased in a protective metal pipe made of schedule 40 steel or iron pipe or in a protective pipe sleeve made of a material approved by the code enforcement official as the equivalent of schedule 40 steel or iron pipe.

Such shield plates shall comply with the requirements of Section 404.7.1, shall cover the area where the CSST is located, and shall extend a minimum of 4 inches (102 mm) to each side of the CSST.

404.7.1 Shield plates. In all cases, shield plates shall be certified or listed as complying with ANSI LC-1. In addition, in the case of piping made of CSST, shield plates shall be listed for use with the manufacturer's CSST system.

5. 2015 IFGC Section 602.2 (Flame safeguard device).

Section 602.2 of the 2015 IFGC shall be deemed to be amended to read as follows:

602.2 Flame safeguard device. Decorative vented appliances for installation in approved solid fuel-burning fireplaces, with the exception of those tested in accordance with ANSI Z21.84, shall utilize a direct ignition device, an igniter or a pilot flame to ignite the fuel at the main burner, and shall be equipped with a flame safeguard device. The flame safeguard device shall automatically shut off the fuel supply to a main burner or group of burners when the means of ignition of such burners becomes inoperative.

CHAPTER 7
Amendments to the 2015 IFC

For the purposes of applying the 2015 IFC in this State, the 2015 IFC shall be deemed to be amended in the manner specified in this Chapter.

1. 2015 IFC Section 202 (General definitions).

The definition of the terms “*access roof*”, “*ground access area*”, and “*roof access point*” shall be deemed to be added to Section 202 of the 2015 IFC; said new definitions to read as follows:

ACCESS ROOF. A roof surface which provides access to the ridge or peak of an adjoining roof surface containing solar panels, modules, or arrays; and

1. Is relatively free of vents, skylights, and other such obstructions, and
2. Does not contain solar panels, modules, or arrays; or is a single ridge roof where the total edge width of the solar panels, modules, or arrays does not exceed 33% of the ridge length.

GROUND ACCESS AREA. A ground area relatively clear of obstructions that can be used to establish ground ladders for gaining entry to the access roof or roof access point.

ROOF ACCESS POINT. The beginning of the roof access pathway at the eave.

2. 2015 IFC Section 403 (Fire drills in college and university buildings).

Section 403 of the 2015 IFC shall be deemed to be amended by the addition of the following sections:

403.2.5 Education Law requirements for Groups A college and university buildings. In addition to other requirements, the frequency and timing of drills shall be in accordance with the requirements of Section 807.3 of the Education Law, which requires not less than three drills annually, one of which shall take place between September 1 and December 1. At least one of the drills shall use fire escapes, where provided. Where summer sessions are provided, at least one of the required drills shall be held during the first week of summer school.

403.4.1 Education Law requirements for Group B college and university buildings. In addition to other requirements, the frequency and timing of drills shall be in accordance with the requirements of Section 807.3 of the Education Law, which requires not less than 3 drills annually, one of which shall take place between September 1 and December 1. At least one of the drills shall use fire escapes, where provided. Where summer sessions are provided, at least one of the required drills shall be held during the first week of summer school.

3. 2015 IFC Section 403 (Fire drills in group E occupancies).

Section 403 of the 2015 IFC shall be deemed to be amended by the addition of the following section:

403.5.4 Education Law requirements for Group E occupancies. In addition to other requirements, the frequency and timing of drills shall be in accordance with the requirements of Section 807.1 of the Education Law, which requires not less than 12 drills annually, eight of which shall take place between September 1 and December 1. At least one-third of the drills shall use fire escapes, where provided. At least one drill shall be held during a lunch period, or pupils shall be instructed in procedures to be followed during a lunch period. At least four additional drills shall be held during hours after sunset or before sunrise, where students reside at the school. At least two additional drills shall be held during the first week of summer school.

4. 2015 IFC Table 405.2 (Fire drills in college and university buildings).

Table 405.2 of the 2015 IFC shall be deemed to be amended by the addition of the following fields:

Group A (college and university buildings)	Three annually	All occupants
Group B (college and university buildings)	Three annually	All occupants

5. 2015 IFC Section 503.1.1 (Buildings and facilities).

Section 503.1.1 of the 2015 IFC shall be deemed to be amended by the modification of exception 1.3 and the addition of exception 1.4 to read as follows:

Exceptions:

- 1.3. Group U occupancies.
- 1.4. One- or two-family detached dwellings or not more than two Group R-3 occupancies that meet the requirements of Section 511.

6. 2015 IFC Section 505.1 (Address identification).

Section 505.1 of the 2015 IFC shall be deemed to be amended by the addition of the following exception:

Exception: Buildings identified under an addressing scheme as part of a countywide 911

numbering system.

7. 2015 IFC Section 507.2 (Type of water supply).

Section 507.2 of the 2015 IFC shall be deemed to be amended by the addition of the following exception:

Exception: In rural and suburban areas in which adequate and reliable water supply systems do not exist, the fire code official is authorized to approve the use of NFPA 1142.

8. 2015 IFC Chapter 5 (FIRE SERVICE FEATURES).

Chapter 5 of the 2015 IFC shall be deemed to be amended by the addition of a new Section 511 to read as follows:

**SECTION 511
EMERGENCY VEHICLE ACCESS**

511.1 Emergency access driveways. Emergency vehicle access for one or two Group R-3 buildings and detached one- and two-family dwellings constructed by the Residential Code hereafter constructed or moved into the jurisdiction shall be provided in accordance with this section.

Exceptions:

1. Construction of dwellings on premises which have had local site plan approval prior to January 1st, 2011.
2. Accessory storage buildings.
3. Dwellings without electrical service and permitted to not have electrical service by the 2015 IRC.

511.2 Driveways. Driveways shall be provided when an exit door required by the 2015 IRC Section R311.2 is located more than 300 feet (91 440 mm) from a fire apparatus access road or public street.

Exception: The measurement is permitted to be increased beyond 300 feet (91 440 mm) if driveways cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions and the building is protected by an automatic sprinkler system in accordance with 903.3.1.1, 903.3.1.2, 903.3.1.3, or the 2015 IRC Section P2904.

511.2.1 Dimensions. Driveways shall provide a minimum unobstructed width of 12 feet (3658 mm) and a minimum unobstructed height of 13 feet, 6 inches (4115 mm).

511.2.2 Turnaround. When driveways are in excess of 500 feet (152 400 mm) in length and does not exit to another fire apparatus access road or public street, a turnaround shall be provided suitable for use by fire apparatus.

511.2.3 Turnouts. Driveways in excess of 500 feet (152 400 mm) in length and less than 20 feet (6096 mm) in width shall be provided with turnouts along the driveway that are a minimum 20 feet in width for a length of 50 feet (15 240 mm) in length. The turnouts shall be placed at intervals not to exceed 500 feet (152 400 mm) along the driveway.

511.2.4 Stability. Driveways, including bridges and other supporting structure of driveways, shall be constructed to support fire apparatus in all weather conditions.

511.2.5 Design. The design of driveways, including turning radius and grade, shall facilitate passage of fire apparatus and be approved.

511.2.6 Driveways, and portions thereof, that serve more than four buildings shall meet the design requirements of fire apparatus access roads in Section 503.

9. 2015 IFC Section 605.11 (Solar photovoltaic power systems).

Section 605.11 of the 2015 IFC shall be deemed to be amended by the replacement of sections 605.11.1 through 605.11.1.2.5 in their entirety, and the addition of a new section 605.11.1.2.6. Said amendment to read as follows:

605.11.1 Access and pathways. Roof access, pathways and spacing requirements for solar photovoltaic systems shall be provided in accordance with Sections 605.11.1.1 through 605.11.1.3.3.

Exceptions:

1. Roof access, pathways and spacing requirements need not be provided where an alternative ventilation method has been provided, or where vertical ventilation techniques will not be employed.
2. Detached, non-habitable Group U structures.

605.11.1.1 Roof access points. Roof access points shall be located:

1. In areas that establish access pathways which are independent of each other and as remote from each other as practicable so as to provide escape routes from all points along the roof;

2. In areas that do not require the placement of ground ladders over openings such as windows or doors or areas that may cause congestion or create other hazards;
3. At strong points of building construction, such as corners, pilasters, hips, and valleys, and other areas capable of supporting the live load from emergency responders;
4. Where the roof access point does not conflict with overhead obstructions such as tree limbs, wires or signs;
5. Where the roof access point does not conflict with ground obstructions such as decks, fences, or landscaping; and
6. In areas that minimize roof tripping hazards such as vents, skylights, satellite dishes, antennas, or conduit runs.

605.11.1.2 Solar photovoltaic systems for Group R-3 buildings. Solar photovoltaic systems for Group R-3 buildings shall comply with Sections 605.11.1.2.1 through 605.11.1.2.6.

Exception: These requirements shall not apply to structures designed and constructed in accordance with the International Residential Code.

605.11.1.2.1 Size of solar photovoltaic array. Each photovoltaic array shall not exceed 150 feet (45 720 mm) in any direction.

605.11.1.2.2 Ground access areas. Ground access areas shall be located directly beneath access roofs and roof access points. The minimum width of the ground access area shall be the full width of the access roof or roof access point, measured at the eave. The minimum depth shall allow for the safe placement of ground ladders for gaining entry to the access roof.

605.11.1.2.3 Single ridge roofs. Panels, modules, or arrays installed on roofs with a single ridge shall be located in a manner that provides two, 36 inches wide (914 mm) access pathways extending from the roof access point to the ridge. Access pathways on opposing roof slopes shall not be located along the same plane as the truss, rafter, or other such framing system that supports the pathway.

Exceptions:

1. Roofs with slopes of 2 units vertical in 12 units horizontal (16.6 percent) and less.
2. Structures where an access roof fronts a street, driveway, or other area readily accessible to emergency responders.
3. One access pathway shall be required when a roof slope containing panels, modules or arrays is located not more than 24 inches (610 mm) vertically from an adjoining roof which contains an access roof.

605.11.1.2.4 Hip roofs. Panels, modules, and arrays installed on structures with hip roofs shall be located in a manner that provides a clear access pathway not less than 36

inches wide (914 mm), extending from the roof access point to the ridge, on each roof slope where panels, modules, or arrays are located.

Exceptions:

1. Roofs with slopes of 2 units vertical in 12 units horizontal (16.6 percent) and less.
2. Structures where an access roof fronts a street, driveway, or other area readily accessible to emergency responders.

605.11.1.2.5 Roofs with valleys. Panels and modules shall not be located less than 18 inches (457 mm) from a valley.

Exception: Roofs with slopes of 2 units vertical in 12 units horizontal (16.6 percent) and less.

605.11.1.2.6 Allowance for smoke ventilation operations. Panels and modules shall not be located less than 18 inches (457 mm) from a ridge or peak.

Exceptions:

1. Where an alternative ventilation method has been provided or where vertical ventilation methods will not be employed between the upper most portion of the solar photovoltaic system and the roof ridge or peak.
2. Detached, non-habitable Group U structures.

10. 2015 IFC Section 806.1.1 (Restricted occupancies).

Section 806.1.1 of the 2015 IFC shall be deemed to be amended by the addition of the following exception:

Exception: 3. In places of public assembly as defined in Article 1 of the Labor Law, natural cut trees shall be permitted without the installation of an approved automatic sprinkler system, provided that an approved two and one-half gallon soda ash or loaded stream fire extinguisher shall be kept in plain sight within 15 feet of such tree [Title 12 NYCRR Part 36, Section 36-2.9(a4)].

11. 2015 IFC Section 907.2.1 (Group A).

Section 907.2.1 of the 2015 IFC shall be deemed to be amended by the addition of the following section:

907.2.1.3 Automatic smoke detection system. A smoke detection system that activates the

occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies unless the fire area is protected with an automatic fire sprinkler system installed in accordance with 903.3.1.1.

12. 2015 IFC Section 915 (Carbon monoxide detection systems).

Section 915 of the 2015 IFC shall be deemed to be amended to read as follows:

915.1. General. Carbon monoxide alarms and carbon monoxide detectors shall be installed in buildings as required in accordance with Section 915.2 for residential buildings or Section 915.3 for commercial buildings.

915.2 Residential buildings.

915.2.1 General. Section 915.2 covers the application, installation, performance and maintenance of carbon monoxide alarms and carbon monoxide detectors, and their components, in new and existing one-and two-family dwellings; multiple single-family dwellings (townhouses); buildings owned as condominiums or cooperatives and containing dwelling units; bed and breakfast dwellings; and other buildings and structures which contain one or more dwelling units, sleeping units or sleeping areas and which are classified, in whole or in part, in one or more of the following occupancy Groups: E, I-1, I-2 (except hospitals), I-4, R-1, R-2, R-3 or R-4. Carbon monoxide alarms (or, where permitted, carbon monoxide detectors) shall be provided in all new and existing buildings and structures described in Section 915.2.1, without regard to the date of construction of the building or structure and without regard to whether such building or structure shall or shall not have been offered for sale. Carbon monoxide alarms (or, where permitted, carbon monoxide detectors) shall be installed, operated and maintained in accordance with the provisions of Section 915.2 or, in the alternative, in accordance with the provisions of NFPA 720.

Exception: Carbon monoxide alarms and/or carbon monoxide detectors shall not be required in a building or structure that contains no carbon monoxide source.

915.2.2 Definitions. For the purposes of this Section 915.2, the following terms shall have the following meanings:

Carbon monoxide alarm. A single or multiple-station device that has (1) a sensor capable of detecting the presence of carbon monoxide and (2) an alarm that sounds when carbon monoxide is detected.

Carbon monoxide detector. A device that (1) has a sensor capable of detecting the presence of carbon monoxide and (2) is connected to an alarm control unit that sounds an alarm when carbon monoxide is detected.

Carbon monoxide source. Any appliance, equipment, device or system that may emit carbon monoxide (including, but not limited to, fuel fired furnaces; fuel fired boilers; space heaters with pilot lights or open flames; kerosene heaters; wood stoves; fireplaces; and stoves, ovens, dryers, water heaters and refrigerators that use gas or liquid fuel), garages, and other motor vehicle related occupancies.

Dwelling unit. A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. Dwelling units include, but are not limited to, one-family dwellings, each unit in a two-family dwelling, each unit in a multiple single-family dwelling (townhouse), bed and breakfast dwellings, apartments, and dormitory suites having living areas, bedrooms, bathrooms and kitchens.

Sleeping area. A room or space that can be used, either on an occasional or permanent basis, for sleeping. Sleeping areas include, but are not limited to, bedrooms and places where children sleep in a daycare facility.

Sleeping unit. A room or space in which people sleep, which can also include permanent provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a dwelling unit are not sleeping units. Sleeping units include, but are not limited to, dormitory suites with living areas, bedrooms and bathrooms.

915.2.3 Required locations. Carbon monoxide alarms shall be provided in the locations determined pursuant to Section 915.2.3.

Exceptions:

1. Where coverage at a location is required by more than one provision of Section 915.2.3, providing one carbon monoxide alarm at such location shall be deemed to satisfy all such provisions.
2. In lieu of a carbon monoxide alarm, a carbon monoxide detector may be provided at any location where coverage is required, provided that such carbon monoxide detector is part of a system that causes an alarm to sound at such location when carbon monoxide is detected at such location.

915.2.3.1 One- Family Dwellings.

915.2.3.1.1 Buildings constructed on or after January 1, 2008.

915.2.3.1.1.1 A carbon monoxide alarm shall be provided on each story containing a sleeping area, within 15 feet of the sleeping area. More than one carbon monoxide alarm shall be provided where necessary to assure that no sleeping area on such story is more than 15 feet away from a carbon monoxide alarm.

915.2.3.1.1.2 A carbon monoxide alarm shall be provided on each story that

contains a carbon monoxide source.

915.2.3.1.2 Buildings constructed prior to January 1, 2008. A carbon monoxide alarm shall be provided on the lowest story containing a sleeping area, within 15 feet of the sleeping area. More than one carbon monoxide alarm shall be provided where necessary to assure that no sleeping area on such story is more than 15 feet away from a carbon monoxide alarm.

915.2.3.2 Two-family dwellings, multiple single-family dwellings (townhouses), and buildings owned as condominiums or cooperatives and containing dwelling units.

915.2.3.2.1 Buildings constructed on or after January 1, 2008. Within each dwelling unit:

915.2.3.2.1.1 A carbon monoxide alarm shall be provided on every story containing a sleeping area, within 15 feet of the sleeping area. More than one carbon monoxide alarm shall be provided where necessary to assure that no sleeping area on such story is more than 15 feet away from a carbon monoxide alarm.

915.2.3.2.1.2 A carbon monoxide alarm shall be provided on every story that contains a carbon monoxide source.

915.2.3.2.2 Buildings constructed prior to January 1, 2008. Within each dwelling unit, a carbon monoxide alarm shall be provided on the lowest story containing a sleeping area, within 15 feet of the sleeping area. More than one carbon monoxide alarm shall be provided where necessary to assure that no sleeping area on such story is more than 15 feet away from a carbon monoxide alarm.

915.2.3.3 Bed and breakfast dwellings and buildings and structures which: (1) contain one or more sleeping areas; (2) are classified in one or more of the following occupancy Groups: E, I-2 (except hospitals), I-4, R-1, R-2, R-3 or R-4; and, (3) are not covered by Section 915.2.3.1 or Section 915.2.3.2.

915.2.3.3.1 Buildings and structures constructed on or after January 1, 2008.

915.2.3.3.1.1 Dwelling units and sleeping units. Carbon monoxide alarms shall be provided within each dwelling unit and within each sleeping unit at the locations specified in this Section 915.2.3.3.1.1.

915.2.3.3.1.1.1 In a dwelling unit or sleeping unit that contains a carbon monoxide source, a carbon monoxide alarm shall be provided on each story that contains a sleeping area. The carbon monoxide alarm shall be located within 15 feet of the sleeping area. More than one carbon monoxide alarm

shall be provided where necessary to assure that no sleeping area on such story is more than 15 feet away from a carbon monoxide alarm. In addition, a carbon monoxide alarm shall be provided within each sleeping area that contains a carbon monoxide source.

915.2.3.3.1.1.2 In a dwelling unit or sleeping unit which contains no carbon monoxide source, but which is located (in whole or in part) on the same story as a carbon monoxide source, a carbon monoxide alarm shall be provided on each story that contains a sleeping area. The carbon monoxide alarm shall be located within 15 feet of the sleeping area. More than one carbon monoxide alarm shall be provided where necessary to assure that no sleeping area on such story is more than 15 feet away from a carbon monoxide alarm.

915.2.3.3.1.1.3 In a dwelling unit or sleeping unit which contains no carbon monoxide source and which is not located (in whole or in part) on the same story as a carbon monoxide source, no carbon monoxide alarm is required.

915.2.3.3.1.2 Sleeping areas not located within a dwelling unit. Carbon monoxide alarms shall be provided within sleeping areas that are not located within a dwelling unit when required by this Section 915.2.3.3.1.2.

915.2.3.3.1.2.1 A carbon monoxide alarm shall be provided within each sleeping area that contains a carbon monoxide source.

915.2.3.3.1.2.2 A carbon monoxide alarm shall be provided within each sleeping area that is located (in whole or in part) on the same story as a carbon monoxide source.

915.2.3.3.1.3 Stories which (1) contain a carbon monoxide source and (2) contain no dwelling unit, sleeping unit or sleeping area. A carbon monoxide alarm shall be provided on every story which (1) contains a carbon monoxide source and (2) contains no dwelling unit, sleeping unit or sleeping area.

915.2.3.3.2 Buildings and structures constructed prior to January 1, 2008.

915.2.3.3.2.1 Dwelling units and sleeping units. Carbon monoxide alarms shall be provided within each dwelling unit and within each sleeping unit at the locations specified in this Section 915.2.3.3.2.1.

915.2.3.3.2.1.1 In a dwelling unit or sleeping unit that contains a carbon monoxide source, a carbon monoxide alarm shall be provided on the lowest story that contains a sleeping area. The carbon monoxide alarm shall be located within 15 feet of the sleeping area. More than one carbon monoxide alarm shall be provided where necessary to assure that no sleeping area on

such story is more than 15 feet away from a carbon monoxide alarm. In addition, a carbon monoxide alarm shall be provided within each sleeping area that contains a carbon monoxide source.

915.2.3.3.2.1.2 In a dwelling unit or sleeping unit which contains no carbon monoxide source, but which is located (in whole or in part) on the same story as a carbon monoxide source, a carbon monoxide alarm shall be provided on the lowest story that contains a sleeping area. The carbon monoxide alarm shall be located within 15 feet of the sleeping area. More than one carbon monoxide alarm shall be provided where necessary to assure that no sleeping area on such story is more than 15 feet away from a carbon monoxide alarm.

915.2.3.3.2.1.3 In a dwelling unit or sleeping unit which contains no carbon monoxide source and which is not located (in whole or in part) on the same story as a carbon monoxide source, no carbon monoxide alarm is required.

915.2.3.3.2.2 Sleeping areas not located within a dwelling unit. Carbon monoxide alarms shall be provided within sleeping areas that are not located within a dwelling unit when required by this Section 915.2.3.3.2.2.

915.2.3.3.2.2.1 A carbon monoxide alarm shall be provided within each sleeping area that contains a carbon monoxide source.

915.2.3.3.2.2.2 A carbon monoxide alarm shall be provided within each sleeping area that is located (in whole or in part) on the same story as a carbon monoxide source.

915.2.3.3.2.3 Stories which (1) contain a carbon monoxide source and (2) contain no dwelling unit, sleeping unit or sleeping area. A carbon monoxide alarm shall be provided on every story which (1) contains a carbon monoxide source and (2) contains no dwelling unit, sleeping unit or sleeping area.

915.2.3.4 Buildings and structures classified in Occupancy Group I-1:

915.2.3.4.1 Buildings and structures constructed on or after January 1, 2008.

915.2.3.4.1.1 A carbon monoxide alarm shall be provided on every story containing a sleeping area, within 15 feet of the sleeping area. More than one carbon monoxide alarm shall be provided where necessary to assure that no sleeping area on such story is more than 15 feet away from a carbon monoxide alarm.

915.2.3.4.1.2 A carbon monoxide alarm shall be provided on every story that contains a carbon monoxide source.

915.2.3.4.2 Buildings and structures constructed prior to January 1, 2008. A carbon monoxide alarm shall be provided on every story containing a sleeping area, within 15 feet of the sleeping area. More than one carbon monoxide alarm shall be provided where necessary to assure that no sleeping area on such story is more than 15 feet away from a carbon monoxide alarm.

915.2.4 New carbon monoxide source. This section applies when a carbon monoxide source is installed in, or added, or attached to a building or structure after the date of original construction of the building or structure. This section applies without regard to the date of original construction of the building or structure. When a carbon monoxide source is installed in, or added, or attached to a building or structure, the building or structure (with such new carbon monoxide source) shall be evaluated as if such building or structure (with such new carbon monoxide source) were constructed on or after January 1, 2008, and a carbon monoxide alarm shall be provided at each location determined for such building or structure (with such new carbon monoxide source) pursuant to Section 915.2.3.

Exception: In lieu of a carbon monoxide alarm, a carbon monoxide detector may be provided at any location where coverage is required, provided that such carbon monoxide detector is part of a system that causes an alarm to sound at such location when carbon monoxide is detected at such location.

915.2.5 Power source. Carbon monoxide alarms, carbon monoxide detectors, and the alarm control units to which carbon monoxide detectors are connected shall receive their primary power from the building wiring, and shall be equipped with a battery backup system that automatically provides power from one or more batteries when primary power is interrupted. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

Exceptions:

1. Carbon monoxide alarms and carbon monoxide detectors installed in a building or structure without an electrical power source shall be battery operated.
2. Carbon monoxide alarms and carbon monoxide detectors installed in a building or structure constructed prior to January 1, 2008 may be battery operated, cord-type or direct plug.
3. Carbon monoxide alarms and carbon monoxide detectors installed in a building or structure pursuant to Section 915.2.4 may be battery operated, cord-type or direct plug.
4. In the case of a building or structure constructed on or after January 1, 2008 and prior to the effective date of this code, when a carbon monoxide alarm or carbon monoxide detector is provided at a location where coverage was not required by prior versions of the Uniform Code, but where coverage is required by Section 610, such carbon monoxide alarm or carbon monoxide detector may be battery operated, cord-type or direct plug.

915.2.6 Equipment. Carbon monoxide alarms shall be listed and labeled as complying

with UL 2034 or CAN/CSA 6.19. Carbon monoxide detectors shall be listed and labeled as complying with UL 2075 and shall meet the sensitivity testing and alarm thresholds of UL 2034 or CAN/CSA 6.19. Carbon monoxide alarms, carbon monoxide detectors and alarm control units shall be installed in accordance with Section 915.2 and the manufacturer's installation instructions.

915.2.6.1 Connection of multiple carbon monoxide alarms and detectors. When more than one carbon monoxide alarm is required to be installed within an individual dwelling unit, sleeping unit, or sleeping area, all carbon monoxide alarms in such dwelling unit, sleeping unit, or sleeping area shall be interconnected.

Exception: Interconnection is not required where battery operated, cord-type or direct plug carbon monoxide alarms and carbon monoxide detectors are permitted.

915.2.6.2 Maintenance and testing. Carbon monoxide alarms, carbon monoxide detectors, and alarm control units shall be maintained in an operative condition at all times. Carbon monoxide alarms, carbon monoxide detectors, and alarm control units shall be periodically tested in accordance with the manufacturer's instructions. The battery or batteries used as the primary or backup power source shall be replaced when low or when otherwise required by the manufacturer's instructions. Carbon monoxide alarms, carbon monoxide detectors, and alarm control units shall be replaced or repaired where defective, and shall be replaced when they cease to operate as intended.

915.2.6.3 Disabling of alarms. No carbon monoxide alarm, carbon monoxide detector, or alarm control unit shall be removed or disabled, except for service, repair or replacement purposes.

Section 915.3 Carbon Monoxide Detection in Commercial Buildings.

(a) Introduction. This Section 915.3 covers the provision of carbon monoxide detection, and the application, installation, performance, and maintenance of carbon monoxide alarms and carbon monoxide detection systems, in new and existing commercial buildings.

(b) Definitions. In this Section 915.3, the following terms shall have the following meanings, unless a different meaning is clearly required by the context:

(1) APPROVED. The term “approved” means acceptable to the code enforcement official for the authority having jurisdiction.

(2) AUTHORITY HAVING JURISDICTION. The term “authority having jurisdiction” with respect to a commercial building means the governmental unit or agency responsible for enforcing the Uniform Code with respect to such commercial building.

(3) CARBON MONOXIDE SOURCE. The term “carbon monoxide source”

means any appliance, equipment, device or system that may emit carbon monoxide (including, but not limited to fuel fired furnaces; fuel fired boilers; space heaters with pilot lights or open flames; kerosene heaters; wood stoves; fireplaces; and stoves, ovens, dryers, water heaters and refrigerators that use gas or liquid fuel), garages, and other motor vehicle related occupancies.

(4) CARBON MONOXIDE-PRODUCING HVAC SYSTEM. The term “carbon monoxide-producing HVAC system” means a system that uses ducts to provide heat, ventilation and/or air-conditioning to all or any part of a commercial building, provided that:

- (i) such ducts run from a carbon monoxide source to the classroom(s) and/or detection zone(s) served by such system; and/or
- (ii) such system is supplied with recirculated or makeup air from a classroom or detection zone that contains a carbon monoxide source.

(5) CENTRAL LOCATION. The term “central location” means the point that, in the judgment of the authority having jurisdiction, maximizes:

- (i) the detection of carbon monoxide;
- (ii) the notification of occupants in normally occupied areas; and
- (iii) the notification of occupants prior to entering normally unoccupied areas.

(6) CLASSROOM. The term “classroom” means a room or area that:

- (i) is located in a school;
- (ii) is a place where classes are taught; and
- (iii) is occupied or capable of being occupied by six or more persons (including students and teachers) at any one time. For the purposes of this definition, the term “school” means any building used, in whole or in part, for educational purposes, including but not limited to a building classified, in whole or in part, as Educational Group E under Chapter 3 of the 2010 BCNYS. The term “school” includes public schools and private schools, including but not limited to religious schools. However, the term “school” does not include a school attended only by students above the 12th grade.

(7) COMMERCIAL BUILDING. The term “commercial building” means any new or existing building that is not a one-family dwelling, a two-family dwelling, or a building containing only townhouses.

(8) DETECTION ZONE. The term “detection zone” means a story of a commercial building. However:

(i) if a story is arranged so that two or more separate carbon monoxide-producing HVAC systems are used to serve separate portions of the story, each such portion of the story shall be deemed to be a separate detection zone;

(ii) if a story contains one or more classrooms, each classroom shall be deemed to be a separate detection zone and the portion, if any, of the story that is not a classroom shall be deemed to be a separate detection zone;

(iii) if a portion of a story is used as a garage, the portion used as a garage shall not be deemed to be a detection zone and the portion not used as a garage shall be deemed to be a detection zone; and

(iv) if an entire story is used as a garage, such story shall not be deemed to be a detection zone.

(9) EXISTING COMMERCIAL BUILDING. The term “existing commercial building” means a commercial building that was constructed prior to December 31, 2015. For the purposes of this definition, a commercial building shall be deemed to have been constructed prior to December 31, 2015, and shall be deemed to be an existing commercial building, if:

(i) the original construction of such commercial building was completed prior to December 31, 2015; or

(ii) the complete application for the building permit for the original construction of such commercial building was filed prior to December 31, 2015.

(10) NEW COMMERCIAL BUILDING. The term “new commercial building” means a commercial building that is not an existing commercial building.

(11) Terms defined elsewhere. Terms that:

(i) are used in this Section 915.3;

(ii) are not defined in this subdivision; and

(iii) are defined in the 2015 IBC, the 2015 IFC, the 2010 IRC or NFPA 720 shall have the meanings ascribed to those terms by the 2015 IBC, the 2015 IFC, the 2015 IRC or NFPA 720, as applicable.

(c) Commercial buildings required to have carbon monoxide detection.

(1) General rule. Carbon monoxide detection shall be provided in accordance with the provisions of this Section 915.3 in every commercial building that:

- (i) contains any carbon monoxide source (including, but not limited to, any garage or any other motor-vehicle-related occupancy);
- (ii) is attached to a garage; and/or
- (iii) is attached to any other motor-vehicle-related occupancy.

These requirements shall apply without regard to whether such commercial building is an existing commercial building or a new commercial building and without regard to whether such commercial building shall or shall not have been offered for sale.

(2) Exceptions.

- i. Carbon monoxide detection shall not be required under this Section 915.3 in a commercial building that is:
 - (A) classified, in its entirety, in Storage Group S or Utility and Miscellaneous Group U under Chapter 3 of the 2015 IBC; and
 - (B) occupied only occasionally and only for building or equipment maintenance.
- ii. Carbon monoxide detection shall not be required under this Section 915.3 in a commercial building that is a “canopy” (as that term is defined in the 2015 IFC).
- iii. Carbon monoxide detection shall not be required under this Section 915.3 in a commercial building during any period when each of the following conditions is satisfied: (A) no part of such commercial building is occupied; (B) each carbon monoxide source in such commercial building is removed or disabled in a manner that makes it incapable of producing carbon monoxide; (C) each exterior opening in such commercial building is boarded, locked, blocked or otherwise protected to prevent entry by unauthorized individuals; (D) no garage or other motor-vehicle-related occupancy in such commercial building or attached to such commercial building is in use; and (E) each garage or other motor-vehicle-related occupancy in such commercial building or attached to such commercial building is boarded, locked, blocked or otherwise protected to prevent entry by motor vehicles or by unauthorized individuals.

(d) Detection zones required to be provided with carbon monoxide detection.

(1) General rule. Where a commercial building is required by subdivision (c) of this Section 915.3 to have carbon monoxide detection, carbon monoxide detection shall be provided in each detection zone which is located in such commercial building and in which at least one of the following triggering conditions exists:

(i) Triggering Condition 1: The presence of any carbon monoxide source in a detection zone shall be a triggering condition for such detection zone.

(ii) Triggering Condition 2: The presence in a detection zone of a duct opening or other outlet from a carbon monoxide-producing HVAC system shall be a triggering condition for such detection zone. However, the presence in a detection zone of a duct opening or other outlet from a carbon monoxide-producing HVAC system shall not be deemed to be a triggering condition for such detection zone if:

(a) carbon monoxide detection is provided in the first room or area served by each main duct leaving the carbon monoxide source in such carbon monoxide-producing HVAC system and

(b) the signals from the carbon monoxide detection equipment in the first room or area served by each such main duct are automatically transmitted to an approved location.

(iii) Triggering Condition 3: The presence of a garage or other motor-vehicle-related occupancy in location that is adjacent to a detection zone shall be a triggering condition for such detection zone. The presence of an adjacent garage or other motor-vehicle-related occupancy shall be a triggering condition even if there are no openings, penetrations, or air transfer openings between the detection zone and the adjacent garage or other motor-vehicle-related occupancy. However, in the case of a detection zone that is not a classroom:

(A) the presence of an adjacent garage or other motor-vehicle-related occupancy shall not be deemed to be a triggering condition for such detection zone if the garage or other motor-vehicle-related occupancy is attached to, but not located in, the commercial building in which such detection zone is located, and the attachment between the garage or other motor-vehicle-related occupancy and the commercial building is only through a covered walkway that is open (without sidewalls or drops) on 50 percent or more of its perimeter; and

(B) the presence of an adjacent garage shall not be deemed to be a triggering condition for such detection zone if the garage is attached to, but not located in, the commercial building in which the detection

zone is located, and the garage is an open parking garage that complies with Section 406.5 of the 2015 IBC.

(2) Exceptions for detection zones that are not classrooms. Notwithstanding the existence of any one or more of the triggering conditions described in paragraph (1) of this subdivision in a detection zone that is not a classroom, carbon monoxide protection shall not be required to be provided in such detection zone if:

(i) such detection zone has ambient conditions that would, under normal conditions and with all required ventilation and exhaust systems installed and operating properly, activate the carbon monoxide detection devices that otherwise would be required in such detection zone under this Section 915.3, and an alternative safety plan for the commercial building in which such detection zone is located shall have been approved by the authority having jurisdiction and implemented; or

(ii) such detection zone is open (without sidewalls or drops) on 50 percent or more of its perimeter, and there is no occupiable area within such detection zone that is not open on 50 percent or more of its perimeter.

(e) Placement of carbon monoxide detection. Where a detection zone is required by subdivision (d) of this Section 915.3 to be provided with carbon monoxide detection, the carbon monoxide detection shall be placed as provided in this subdivision.

(1) Detection zones less than 10,000 square feet. Where carbon monoxide detection is required to be provided in a detection zone having an area less than 10,000 square feet, the carbon monoxide detection shall be placed in a central location within such detection zone.

(2) Detection zones 10,000 square feet or larger.

(i) General rule. Where carbon monoxide detection is required to be provided in a detection zone having an area 10,000 square feet or larger, carbon monoxide detection shall be placed in a central location within such detection zone and at such additional locations within such detection zone as may be necessary to assure that no point in the detection zone is more than 100 feet from carbon monoxide detection.

(ii) Exception. In the case of a detection zone having an area 10,000 square feet or larger that (A) contains one or more carbon monoxide sources, (B) is not served by a carbon monoxide-producing HVAC system, (C) is not adjacent to a garage or other motor-vehicle-related occupancy, and (D) is not a classroom, compliance with the following shall be an acceptable alternative to compliance with Section 915.3(e)(2)(i): one carbon monoxide detection device shall be placed in a central location within such detection

zone and, for each carbon monoxide source located in such detection zone, one additional carbon monoxide detection device shall be placed at one of the following locations: (1) in an approved location between such carbon monoxide source and the remainder of the detection zone or (2) on the ceiling of, or at another approved location in, the room containing such carbon monoxide source.

(f) Detection equipment. Carbon monoxide detection required by this Section 915.3 shall be provided by carbon monoxide alarms complying with subdivision (g) of this section or carbon monoxide detection systems complying with subdivision (h) of this section.

(g) Carbon monoxide alarms. Carbon monoxide alarms shall comply with this subdivision.

(1) Power source.

(i) General rule. Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than that required for overcurrent protection.

(ii) Exceptions.

(A) Carbon monoxide alarms powered solely by a 10-year battery shall be permitted in (I) existing commercial buildings and (II) commercial buildings without commercial electric power.

(B) If a plug-in or cord-type carbon monoxide alarm, or a battery operated carbon monoxide alarm powered by a battery with a life of less than 10 years, was installed in a particular location in an existing commercial building at any time prior to June 27, 2015 for the purpose of complying with Section 610 of the 2010 Fire Code of New York State (or with any other carbon monoxide alarm requirement applicable to at the time of such installation) and if this Section 915.3 requires installation of carbon monoxide detection at such location, such previously installed carbon monoxide alarm may remain at such location, and shall be deemed to satisfy the requirements of this Section 915.3 regarding carbon monoxide detection at such location, provided that at the end of the useful life of such previously installed carbon monoxide alarm it shall be replaced with an alarm powered by a 10-year battery or by another carbon monoxide alarm or detector that satisfies the requirements of this Section 915.3.

(2) Listing. Carbon monoxide alarms shall be listed in accordance with UL 2034.

(3) Combination alarms.

(i) General rule. A combination carbon monoxide / smoke alarm shall not be deemed to satisfy the requirements of this Section 915.3.

(ii) Exception. If a combination carbon monoxide / smoke alarm was installed in a particular location in an existing commercial building at any time prior to June 27, 2015 for the purpose of complying with Section 610 of the 2010 Fire Code of New York State (or with any other carbon monoxide alarm requirement applicable to at the time of such installation) and if this Section 915.3 requires installation of carbon monoxide detection at such location, such previously installed combination carbon monoxide / smoke alarm may remain at such location, and shall be deemed to satisfy the requirements of this Section 915.3 regarding carbon monoxide detection at such location, provided that at the end of the useful life of such previously installed combination carbon monoxide / smoke alarm it shall be replaced with an carbon monoxide alarm or detector that satisfies the requirements of this Section 915.3 and a separate smoke alarm that satisfies all applicable smoke alarm requirements.

(4) Interconnection. In new commercial buildings, where a carbon monoxide alarm is installed in a normally unoccupied detection zone, such carbon monoxide alarm shall be interconnected with a carbon monoxide alarm that is placed in an adjacent and normally occupied detection zone. An approved sign shall be placed in an approved location in the proximity of each carbon monoxide alarm installed in a normally occupied detection zone that is interconnected to one or more carbon monoxide alarms installed in one or more normally unoccupied detection zones. Such sign shall identify and describe the location of each normally unoccupied detection zone that contains any such interconnected carbon monoxide alarm.

(5) Locations. Carbon monoxide alarms shall be installed in the locations specified in subdivisions (d) and (e) of this Section 915.3.

(6) Manufacturer's instructions. Carbon monoxide alarms shall be installed, operated, and maintained in accordance with the manufacturer's instructions. However, in the event of a conflict between the manufacturer's instructions and the provisions of this Section 915.3, the provisions of this Section 915.3 shall control. In particular, but not by way of limitation, in the event of a conflict between location requirements specified in the manufacturer's installation instructions and the location requirements specified in subdivisions (d) and (e) of this Section 915.3, the location requirements specified in subdivisions (d) and (e) of this Section 915.3 shall control.

(h) Carbon monoxide detection systems. Carbon monoxide detection systems shall comply with this subdivision.

(1) General. Carbon monoxide detection systems shall comply with NFPA 720. Carbon monoxide detectors shall be listed in accordance with UL 2075.

(2) Locations. Carbon monoxide detectors (as that term is defined in NFPA 720) shall be installed in the locations specified in subdivisions (d) and (e) of this Section 915.3. In the event of a conflict between the carbon monoxide detector location requirements specified in subdivisions (d) and (e) of this Section 915.3 and the carbon monoxide detector location requirements specified in NFPA 720, the carbon monoxide detector location requirements specified in subdivisions (d) and (e) of this Section 915.3 shall control.

(3) Combination detectors. Combination carbon monoxide / smoke detectors installed in carbon monoxide detection systems shall be an acceptable alternative to carbon monoxide detectors provided such combination detectors are listed in accordance with UL 2075 and UL 268.

(4) Notification appliances. Notification appliances (as that term is defined in NFPA 720) shall comply with NFPA 720. Notification appliances shall be provided in the locations specified in NFPA 720 or, in the alternative, in the locations specified in subdivisions (d) and (e) and paragraph (4) of subdivision (g) of this Section 915.3 as the required locations for carbon monoxide detection.

(5) Power source. The power source for carbon monoxide detection systems shall comply with NFPA 720.

(i) Additional requirement in Group E occupancies. In a new commercial building that:

(1) has an occupant load of 31 or more; and

(2) is classified, in whole or in part, as Educational Group E under Chapter 3 of the 2015 IBC, carbon monoxide alarm signals shall be automatically transmitted to an approved on-site location that is normally staffed by school personnel during normal school hours.

(j) Maintenance. Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with NFPA 720. Carbon monoxide alarms and carbon monoxide detectors that become inoperable or begin producing end-of-life signals shall be replaced as soon as practicable.

(k) Connection of carbon monoxide detection systems to control units and off-premises signal transmission. Carbon monoxide detection systems shall be connected to control units and off-premises signal transmission in accordance with this subdivision.

(1) Carbon monoxide detection systems. All carbon monoxide detection systems installed in accordance with subdivision (h) of this Section 915.3 shall have off-

premises signal transmission in accordance with NFPA 720.

(2) New commercial buildings. All carbon monoxide detection systems in new commercial buildings that are required by Section 903 or Section 907 of the 2015 IFC to have a fire alarm control panel installed shall have off-premises signal transmission in accordance with NFPA 720.

(3) Arrangement of carbon monoxide detection system circuits. The following requirements apply to all carbon monoxide detection systems, including carbon monoxide detection systems installed prior to the effective date of this Section 915.3 and carbon monoxide detection systems installed on or after the effective date of this Section 915.3.

(i) Signal. Carbon monoxide detection systems shall not activate a fire signal to a fire alarm control panel.

(ii) Fire alarm system notification. Carbon monoxide detection systems shall not activate any notification appliance that announces a fire alarm or any other alarm that is not distinctive from a fire notification as required by NFPA 72.

(iii) On-site notification. Where notification of carbon monoxide detection system is permitted to be transmitted to approved locations, at least one approved notification appliance shall be provided within every building that transmits a signal to an approved location.

(I) Other Uniform Code provisions relating to carbon monoxide detection.

(1) Other provisions of the Uniform Code in effect prior to the effective date of this Section 915.3, including but not necessarily limited to Section 915.2 of the 2015 IFC as amended by this supplement, require carbon monoxide detection in certain buildings and structures. Nothing in this Section 915.3 shall be deemed to repeal, override, modify or otherwise affect any such other provision. Any building that is or hereafter becomes subject to Section 915.2 of the 2015 IFC as amended by this supplement must comply with Section 915.2 of the 2015 IFC as amended by this supplement, as applicable.

(2) Mixed use buildings. Certain buildings that are subject to Section 915.2 of the 2015 IFC as amended by this supplement are also “commercial buildings” (as defined in subdivision (b) of this Section 915.3) and are also subject to this Section 915.3. Such buildings are referred to in this Section 915.3 as “mixed use buildings.” Such mixed used buildings include, but are not necessarily limited to:

(i) any new or existing building that contains townhouses and also contains any use or occupancy other than townhouses or other dwelling units;

(ii) any new or existing building owned as a condominium or cooperative that contains dwelling units and also contains any use or occupancy other than dwelling units; and

(iii) any new or existing building or structure that:

(a) is classified, in whole or in part, in Educational Group E, Institutional Group I, and/or Residential Group R under Chapter 3 of the 2015 IBC;

(b) contains one or more dwelling units, sleeping units or sleeping areas; and

(c) also contains any use or occupancy other than dwelling units, sleeping units or sleeping areas.

(3) Compliance in mixed use buildings. A mixed use building shall comply with the requirements of Section 915.2 of the 2015 IFC as amended by this supplement, as applicable, and, in addition, shall comply with the requirements of this Section 915.3. However, this paragraph shall not be construed as requiring duplicative carbon monoxide detection, and if an area in a mixed use building is provided carbon monoxide detection in accordance with the requirements of Section 915.2 of the 2015 IFC as amended by this supplement, as applicable, such area need not be provided with additional carbon monoxide protection under this Section 915.3.

(m) Interconnection in “mixed used buildings.” In the case of a new “mixed use building” (as defined in subdivision (l) of this Section 915.3), the carbon monoxide detection required by this Section 915.3 shall be interconnected with the carbon monoxide detection required by Section 915.2 of the 2015 IFC as amended by this supplement, as applicable.

(n) Effective date. This section shall take effect on June 27, 2015.

(o) Transition period. In this Section 915.3, the term “transition period” means the period between the effective date of this section (June 27, 2015) and June 27, 2016.

(1) Owners of existing commercial buildings are encouraged to install carbon monoxide detection that complies with the requirements of this Section 915.3 in their buildings as quickly as practicable.

(2) The owner of an existing commercial building shall not be deemed to be in violation of this Section 915.3 during the transition period if such owner provides to the authority having jurisdiction a written statement certifying that such owner is attempting in good faith to install carbon monoxide detection that complies with the requirements of this Section 915.3 in such owner’s existing commercial

building as quickly as practicable.

(3) The owners of all existing commercial buildings shall be required to have carbon monoxide detection that complies with the requirements of this Section 915.3 fully installed and fully operational by the end of the transition period.

13. 2015 IFC Chapter 11 (Construction requirements for existing buildings).

Chapter 11 of the 2015 IFC shall be deemed to be amended to read as followings:

SECTION 1101 GENERAL

1101.1 General. Means of egress in existing buildings shall comply with the minimum egress requirements of this section. Where the provisions of this chapter conflict with the building code that applied at the time of construction, the most restrictive provision shall apply. Existing buildings that were not required to comply with a building code at the time of construction shall comply with the minimum egress requirements where enumerated in Sections 1101.2 through 1101.28.

Exceptions:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the 2015 IRC.
2. Buildings constructed in conformance with the Uniform Fire Prevention and Building Code, the State Building Construction Code or other building code in force before the effective date of this code shall have exits maintained in compliance with the code in effect at the date of substantial completion.
3. Buildings rehabilitated in conformance with the 2015 IEBC shall have the means of egress maintained in compliance with such code.

1101.2 Elevators, escalators and moving walks. Elevators, escalators and moving walks shall not be used as a component of a required means of egress.

Exceptions:

1. Elevators used as an accessible means of egress where allowed by Section 1009.4.
2. Previously approved elevators, escalators and moving walks in existing buildings.

1101.3 Exit sign illumination. Exit signs shall be internally or externally illuminated. The face of an exit sign illuminated from an external source shall have an intensity of not less than 5 foot-candles (54 lux). Internally illuminated signs shall provide equivalent luminance and be listed for the purpose.

Exception: Approved self-luminous signs that provide evenly illuminated letters shall have a minimum luminance of 0.06 foot-lamberts (0.21 cd/m²).

1101.4 Power source. Where emergency illumination is required in Section 1101.5, exit signs shall be visible under emergency illumination conditions.

Exception: Approved signs that provide continuous illumination independent of external power sources are not required to be connected to an emergency electrical system.

1101.5 Illumination emergency power. Where means of egress illumination is provided, the power supply for means of egress illumination shall normally be provided by the premises electrical supply. In the event of power supply failure, illumination shall be automatically provided from an emergency system for the following occupancies where such occupancies require two or more means of egress:

1. Group A having 50 or more occupants.

Exception: Assembly occupancies used exclusively as a place of worship and having an occupant load of less than 300.

2. Group B buildings three or more stories in height, buildings with 100 or more occupants above or below a level of exit discharge serving the occupants or buildings with 1,000 or more total occupants.
3. Group E in interior exit access and exit stairways and ramps, corridors, windowless areas with student occupancy, shops and laboratories.
4. Group F having more than 100 occupants.

Exception: Buildings used only during daylight hours and that are provided with windows for natural light in accordance with the 2015 IBC.

5. Group I.
6. Group M.

Exception: Buildings less than 3,000 square feet (279 m²) in gross sales area on one story only, excluding mezzanines.

7. Group R-1.

Exception: Where each sleeping unit has direct access to the outside of the building at grade.

8. Group R-2.

Exception: Where each dwelling unit or sleeping unit has direct access to the outside of the building at grade.

9. Group R-4.

Exception: Where each sleeping unit has direct access to the outside of the building at ground level.

1101.5.1 Emergency power duration and installation. Emergency power for means of egress illumination shall be provided in accordance with Section 604. In other than Group I-2, emergency power shall be provided for not less than 60 minutes for systems requiring emergency power. In Group I-2, essential electrical systems shall comply with Sections 1105.5.1 and 1105.5.2.

1101.6 Guards. Guards complying with this section shall be provided at the open sides of means of egress that are more than 30 inches (762 mm) above the floor or grade below.

1101.6.1 Height of guards. Guards shall form a protective barrier not less than 42 inches (1067 mm) high.

Exceptions:

1. Existing guards on the open side of exit access and exit stairways and ramps shall be not less than 30 inches (760 mm) high.
2. Existing guards within dwelling units shall be not less than 36 inches (910 mm) high.
3. Existing guards in assembly seating areas.

1101.6.2 Opening limitations. Open guards shall have balusters or ornamental patterns such that a 6-inch-diameter (152 mm) sphere cannot pass through any opening up to a height of 34 inches (864 mm).

Exceptions:

1. At elevated walking surfaces for access to, and use of, electrical, mechanical or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass through any opening.
2. In occupancies in Group I-3, F, H or S, the clear distance between intermediate rails measured at right angles to the rails shall not exceed 21 inches (533 mm).
3. Approved existing open guards.

1101.7 Size of doors. The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of not less than 28 inches (711 mm). Where this section requires a minimum clear width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 28 inches (711 mm). In ambulatory care facilities, doors serving as means of egress from patient treatment rooms or patient sleeping rooms shall provide a clear width of not less than 32 inches (813 mm). In Group I-2, means of egress doors where used for the movement of beds shall provide a clear width not less than 2 inches (1054 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. The height of door openings shall be not less than 80 inches (2032 mm).

Exceptions:

1. The minimum and maximum width shall not apply to door openings that are not part of the required means of egress in occupancies in Groups R-2 and R-3.
2. Door openings to storage closets less than 10 square feet (0.93 m²) in area shall not be limited by the minimum width.
3. Width of door leafs in revolving doors that comply with Section 1010.1.1 shall not be limited.
4. Door openings within a dwelling unit shall be not less than 78 inches (1981 mm) in height.
5. Exterior door openings in dwelling units, other than the required exit door, shall be not less than 76 inches (1930 mm) in height.
6. Exit access doors serving a room not larger than 70 square feet (6.5 m²) shall be not less than 24 inches (610 mm) in door width.
7. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

1101.8 Opening force for doors. The opening force for interior side-swinging doors without closers shall not exceed a 5-pound (22 N) force. The opening forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position. For other side-swinging, sliding and folding doors, the door latch shall release when subjected to a force of not more than 15 pounds (66 N). The door shall be set in motion when subjected to a force not exceeding 30 pounds (133 N). The door shall swing to a full-open position when subjected to a force of not more than 50 pounds (222 N). Forces shall be applied to the latch side.

1101.9 Revolving doors. Revolving doors shall comply with the following:

1. A revolving door shall not be located within 10 feet (3048 mm) of the foot or top of stairways or escalators. A dispersal area shall be provided between the stairways or escalators and the revolving doors.
2. The revolutions per minute for a revolving door shall not exceed those shown in Table 1101.9.
3. Each revolving door shall have a conforming side-hinged swinging door in the same wall as the revolving door and within 10 feet (3048 mm).

Exceptions:

1. A revolving door is permitted to be used without an adjacent swinging door for street-floor elevator lobbies provided a stairway, escalator or door from other parts of the building does not discharge through the lobby and the lobby does not have any occupancy or use other than as a means of travel between elevators and a street.
2. Existing revolving doors where the number of revolving doors does not exceed the number of swinging doors within 20 feet (6096 mm).

1101.9.1 Egress component. A revolving door used as a component of a means of egress shall comply with Section 1101.9 and all of the following conditions:

1. Revolving doors shall not be given credit for more than 50 percent of the required

- egress capacity.
2. Each revolving door shall be credited with not more than a 50-person capacity.
 3. Revolving doors shall be capable of being collapsed when a force of not more than 130 pounds (578 N) is applied within 3 inches (76 mm) of the outer edge of a wing.

1101.10 Stair dimensions for existing stairways. Existing stairways in buildings shall be permitted to remain if the rise does not exceed 8 ¼ inches (210 mm) and the run is not less than 9 inches (229 mm). Existing stairways can be rebuilt.

Exception: Other stairways approved by the fire code official.

1101.10.1 Dimensions for replacement stairways. The replacement of an existing stairway in a structure shall not be required to comply with the new stairway requirements of Section 1009 where the existing space and construction will not allow a reduction in pitch or slope.

1101.11 Winders. Existing winders shall be allowed to remain in use if they have a minimum tread depth of 6 inches (152 mm) and a minimum tread depth of 9 inches (229 mm) at a point 12 inches (305 mm) from the narrowest edge.

1101.12 Curved stairways. Existing curved stairways shall be allowed to continue in use, provided the minimum depth of tread is 10 inches (254 mm) and the smallest radius shall be not less than twice the width of the stairway.

1101.13 Stairway handrails. Stairways shall have handrails on at least one side. Handrails shall be located so that all portions of the stairway width required for egress capacity are within 44 inches (1118 mm) of a handrail.

Exception: Aisle stairs provided with a center handrail are not required to have additional handrails.

1101.13.1 Height. Handrail height, measured above stair tread nosings, shall be uniform, not less than 30 inches (762 mm) and not more than 42 inches (1067 mm).

1101.14 Slope of ramps. Ramp runs utilized as part of a means of egress shall have a running slope not steeper than one unit vertical in 10 units horizontal (10-percent slope). The slope of other ramps shall not be steeper than one unit vertical in eight units horizontal (12.5-percent slope).

1101.15 Width of ramps. Existing ramps are permitted to have a minimum width of 30 inches (762 mm) but not less than the width required for the number of occupants served as determined by Section 1005.1. In Group I-2, ramps serving as a means of egress and used for the movement of patients in beds shall comply with Section 1105.5.4.

1101.16 Fire escape stairways. Fire escape stairways shall comply with Sections 1101.16.1

through 1101.16.7.

1101.16.1 Existing means of egress. Fire escape stairways shall be permitted in existing buildings but shall not constitute more than 50 percent of the required exit capacity.

1101.16.2 Protection of openings. Openings within 10 feet (3048 mm) of fire escape stairways shall be protected by opening protectives having a minimum ¾-hour fire protection rating.

Exception: In buildings equipped throughout with an approved automatic sprinkler system, opening protection is not required.

1101.16.3 Dimensions. Fire escape stairways shall meet the minimum width, capacity, riser height and tread depth as specified in Section 1101.10.

1101.16.4 Access. Access to a fire escape stairway from a corridor shall not be through an intervening room. Access to a fire escape stairway shall be from a door or window meeting the criteria of Section 1005.1. Access to a fire escape stairway shall be directly to a balcony, landing or platform. These shall not be higher than the floor or window sill level and not lower than 8 inches (203 mm) below the floor level or 18 inches (457 mm) below the window sill.

1101.16.5 Materials and strength. Components of fire escape stairways shall be constructed of noncombustible materials. Fire escape stairways and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.78 kN/m²). Fire escape stairways and balconies shall be provided with a top and intermediate handrail on each side.

1101.16.5.1 Examination. Fire escape stairways and balconies shall be examined for structural adequacy and safety in accordance with Section 1101.16.5 by a registered design professional or others acceptable to the fire code official every 5 years, or as required by the fire code official. An inspection report shall be submitted to the fire code official after such examination.

1101.16.6 Termination. The lowest balcony shall not be more than 18 feet (5486 mm) from the ground. Fire escape stairways shall extend to the ground or be provided with counterbalanced stairs reaching the ground.

Exception: For fire escape stairways serving 10 or fewer occupants, an approved fire escape ladder is allowed to serve as the termination.

1101.16.7 Maintenance. Fire escape stairways shall be kept clear and unobstructed at all times and shall be maintained in good working order.

1101.17 Corridor construction. Corridors serving an occupant load greater than 30 and the

openings therein shall provide an effective barrier to resist the movement of smoke. Transoms, louvers, doors and other openings shall be kept closed or be self-closing. In Group I-2, corridors in areas housing patient sleeping or care rooms shall comply with Section 1105.4.

Exceptions:

1. Corridors in occupancies other than in Group H, that are equipped throughout with an approved automatic sprinkler system.
2. Corridors in occupancies in Group E where each room utilized for instruction or assembly has not less than one-half of the required means of egress doors opening directly to the exterior of the building at ground level.
3. Corridors that are in accordance with the 2015 IBC.

1101.17.1 Corridor openings. Openings in corridor walls shall comply with the requirements of the 2015 IBC.

Exceptions:

1. Where 20-minute fire door assemblies are required, solid wood doors not less than 1 ¾ inches (44 mm) thick or insulated steel doors are allowed.
2. Openings protected with fixed wire glass set in steel frames.
3. Openings covered with ½ inch (12.7 mm) gypsum wallboard or ¾ inch (19.1 mm) plywood on the room side.
4. Opening protection is not required where the building is equipped throughout with an approved automatic sprinkler system.

1101.18 Dead end corridors. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead ends do not exceed the limits specified in Table 1104.18 of the 2015 IFC.

Exception: A dead-end passageway or corridor shall not be limited in length where the length of the dead-end passageway or corridor is less than 2.5 times the least width of the dead-end passageway or corridor.

1101.19 Exit access travel distance. Exits shall be located so that the maximum length of exit access travel, measured from the most remote point to an approved exit along the natural and unobstructed path of egress travel, does not exceed the distances given in Table 1104.18 of the 2015 IFC.

1101.20 Common path of egress travel. The common path of egress travel shall not exceed the distances given in Table 1104.18 of the 2015 IFC.

1101.21 Stairway discharge identification. An interior exit stairway or ramp that continues below its level of exit discharge shall be arranged and marked to make the direction of egress to a public way readily identifiable.

Exception: Stairways that continue one-half story beyond their levels of exit discharge

need not be provided with barriers where the exit discharge is obvious.

1101.22 Exterior stairway protection. Exterior exit stairways shall be separated from the interior of the building as required in Section 1027.6. Openings shall be limited to those necessary for egress from normally occupied spaces.

Exceptions:

1. Separation from the interior of the building is not required for buildings that are two stories or less above grade where the level of exit discharge serving such occupancies is the first story above grade.
2. Separation from the interior of the building is not required where the exterior stairway is served by an exterior balcony that connects two remote exterior stairways or other approved exits, with a perimeter that is not less than 50 percent open. To be considered open, the opening shall be not less than 50 percent of the height of the enclosing wall, with the top of the opening not less than 7 feet (2134 mm) above the top of the balcony.
3. Separation from the interior of the building is not required for an exterior stairway located in a building or structure that is permitted to have unenclosed interior stairways in accordance with Section 1023.
4. Separation from the open-ended corridors of the building is not required for exterior stairways provided that:
 - 4.1. The open-ended corridors comply with Section 1020.
 - 4.2. The open-ended corridors are connected on each end to an exterior exit stairway complying with Section 1027.
 - 4.3. At any location in an open-ended corridor where a change of direction exceeding 45 degrees (0.79 rad) occurs, a clear opening of not less than 35 square feet (3 m²) or an exterior stairway shall be provided. Where clear openings are provided, they shall be located so as to minimize the accumulation of smoke or toxic gases.

1101.23 Minimum aisle width. The minimum clear width of aisles shall be:

1. Forty-two inches (1067 mm) for aisle stairs having seating on each side.

Exception: Thirty-six inches (914 mm) where the aisle serves less than 50 seats.

2. Thirty-six inches (914 mm) for stepped aisles having seating on only one side.

Exceptions:

1. Thirty inches (760 mm) for catchment areas serving not more than 60 seats.
2. Twenty-three inches (584 mm) between a stepped aisle handrail and seating where an aisle does not serve more than five rows on one side.
3. Twenty inches (508 mm) between a stepped aisle handrail or guard and seating where the aisle is subdivided by the handrail.
4. Forty-two inches (1067 mm) for level or ramped aisles having seating on both sides.

Exception: Thirty-six inches (914 mm) where the aisle serves less than 50 seats.

5. Thirty-six inches (914 mm) for level or ramped aisles having seating on only one side.

Exception: Thirty inches (760 mm) for catchment areas serving not more than 60 seats.

6. In Group I-2, where aisles are used for movement of patients in beds, aisles shall comply with Section 1105.5.8.

1101.24 Stairway floor number signs. Existing stairways shall be marked in accordance with Section 1023.9.

1101.25 Egress path markings. Existing high-rise buildings of Group A, B, E, I, M and R-1 occupancies shall be provided with luminous egress path markings in accordance with Section 1025.

Exception: Open, unenclosed stairwells in historic buildings designated as historic under a state or local historic preservation program.

1101.26 Capacity of means of egress. The occupant load of buildings or portions of buildings shall not exceed the capacity of the means of egress from the buildings or portions thereof. Occupant load shall be calculated as provided in Section 1004.1. Capacity of the means of egress shall be calculated as provided in Sections 1005 and 1006.

1101.27 Posting of occupant load. Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved, legible, permanent design and shall be maintained by the owner or authorized agent.

1101.28 Overcrowding. It shall be prohibited for buildings, or portions thereof, to be overcrowded. The building owner or authorized agent shall be responsible to ensure buildings, or portions thereof, are not overcrowded.

SECTION 1102 SINGLE AND MULTIPLE STATION SMOKE ALARMS

1102.1 Single- and multiple-station smoke alarms. Single- and multiple-station smoke alarms shall be installed in existing Group I-1 and R occupancies in accordance with Sections 1102.1.1 through 1102.1.3.

1102.1.1 Where required. Existing Group I-1 and R occupancies shall be provided with

single-station smoke alarms in accordance with Section 907.2.11. Interconnection and power sources shall be in accordance with Sections 1102.8.2 and 1102.8.3, respectively.

Exceptions:

1. Where the code that was in effect at the time of construction required smoke alarms and smoke alarms complying with those requirements are already provided.
2. Where smoke alarms have been installed in occupancies and dwellings that were not required to have them at the time of construction, additional smoke alarms shall not be required provided that the existing smoke alarms comply with requirements that were in effect at the time of installation.
3. Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

1102.1.2 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling or sleeping unit, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings that are not undergoing alterations, repairs or construction of any kind.
2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for interconnection without the removal of interior finishes.

1102.1.3 Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

1. Smoke alarms are permitted to be solely battery operated in existing buildings where construction is not taking place.
2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.
3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in the removal of

interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for building wiring without the removal of interior finishes.

SECTION 1103 FIRE ALARM REQUIREMENTS IN EXISTING BUILDINGS

1103.1 Fire alarm systems. When the 2015 IEBC requires the installation of a fire alarm system in accordance with the existing fire alarm requirements, an approved fire alarm system shall be installed in accordance with Sections 1103.1.1 through 1103.1.7 and provide occupant notification in accordance with Section 907.5 unless other requirements are provided by other sections of this code.

Exception: Occupancies with an existing, previously approved fire alarm system.

1103.1.1 Group E. A fire alarm system shall be installed in existing Group E occupancies in accordance with Section 907.2.3.

Exceptions:

1. A manual fire alarm system is not required in a building with a maximum area of 1,000 square feet (93 m²) that contains a single classroom and is located not closer than 50 feet (15 240 mm) from another building.
2. A manual fire alarm system is not required in Group E occupancies with an occupant load less than 50.

1103.1.2 Group I-1. An automatic fire alarm system shall be installed in existing Group I-1 facilities in accordance with Section 907.2.6.1.

Exception: Where each sleeping room has a means of egress door opening directly to an exterior egress balcony that leads directly to the exits in accordance with Section 1021, and the building is not more than three stories in height.

1103.1.3 Group I-2. In Group I-2, an automatic fire alarm system shall be installed in accordance with Section 1105.9.

1103.1.4 Group I-3. An automatic and manual fire alarm system shall be installed in existing Group I-3 occupancies in accordance with Section 907.2.6.3.

1103.1.5 Group R-1. A fire alarm system and smoke alarms shall be installed in existing Group R-1 occupancies in accordance with Sections 1103.7.5.1 through 1103.7.5.2.1.

1103.1.5.1 Group R-1 hotel and motel manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-1 hotels and motels more than three stories

or with more than 20 sleeping units.

Exceptions:

1. Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by one-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.
2. Manual fire alarm boxes are not required throughout the building where the following conditions are met:
 - 2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
 - 2.2. The notification appliances will activate upon sprinkler water flow.
 - 2.3. Not less than one manual fire alarm box is installed at an approved location.

1103.1.5.1.1 Group R-1 hotel and motel automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-1 hotels and motels throughout all interior corridors serving sleeping rooms not equipped with an approved, supervised sprinkler system installed in accordance with Section 903.

Exception: An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

1103.1.5.2 Group R-1 boarding and rooming houses manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-1 boarding and rooming houses.

Exception: Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.

1103.1.5.2.1 Group R-1 boarding and rooming houses automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-1 boarding and rooming houses throughout all interior corridors serving sleeping units not equipped with an approved, supervised sprinkler system installed in accordance with Section 903.

Exception: Buildings equipped with single-station smoke alarms meeting or exceeding the requirements of Section 907.2.11.1 and where the fire alarm

system includes not less than one manual fire alarm box per floor arranged to initiate the alarm.

1103.1.6 Group R-2. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-2 occupancies more than three stories in height or with more than 16 dwelling or sleeping units.

Exceptions:

1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than 3/4 hour, and where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and having a local alarm to notify all occupants.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1027.6, Exception.
4. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units, do not exceed three stories in height and comply with both of the following:
 - 4.1 Each dwelling unit is separated from other contiguous dwelling units by fire barriers having a fire-resistance rating of not less than 3/4 hour.
 - 4.2 Each dwelling unit is provided with hard-wired, interconnected smoke alarms as required for new construction in Section 907.2.11.

1103.1.7 Group R-4. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-4 residential care/assisted living facilities in accordance with Section 907.2.10.1.

Exceptions:

1. Where there are interconnected smoke alarms meeting the requirements of Section 907.2.11 and there is not less than one manual fire alarm box per floor arranged to continuously sound the smoke alarms.
2. Other manually activated, continuously sounding alarms approved by the fire code official.

14. 2015 IFC Section 5601.1 (Scope).

Section 5601.1 of the 2015 IFC shall be deemed to be amended with the replacement of the following section in its entirety:

5601.1 Scope. Unless regulated by other laws or regulations, such as Penal Law 405 or Title 12 NYCRR Part 39, the provisions of this chapter shall govern the possession, manufacture, storage, handling, sale and use of explosives, explosive materials, fireworks, and small arms ammunition.

15. 2015 IFC Chapter 56 (Explosives and fireworks).

Chapter 56 of the 2015 IFC shall be amended by the addition of a new Section 5610 to read as follows:

SECTION 5610 SPARKLING DEVICES

5610.1 Scope. The provisions of this section shall govern the possession, manufacture, storage, handling, sale, and use of sparkling devices. Any building or structure where sparkling devices are manufactured, stored, handled, sold or used shall be subject to the provisions of this section and to all other provisions of the Uniform Code applicable to such building or structure.

5610.2 Definitions. In this section, the following terms shall have the following meanings unless a different meaning is clearly required by the context:

OPERATING BUILDING. The term operating building means a building occupied in conjunction with the manufacture, transportation or use of explosive materials, sparkling devices, or both. Operating buildings are separated from one another with the use of intraplant or intraline distances.

SPARKLING DEVICES. The term sparkling devices shall have the meaning ascribed to that term by section 270.00(1)(a)(vi) of the Penal Law, and shall include ground-based or hand-held devices (as defined in subparagraph [i] of this paragraph) and novelties (as defined in subparagraph (ii) of this paragraph).

(i) Ground-based or hand-held devices. The term ground-based or hand-held devices shall include the category of devices described in Section 270.00(1)(a)(vi)(1) of the Penal Law, i.e., sparkling devices which are ground-based or hand-held devices that produce a shower of white, gold, or colored sparks as their primary pyrotechnic effect. Additional effects may include a colored flame, an audible crackling effect, an audible whistle effect,

and smoke. These devices do not rise into the air, do not fire inserts or projectiles into the air, and do not explode or produce a report (an audible crackling-type effect is not considered to be a report). Ground-based or hand-held devices that produce a cloud of smoke as their sole pyrotechnic effect are also included in this category. Types of devices in this category include:

- (a) **Cylindrical fountain.** Cylindrical tube containing not more than 75 grams of pyrotechnic composition that may be contained in a different shaped exterior such as a square, rectangle, cylinder or other shape but the interior tubes are cylindrical in shape. Upon ignition, a shower of colored sparks, and sometimes a whistling effect or smoke, is produced. This device may be provided with a spike for insertion into the ground (spike fountain), a wood or plastic base for placing on the ground (base fountain), or a wood or cardboard handle to be hand held (handle fountain). When more than one tube is mounted on a common base, total pyrotechnic composition may not exceed 200 grams, and when tubes are securely attached to a base and the tubes are separated from each other on the base by a distance of at least half an inch (12.7 millimeters), a maximum total weight of 500 grams of pyrotechnic composition shall be allowed.
- (b) **Cone fountain.** Cardboard or heavy paper cone containing not more than 50 grams of pyrotechnic composition. The effect is the same as that of a cylindrical fountain. When more than one cone is mounted on a common base, total pyrotechnic composition may not exceed 200 grams, and when cones are securely attached to a base and the cones are separated from each other on the base by a distance of at least half an inch (12.7 millimeters), a maximum total weight of 500 grams of pyrotechnic composition shall be allowed.
- (c) **Wooden sparkler / dipped stick.** These devices consist of a wood dowel that has been coated with pyrotechnic composition. Upon ignition of the tip of the device, a shower of sparks is produced. Sparklers may contain up to 100 grams of pyrotechnic composition per item.

(ii) **Novelties.** The term novelties shall include the category of devices described in section 270.00(1)(a)(iv)(2) of the Penal Law, i.e., novelties which do not require approval from the United States Department of Transportation and are not regulated as explosives, provided that they are manufactured and packaged as described below:

- (a) **Party popper.** Small devices with paper or plastic exteriors that are actuated by means of friction (a string or trigger is typically pulled to actuate the device). They frequently resemble champagne bottles or toy pistols in shape. Upon activation, the device expels flame-resistant paper streamers, confetti, or other novelties and produces a small report. Devices may contain no more than 16 milligrams (0.25 grains) of explosive composition, which is limited to potassium chlorate and red phosphorus. These devices must be packaged in an inner packaging which contains a maximum of 72 devices.
- (b) **Snapper.** Small, paper-wrapped devices containing not more than one milligram of silver fulminate coated on small bits of sand or gravel. When dropped, the device

explodes, producing a small report. Snappers must be in inner packages not to exceed 50 devices each, and the inner packages must contain sawdust or a similar, impact-absorbing material.

5610.3 Other applicable laws. The provisions of this section shall be in addition to, and not in limitation of:

1. All other provisions of the Uniform Code applicable to any building or structure where sparkling devices are manufactured, stored, handled, sold or used; and
2. All other statutes, rules, regulations, local laws, and ordinances applicable to the possession, manufacture, storage, handling, sale and/or use of sparkling devices, including but not limited to Sections 270.00 and 405.00 of the Penal Law; Section 392-j of the General Business Law; Section 156-h of the Executive Law; Part 225 of Title 9 NYCRR; Part 39 of Title 12 NYCRR (Industrial Code Rule 39); and local laws, ordinances or regulations relating to operating permits as contemplated by Section 1203.3(g) of Title 19 NYCRR. Nothing in this section shall be construed as permitting the possession, manufacture, handling, sale and/or use of sparkling devices in violation of any other law, statute, rule, regulation, local law or ordinance applicable to the possession, manufacture, storage, handling, sale and/or use of sparkling devices. Nothing in this section shall be construed as permitting the possession, manufacture, handling, sale and/or use of sparkling devices in any jurisdiction where the possession, manufacture, handling, sale and/or use of sparkling devices has not been made legal in accordance with the provisions of Section 405.00 of the Penal Law.

5610.4 Hazardous conditions.

5610.4.1 Fire danger rating areas. The New York State Department of Environmental Conservation (DEC) publishes fire danger ratings for each Fire Danger Rating Area (FDRA) in the State. The use of sparkling devices at any location within a FDRA designated by the DEC as having a fire danger rating of extreme (red) at any time when such designation is in effect is prohibited.

5610.4.2 Red flag condition areas. The DEC designates certain areas within the State as being subject to red flag conditions. The use of sparkling devices at any location within any area designated by the DEC as being subject to red flag conditions at any time such designation remains in effect is prohibited.

5610.5 Use of ground-based or hand-held devices in or near buildings or structures.

5610.5.1 Inside buildings or structures. No ground-based or hand-held device shall be used inside any building or structure unless:

1. Such ground-based or hand-held device is listed for indoor use; and
2. The use of such ground-based or hand-held device inside such building or structure has been approved.

5610.5.2 Near buildings or structures. No ground-based or hand-held shall be used within 10 feet of any building or structure unless:

1. Such ground-based or hand-held device is listed for indoor use or for use within 10 feet of a building or structure; and
2. The use of such ground-based or hand-held device within 10 feet of such building or structure has been approved.

5610.6 Retail sales.

5610.6.1 Limitations. No persons shall construct a retail display of sparkling devices or offer sparkling devices for sale upon highways, sidewalks or public property or in a Group A or E occupancy.

5610.6.2 Reference standard requirements. Retail sales of sparkling devices shall comply with the applicable requirements of NFPA 1124.

5610.6.3 Portable fire extinguisher. A minimum of one pressurized-water portable fire extinguisher complying with Section 906 shall be located not more than 15 feet (4,572 mm) and not less than 10 feet (3,048 mm) from each area where sparkling devices are stored or displayed for retail sale.

5610.6.4 No smoking signs. No smoking signs complying with Section 310 shall be conspicuously posted in each area where sparkling devices are stored or displayed for retail sale.

5610.7 Storage of sparkling devices. The storage or temporary storage of sparkling devices shall comply with the applicable requirements of NFPA 1124 and, in addition, shall be subject to the provisions of subdivision (h) of this section.

5610.8 Limit on quantity. The code enforcement official is authorized to limit the quantity of sparkling devices permitted to be kept or stored at any one- or two-family dwelling, townhouse, or any building or structure containing any Group R occupancy.

5610.9 Records. Manufacturers of sparkling devices shall maintain records of chemicals, chemical compounds and mixtures required by the U.S. Department of Labor regulations set forth in 29 CFR part 1910.1200 and Section 407.

5610.10 Manufacture, assembly, and testing of sparkling devices.

5610.10.1 Reference standard requirements. The manufacture, assembly, and testing of sparkling devices, and facilities where the manufacture, assembly and/or testing of sparkling device occur, shall comply with the requirements of this subdivision and NFPA 495 or NFPA 1124.

5610.10.2 Emergency planning. Emergency plans, emergency drills, employee training and hazard communication shall conform to the provisions of this section and Sections 404, 405, 406 and 407.

5610.10.3 Management plans and inventory statements. Detailed Hazardous Materials Management Plans (HMMP) and hazardous materials inventory statements (HMIS) complying with the requirements of Section 407 shall be prepared and submitted to the local emergency planning committee, the code enforcement official, and the local fire department. A copy of the required HMMP and HMIS shall be maintained on site and furnished to the code enforcement official on request.

5610.10.4 Training. Workers who handle or dispose of sparking devices shall be trained in the hazards of the materials and processes in which they are to be engaged and with the safety rules governing such materials and processes.

5610.10.5 Emergency procedures. Approved emergency procedures shall be formulated for each facility where sparking devices are manufactured, assembled and/or tested. Such procedures shall include personal instruction in any emergency that may be anticipated. All personnel shall be made aware of an emergency warning signal.

16. 2015 IFC Section 5704.2 (Tank storage).

Section 5704.2 of the 2015 IFC shall be deemed to be amended by the addition of the following section:

5704.2.16 Abandonment of heating oil storage tanks. The abandonment or removal of tanks used for storing heating oil for consumptive use on the premises where stored, referred to in this section as heating oil storage tanks, and related piping in connection with the conversion of liquid fuel burning appliance to alternative fuel shall be in accordance with all of the following:

1. The entire contents of the heating oil storage tank and related piping shall be emptied, cleaned and purged of all vapor. The contents of the storage tank and related piping shall be removed from the premises or property and disposed of in accordance with applicable local, state or federal rules and regulations;
2. If the heating oil storage tank is to be abandoned in place, the vent line shall remain open and intact, unless the tank is filled with an inert material. The oil fill pipe and other related piping shall either be removed, or the oil fill pipe shall be filled with concrete;
3. If the heating oil storage tank is to be removed, the vent line, oil fill pipe and related piping shall also be removed, or the oil fill pipe shall be filled with concrete;
4. An appropriate and qualified inspector, as determined by the local government, shall cause an inspection to be made of the abandonment or removal in connection with the conversion to determine conformity with the uniform code; provided, however, that

- the local government official may waive such inspection for good cause shown; and
5. No approval of such abandonment or removal shall be granted unless written proof of the heating oil storage tank's oil fill pipe having been removed or filled with concrete in accordance appropriate provisions of the uniform code has been provided by the property owner to the local inspector or, in the event that an inspection has been waived for good cause shown, to the local government.

17. 2015 IFC Chapter 80 (Referenced standards).

The "NFPA" portion of Chapter 80 of the 2015 IFC shall be deemed to be amended to include the following Standard Specification:

Standard reference number	Title	Referenced in code section number
1142-12	Standard on Water Supplies for Suburban and Rural Fire Fighting	507.2

CHAPTER 8
Amendments to the 2015 IPMC

For the purposes of applying the 2015 IPMC in this State, the 2015 IPMC shall be deemed to be amended in the manner specified in this Chapter.

1. 2015 IPMC Section 302 (Exterior property areas).

Section 302.4 of the 2015 IPMC shall be deemed to be amended to read as follows:

302.4. Weeds. All premises and immediate exterior property shall be maintained free from weeds or plant growth in excess of 10 inches (254 mm). All noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens.

2. 2015 IPMC Section 303 (Swimming pools, spas and hot tubs).

Section 303.2 of the 2015 IPMC shall be deemed to be amended to read as follows:

303.2 Enclosures. The provisions of this section shall control the design of barriers for residential swimming pools, spas and hot tubs. For public swimming pools, spas and hot tubs refer to Chapter 31 of the 2015 IBC. Design controls are intended to provide protection against potential drowning and near-drowning by restricting access to swimming pools, spas and hot tubs.

Exception: Spas or hot tubs with a safety cover that complies with ASTM F 1346 shall be exempt from the provisions of this section.

3. 2015 IPMC Section 303 (Swimming pools, spas and hot tubs).

Section 303 of the 2015 IPMC shall be deemed to be amended by the addition of new Sections 303.3, 303.4, 303.5, 303.6, 303.7 and 303.8 to read as follows:

303.3 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the

- barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
2. Openings in the barrier shall not allow passage of a 4 inch-diameter (102 mm) sphere.
 3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
 4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
 5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
 6. Maximum mesh size for chain link fences shall be a 2.25-inch (32 mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).
 7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).
 8. Access gates shall comply with the requirements of Section 303.3, Items 1 through 7, and shall be securely locked with a key, combination or other child-proof lock sufficient to prevent access to the swimming pool through such gate when the swimming pool is not in use or supervised. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
 - 8.1 The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and
 - 8.2 The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.
 9. Where a wall of a dwelling serves as part of the barrier one of the following conditions shall be met:
 - 9.1 The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or
 - 9.2 All doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed in accordance with UL 2017.
-

The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds immediately after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touch pad or switch, to temporarily deactivate the alarm for a single opening. Deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or

- 9.3 Other means of protection, such as self-closing doors with self-latching devices shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.
- 10. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure and the means of access is a ladder or steps, then:
 - 10.1 The ladder or steps shall be capable of being secured, locked or removed to prevent access, or
 - 10.2 The ladder or steps shall be surrounded by a barrier which meets the requirements of Section 303.3, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

303.4 Indoor swimming pool. All walls surrounding an indoor swimming pool shall comply with Section 303.3, Item 9.

303.5 Prohibited locations. Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

303.6 Swimming pool and spa alarms. Spas or hot tubs with a safety cover which complies with ASTM F 1346 shall be exempt from the provisions of this section.

303.6.1 Applicability. A swimming pool or spa installed, constructed or substantially modified after December 14, 2006, shall be equipped with an approved pool alarm.

Exceptions:

- 1. A hot tub or spa equipped with a safety cover which complies with ASTM F 1346.
- 2. A swimming pool (other than a hot tub or spa) equipped with an automatic power safety cover which complies with ASTM F 1346.

Pool alarms shall comply with ASTM F 2208 and shall be installed, used and maintained in accordance with the manufacturer's instructions and this section.

303.6.2 Multiple alarms. A pool alarm must be capable of detecting entry into the water at any point on the surface of the swimming pool. If necessary to provide detection capability at every point on the surface of the swimming pool, more than one pool alarm shall be provided.

303.6.3 Alarm activation. Pool alarms shall activate upon detecting entry into the water and shall sound poolside and inside the dwelling.

303.6.4 Prohibited alarms. The use of personal immersion alarms shall not be construed as compliance with this section.

303.7 Temporary barriers. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a temporary barrier during installation or construction and shall remain in place until a permanent barrier in compliance with Section 303.3 is provided.

Exceptions:

1. Above-ground or on-ground pools where the pool structure is the barrier in compliance with Section 303.3.
2. Spas or hot tubs with a safety cover which complies with ASTM F 1346, provided that such safety cover is in place during the period of installation or construction of such hot tub or spa. The temporary removal of a safety cover as required to facilitate the installation or construction of a hot tub or spa during periods when at least one person engaged in the installation or construction is present is permitted.

303.7.1 Height. The top of the temporary barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool.

303.7.2 Replacement by a permanent barrier. A temporary barrier shall be replaced by a complying permanent barrier within either of the following periods:

1. 90 days of the date of issuance of the building permit for the installation or construction of the swimming pool; or
2. 90 days of the date of commencement of the installation or construction of the swimming pool.

303.7.2.1 Replacement extension. Subject to the approval of the code enforcement official, the time period for completion of the permanent barrier may be extended for good cause, including, but not limited to, adverse weather conditions delaying construction.

303.8 Entrapment protection for swimming pools and spas. Swimming pools and spas shall maintain body entrapment protections for suction outlets in accordance with the 2015 IBC or the 2015 IRC, as applicable and as amended by this supplement.

4. 2015 IPMC Section 304.14 (Insect screens).

Section 304.14 of the 2015 IPMC shall be deemed to be amended to read as follows:

304.14 Insect screens. During the period from May 15 to September 15, every door, window

and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with approved tightly fitting screens of minimum 16 mesh per inch (16 mesh per 25 mm), and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other approved means, such as air curtains or insect repellent fans, are employed.

5. 2015 IPMC Section 404 (Occupancy limitations).

Section 404.3 of the 2015 IPMC shall be deemed to be amended by the addition of three exceptions to read as follows:

Exceptions:

4. Manufactured housing regulated in the 2015 IRC shall be permitted to retain ceiling heights provided at time of manufacture.
5. Spaces legally in existence before January 1, 2003, and spaces for which a variance has been legally granted shall be allowed to be occupied.
6. Ceiling heights reduced by necessary repairs shall be no lower than 6 feet, 8 inches.

6. 2015 IPMC Section 404.5 (Overcrowding).

Section 404.5 of the 2015 IPMC shall be amended by the addition of an exception following Section 404.5 to read as follows:

Exception: Sleeping quarters located in summer camp cabins housing more than four persons shall be permitted a floor area of 40 square feet of floor area per occupant when single beds are provided and 30 square feet of floor area per occupant when double-deck bunk beds are provided. Floor area includes space within the occupied structure to accommodate: the bed, storage for personal belongings, aisles and exitways, and associated assembly space. Space for toilets, lavatories and showers shall not be used to calculate a sleeping quarter's floor area. For structures built prior to 1975, the required minimum floor area for single beds is 36 square feet.

7. 2015 IPMC Section 502 (Required facilities).

Section 502.1 of the 2015 IPMC shall be deemed to be amended by the addition of an exception to read as follows:

Exceptions: Owner-occupied one-family dwellings subject to the approval of the code enforcement official.

8. 2015 IPMC Section 505 (Water system).

Section 505.1 of the 2015 IPMC shall be deemed to be amended by the addition of exceptions to read as follows:

Exceptions: Owner-occupied one-family dwellings subject to the approval of the code enforcement official.

9. 2015 IPMC Section 506 (Sanitary drainage system).

Section 506.1 of the 2015 IPMC shall be deemed to be amended by the addition of an exception to read as follows:

Exceptions: Owner-occupied one-family dwellings subject to the approval of the code enforcement official.

10. 2015 IPMC Section 602.2 (Residential occupancies).

The exception to Section 602.2 of the 2015 IPMC shall be deemed to be amended to read as follows:

Exceptions: Owner-occupied one-family dwellings subject to the approval of the code enforcement official.

11. 2015 IPMC Section 602.3 (Heat supply).

Section 602.3 of the 2015 IPMC shall be deemed to be amended to read as follows:

602.3 Heat supply. Every owner and operator of any building who rents, leases or lets one or more dwelling unit, rooming unit, dormitory or guestroom on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from September 15th to May 31st to maintain a temperature of not less than 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms.

The exceptions to Section 602.3 of the IPMC shall remain unchanged.

12. 2015 IPMC Section 604.1 (Facilities required).

Section 604.1 of the 2015 IPMC shall be deemed to be amended by the addition of an exception to read as follows:

Exceptions: Owner-occupied one-family dwellings not supplied with electrical power, subject to the approval of the code enforcement official.

CHAPTER 9
Amendments to the 2015 IEBC

For the purposes of applying the 2015 IEBC in this State, the 2015 IEBC shall be deemed to be amended in the manner specified in this Chapter.

1. 2015 IEBC Section 805.3.1.1 (Single-exit buildings).

Section 805.3.1.1 of the 2015 IEBC shall be deemed to be amended by the replacement of the section in its entirety and addition of the following tables:

805.3.1.1 Single-exit buildings. Only one exit is required from buildings and stories of the following occupancies:

1. In Group A, E, F and U located on the level of exit discharge, in buildings not more than five stories, when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet (22 860 mm).
2. Group B, S2 or M, located on the level of exit discharge in buildings not more than five stories, provided the required building features in Table 805.3.1.1 (1) shall be provided.
3. Group B, F2, and S2, in buildings not more than two stories that are not greater than 3,500 square feet per floor (326 m²) when the exit access travel distance does not exceed 75 feet (22,860 mm). 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, in buildings from three stories to five stories, provided the required building features in Table 805.3.1.1(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 805.3.1.1(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, a single exit is permitted with a maximum occupant load of 10 and the exit access travel distance does not exceed 75 feet (22 860 mm).

TABLE 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 Above Grade				
	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 or S2	B, S2 or M	B or S2
Content restriction limited to storage or retail display of hazardous materials within the building not exceeding 10% of the maximum allowable quantities in IBC Table 307.1(1)	Yes	Yes	Yes	Yes	Yes
Maximum gross floor area per story (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

TABLE 805.3.1.1(1) – continued
GROUP B, S2 OR M LOCATED ON THE LEVEL OF EXIT DISCHARGE SINGLE
EXIT BUILDING

Required Building Features	Maximum Number of Stories Above Grade				
	1 and 2		3		4 and 5
	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
Vertical exit and hoistway venting at 3.5% of the cross section and activated by a smoke detector, or smoke management by IBC Section 909	No Sprinklers	No	No Sprinklers	No	Yes
Corridor and exit interior finishes per IBC Section 803 and 804	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
IBC Table 509 incidental use areas fire resistance rating enclosures (hours)	1	0.5	2	0.5	2
Fire dampers per IBC Section 717 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 meet NFPA 70 requirements	Yes	Yes	Yes	Yes	Yes

TABLE 805.3.1.1(1) – continued
GROUP B, S2 OR M LOCATED ON THE LEVEL OF EXIT DISCHARGE SINGLE
EXIT BUILDING

Required Building Features	Maximum Number of Stories Above Grade				
	1 and 2		3		4 and 5
	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
Manual fire alarm system per IBC Section 907	Yes	Yes	Yes	Yes	Yes
Automatic heat detection system per IBC Section 907 throughout building in spaces which would otherwise be provided with fire sprinklers per NFPA 13	Yes	No	Yes	No	No
Automatic smoke detection per IBC Section 907 in shared exit access corridors	No	No	No	No	No
Electrically supervised quick response wet pipe sprinkler system throughout building per IBC Section 903.3 ^c	No	Yes	No	Yes	Yes
Class I Manual - Wet Fire Standpipe System per IBC Section 905	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 (457mm) 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.

**TABLE 805.3.1.1(2)
GROUP R-2 OR R-3 SINGLE EXIT BUILDING**

Required Building Features	Maximum Number of Stories Above Grade ^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 IBC Table 307.1(1)	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

TABLE 805.3.1.1(2) – continued
GROUP R-2 OR R-3 SINGLE EXIT BUILDING

Required Building Features	Maximum Number of Stories Above Grade ^a				
	1 and 2		3		4 and 5
	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
Vertical exit and hoistway venting at 3.5% of the cross section and activated by a smoke detector, or smoke management by IBC Section 909	No	No	No	No	Yes
Corridor and exit interior finishes per IBC Section 803 and 804	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
IBC Table 509 incidental use areas fire resistance rating enclosures (hours)	1	0.5	2	0.5	2
Fire dampers per IBC Section 717 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 meet NFPA 70 requirements	Yes	Yes	Yes	Yes	Yes
Manual fire alarm system per IBC Section 907	Yes	Yes	Yes	Yes	Yes

TABLE 805.3.1.1(2) – continued
GROUP R-2 OR R-3 SINGLE EXIT BUILDING

Required Building Features	Maximum Number of Stories Above Grade ^a				
	1 and 2		3		4 and 5
	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
Automatic heat detection system per IBC Section 907 throughout 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 IBC 907	Yes	Yes	Yes	Yes	Yes
Automatic smoke detection per IBC Section 907 in shared exit access corridors	Yes	No	Yes	No	No
Electrically supervised quick response or residential head (as applicable) wet pipe sprinkler system throughout building per IBC Section 903.3 ^c	No	Yes	Type V construction only	Yes	Yes
Class I Manual - Wet Fire Standpipe System per IBC Section 905	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. Quick response sprinkler protection is required in all non-residential 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 (457mm) 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.

CHAPTER 10

Referenced Standards for the New York State Uniform Fire Prevention and Building Code

The standards that are described in this Chapter are incorporated by reference into 19 NYCRR Parts 1220 through 1227. In the following list of standards, the abbreviation of the name of the publisher (e.g., “AA” for the Aluminum Association) is given, followed by the full name and the address of the publisher, followed by a list of the standards published by the publisher that are incorporated by reference into 19 NYCRR Part 1220 through 1227.

The list of standards includes, for each standard, the standard reference number (e.g., “ADM1”), the title of the standard (e.g. “Aluminum Design Manual: Part 1 – A Specification for Aluminum Structures”), and the publication date of standard that is being incorporated by reference into 19 NYCRR Parts 1220 through 1227.

The lists of sections in the 2015 codes published by the International Code Council in which the standards listed here are referenced are as follows:

2015 International Residential Code	Chapter 44
2015 International Building Code	Chapter 35
2015 International Plumbing Code	Chapter 15
2015 International Mechanical Code	Chapter 15
2015 International Fuel Gas Code	Chapter 8
2015 International Fire Code	Chapter 80
2015 International Property Maintenance Code	Chapter 8
2015 International Existing Building Code	Chapter 16

Copies of the standards can be obtained from the publishers named below at the addresses indicated below.

AA Aluminum Association
1525 Wilson Boulevard, Suite 600
Arlington, VA 22209

Standard reference number	Title	Publication date
ADM	Aluminum Design Manual: Part 1 – A Specification for Aluminum Structures	2015
ASM 35	Specifications for Aluminum Sheet Metal Work in Building Construction	2000

AASHTO American Association of State Highway and Transportation Officials
 444North Capitol Street, Northwest, #249
 Washington, DC 20001

Standard reference number	Title	Publication date
HB-17	Specification for Highway Bridges, 17 th Edition	2002

ACCA Air Conditioning Contractors of America
 2800 Shirlington Road, Suite 300
 Arlington, VA 22206

Standard reference number	Title	Publication date
183	Peak Cooling and Heating Load Calculations in Buildings Except Low-rise Residential Buildings (ASHRAE / ACCA)	2007 (RA 2014)
Manual D	Residential Duct Systems	2014
Manual J	Residential Load Calculation – Eighth Edition	2011
Manual S	Residential Equipment Selection	2014

ACI American Concrete Institute
 38800 Country Club Drive
 Farmington Hills, MI 48331

Standard reference number	Title	Publication date
216.1	Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies	2014
318	Building Code Requirements for Structural Concrete	2014
332	Residential Code Requirements for Structural Concrete	2014
530	Building Code Requirements for Masonry Structures	2013
530.1	Specifications for Masonry Structures	2013

AFSI Architectural Fabric Structures Institute
 c/o Industrial Fabric Association International
 1801 County Road B West
 Roseville, MN 55113

Standard reference number	Title	Publication date
ASI	Design and Standard Manual	1977

AHRI Air-conditioning, Heating and Refrigeration Institute
 2111 Wilson Blvd, Suite 500
 Arlington, VA 22201

Standard reference number	Title	Publication date
440	Standard for Performance Rating of Room Fan Coils	2008
840	Standard for Unit Ventilators	1998

AISC American Institute of Steel Construction
 One East Wacker Drive, Suite 700
 Chicago, IL 60601-18021

Standard reference number	Title	Publication date
341	Seismic Provisions for Structural Steel Buildings	2010
360	Specification for Structural Steel Buildings	2010

AISI American Iron and Steel Institute
 25 Massachusetts Avenue, NW Suite 800
 Washington, DC 20001

Standard reference number	Title	Publication date
S100	North American Specification for the Design of Cold-formed Steel Structural Members	2012
S110 / S1	Standard for Seismic Design of Cold-Formed Steel Structural Systems—Special Moment Frames, 2007 with Supplement 1, dated 2009 (Reaffirmed 2012)	2012
S200	North American Standard for Cold-Formed Steel Framing-General Provisions	2012
S210	North American Standard for Cold-Formed Steel Framing-Floor and Roof System Design (Reaffirmed 2012)	2007
S211 / S1	North American Standard for Cold-Formed Steel Framing-Wall Stud Design, 2007 including Supplement 1, dated 2012 (Reaffirmed 2012)	2007
S212-07	North American Standard for Cold-Formed Steel Framing-Header Design, 2007 (Reaffirmed 2012)	2007
S213 / S1	North American Standard for Cold-Formed Steel Framing-Lateral Design, with Supplement 1, dated 2009 (Reaffirmed 2012)	2012
S214	North American Standard for Cold-formed Steel Framing-Truss Design, 2012	2012
S220	North American Standard for Cold-formed Steel Framing-Nonstructural Members	2011

S230 / S3	Standard for Cold-formed Steel Framing-Prescriptive Method for One- and Two-family Dwellings, 2007, with Supplement 3, dated 2012 (Reaffirmed 2012)	2012
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ALI Automotive Lift Institute
P.O. Box 85
Courtland, NY 13045

Standard reference number	Title	Publication date
ALI ALCTV	Standard for Automotive Lifts—Safety Requirements for Construction, Testing and Validation (ANSI)	2011

ANSI American National Standards Institute
25 West 43rd Street, Fourth Floor
New York, NY 10036

Standard reference number	Title	Publication date
A108.1A	Installation of Ceramic Tile in the Wet-set Method, with Portland Cement Mortar (TCA)	1999
A108.1B	Installation of Ceramic Tile, Quarry Tile on a Cured Portland Cement Mortar Setting Bed with Dry-set or Latex Portland Mortar (TCA)	1999
A108.4	Installation of Ceramic Tile with Organic Adhesives or Water-Cleanable Tile-setting Epoxy Adhesive (TCA)	1999
A108.5	Installation of Ceramic Tile with Dry-set Portland Cement Mortar or Latex Portland Cement Mortar (TCA)	1999
A108.6	Installation of Ceramic Tile with Chemical-resistant, Water-cleanable Tile-setting and –grouting Epoxy (TCA)	1999
A108.8	Installation of Ceramic Tile with Chemical-resistant Furan Resin Mortar and Grout (TCA)	1999
A108.9	Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout (TCA)	1999
A108.10	Installation of Grout in Tilework (TCA)	1999
E1.21	Entertainment Technology: Temporary Ground Supported Overhead Structures Used to Cover the Stage Areas and Support Equipment in the Production of Outdoor Entertainment Events (TSA)	2006
LCI/CSA 6.26	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST) (CSA)	2013
Z21.8	Installation of Domestic Gas Conversion Burners (CSA)	1994

APA APA – The Engineered Wood Association
 7011 South 19th
 Tacoma, WA 98466

Standard reference number	Title	Publication date
APA E30	Engineered Wood Construction Guide	2011
APA PDS D510	Panel Design Specification	2012
APA PDS S811 Supplement 1	Design and Fabrication of Plywood Curved Panels	2014
APA PDS S812 Supplement 2	Design and Fabrication of Plywood-lumber Beams	2014
APA PDS U813 Supplement 3	Design and Fabrication of Plywood Stressed-skin Panels	2014
APA PDS U814 Supplement 4	Design and Fabrication of Plywood Sandwich Panels	2014
APA PDS H815 Supplement 5	Design and Fabrication of All-plywood Beams	2014
EWS R540	Builders Tips: Proper Storage and Handling of Glulam Beams	2013
EWS S475	Data File: Glued Laminated Beam Design Tables	2007
EWS S560	Technical Note: Field Notching and Drilling of Glued Laminated Timber Beams	2014
EWS T300	Technical Note: Glulam Connection Details	2007
EWS X440	Product Guide-Glulam	2008

API American Petroleum Institute
 1220 L Street, Northwest
 Washington, DC 20005

Standard reference number	Title	Publication date
Spec 12P	Fiberglass Reinforced Plastic Tanks	1995
RP 651	Cathodic Protection of Aboveground Petroleum Storage Tanks	2007
Standard 653	Tank Inspection, Repair, Alteration and Reconstruction	2009
RP 1604	Closure of Underground Petroleum Storage Tanks	1996
RP 1615	Installation of Underground-Petroleum Storage Systems	1996
RP 2009	Safe Welding, Cutting, and Hot Work Practices in the Petroleum and Petrochemical Industries	2002
Std 2015	Safe Entry and Clearing of Petroleum Storage Tanks	2001

RP 2023	Guide for Safe Storage and Handling of Heated Petroleum-derived Asphalt Products and Crude-oil Residue	2001
Publ 2028	Flame Arrestors in Piping Systems	2002
Publ 2201	Safe Hot Tapping Practices in the Petroleum and Petrochemical Industries	2003

APSP The Association of Pool & Spa Professionals
2111 Eisenhower Avenue
Alexandria, VA 22314

Standard reference number	Title	Publication date
ANSI/APSP 7	American National Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs and Catch Basins	2013

ASABE American Society of Agricultural and Biological Engineers
2950 Niles Road
St. Joseph, MI 49085

Standard reference number	Title	Publication date
EP 484 2 nd Edition	Diaphragm Design of Metal-clad, Wood-frame Rectangular Buildings	1998
EP 486 2 nd Edition	Shallow-post and Pier Foundation Design	2012
EP 559 with Corr.1 1 st Edition	Design Requirements and Bending Properties for Mechanically Laminated Wood Assemblies	2010

ASCE / SEI American Society of Civil Engineers
Structural Engineering Institute
1801 Alexander Bell Drive
Reston, VA 20191-4400

Standard reference number	Title	Publication date
5	Building Code Requirements for Masonry Structures (ACI 530/ASCE 5/TMS 402)	2013
6	Specification for Masonry Structures (ACI 530.1/ASCE 6/TMS 602)	2013
7	Minimum Design Loads for Buildings and Other Structures with Supplement No. 1	2010
24	Flood Resistant Design and Construction	2014
32	Design and Construction of Frost Protected Shallow Foundations	2001
41	Seismic Evaluation and Retrofit of Existing Buildings	2013

ASHRAE American Society of Heating, Refrigerating and Air Conditioning Engineers
 1791 Tullie Circle, NE
 Atlanta, GA 30329

Standard reference number	Title	Publication date
ASHRAE 2013	ASHRAE Fundamentals Handbook	2013
ASHRAE 2012	HVAC Systems and Equipment Handbook	2012
15	Safety Standard for Refrigeration Systems	2013
34	Designation and Safety Classification of Refrigerants	2013
62.1	Ventilation for Acceptable Indoor Air Quality	2013
90.1	Energy Standard for Buildings Except Low-rise Residential Buildings	2013
170	Ventilation of Health Care Facilities	2008
183	Peak Cooling and Heating Load Calculations in Buildings Except Low-rise Residential Buildings (ASHRAE / ACCA)	2007 (RA 2014)

ASME American Society of Mechanical Engineers
 Park Avenue
 New York, NY 10016-5990

Standard reference number	Title	Publication date
A13.1	Scheme for the Identification of Piping Systems	2007
ASME A17.1 / CSA B44	Safety Code for Elevators and Escalators	2013
A17.3	Safety Code for Existing Elevators and Escalators	2008
A17.7 / CSA B44.7	Performance-Based Safety Code for Elevators and Escalators	2007
A18.1	Safety Standard for Platform Lifts and Stairway Chairlifts	2008
A90.1	Safety Standard for Belt Man-lifts	2009
B20.1	Safety Standard for Conveyors and Related Equipment	2009
B31.9	Building Services Piping	2011
A112.19.8	Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathing Appliances	2007
A112.19.17	Manufacturers Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub and Wading Pool Suction Systems	2002

ASSE American Society of Safety Engineers
 1800 East Oakton Street
 Des Plaines, IL 60018

Standard reference number	Title	Publication date
ASSE Z359.1	Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components, Part of the Fall Protection Code	2007

ASTM ASTM International
 100 Barr Harbor Drive
 West Conshohocken, PA 19428-2959

Standard reference number	Title	Publication date
B 828	Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings	2010
C 143/C 143M	Test Method for Slump of Hydraulic Cement Concrete	2012
C 636/C 636M	Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels	2008
C 754	Specification for Installation of Steel Framing Members to Receive Screw-attached Gypsum Panel Products	2011
C 840	Specification for Application and Finishing of Gypsum Board	2011
C 841	Specification for Installation of Interior Lathing and Furring	2008 E1
C 842	Specification for Application of Interior Gypsum Plaster	2010 E1
C 843	Specification for Application of Gypsum Veneer Plaster	1999
C 844	Specification for Application of Gypsum Base to Receive Gypsum Veneer Plaster	2010
C 926	Specification for Application of Portland Cement-based Plaster	2013
C 946	Standard Practice for Construction of Dry-Stacked, Surface-Bonded Walls	2010
C 1007—11a	Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories	2011
C 1063—14D	Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-based Plaster	2014
C 1283	Practice for Installing Clay Flue Lining	2011
D 2657	Standard Practice for Heat Fusion-joining of Polyolefin Pipe Fittings	2007
D 2855	Standard Practice for Making Solvent-cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings	1996

E 96	Standard Test Methods for Water Vapor Transmission of Materials (Vapor Retarder)	2000
E 779	Standard Method for Determining Air Leakage Rate by Fan Pressurization	2010
E1602	Guide for Construction of Solid Fuel Burning Masonry Heaters	2003
F 1346	Standard Performance for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas, and Hot Tubs	1991

AWC American Wood Council
222 Catoctin SE, Suite 201
Leesburg, VA 20175

Standard reference number	Title	Publication date
AWC WCD No. 4	Wood Construction Data – Plank and Beam Framing for Residential Buildings	2003
STJR	Span Tables for Joists and Rafters	2015
WFCM	Wood Frame Construction Manual for One- and Two-family Dwellings	2015
NDS	National Design Specification (NDS) for Wood Construction	2015
PWF	Permanent Wood Foundation Design	2015
SDPWS	Special Design Provisions for Wind and Seismic	2015

BHMA Builders Hardware Manufacturers' Association
355 Lexington Avenue, 17th Floor
New York, NY 10017-6603

Standard reference number	Title	Publication date
A156.10	Power-operated Pedestrian Doors	2011
A156.19	Power Assist and Low-energy Power-operated Doors	2013
A156.27	Power and Manual Operated Revolving Pedestrian Doors	2011

CGR Coast Guard Regulations
 c/o Superintendent of Documents
 U.S. Government Printing Office
 Washington, DC 20402-9325

Standard reference number	Title	Publication date
46 CFR Parts 30, 32, 35 & 39	Shipping	1999

CSA CSA Group
 8501 East Pleasant Valley Road
 Cleveland, OH 44131-5516

Standard reference number	Title	Publication date
LC1 6.26	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (ANSI)	2013
B44 (ASME A17.1)	Safety Code for Elevators and Escalators	2013
Z21.8	Installation of Domestic Gas Conversion Burners	1994

DOE United States Department of Energy c/o Superintendent of Documents
 U.S. Government Printing Office
 Washington, DC 20402-9325

Standard reference number	Title	Publication date
Appendix N to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations - 2009	Uniform Test Method for Measuring the Energy Consumption of Furnaces and Boilers	2009

DOL United States Department of Labor
 Occupational Safety and Health Administration
 c/o Superintendent of Documents
 US Government Printing Office
 Washington, DC 20402-9325

Standard reference number	Title	Publication date
29 CFR Part 1910.1000	Air Contaminants	2009

DOTn U.S. Department of Transportation
 Office of Hazardous Material Safety
 1200 New Jersey Avenue, SE
 East Building, 2nd Floor
 Washington, DC 20590

Standard reference number	Title	Publication date
33 CFR Part 154	Facilities Transferring Oil or Hazardous Material in Bulk	1998
33 CFR Part 155	Oil or Hazardous Material Pollution Prevention for Vessels	1998
33 CFR Part 156	Oil and Hazardous Material Transfer Operations	1998
49 CFR Parts 100-185	Hazardous Materials Regulations	2005
49 CFR Part 172	Hazardous Materials Tables, Special Provisions, Hazardous Materials Communications, Emergency Response Information and Training Requirements	2009
49 CFR Part 173	Shippers – General Requirements for Shipments and Packaging	2009
49 CFR Part 173.137	Shippers – General Requirements for Shipments and Packaging: Class 8—Assignments of Packing Group	2009

EPA U.S. Environmental Protection Agency
 c/o Superintendent of Documents
 US Government Printing Office
 Washington, DC 20402-9325

Standard reference number	Title	Publication date
40 CFR Part 745	Lead-Based Paint Poisoning Prevention In Certain Residential Structures www.gpo.gov/fdsys/granule/CFR-2004-title40-vol29/CFR-2004-title40-vol29-part745	2004

FCC (WTB) Federal Communications Commission Wireless Telecommunications Bureau
 445 12th Street, SW
 Washington, DC 20554

Standard reference number	Title	Publication date
47 CFR Part 90.219	Private Land Mobile Radio Services – Use of Signal Boosters	2007

FEMA Federal Emergency Management Agency
 Federal Center Plaza
 500 C Street S.W.
 Washington, DC 20472

Standard reference number	Title	Publication date
FEMA TB-2	Flood Damage-resistant Materials Requirements	2008
FEMA TB-11	Crawlspace Construction for Buildings Located in Special Flood Hazard Area	2001

GA Gypsum Association
 6525 Belcrest Road, Suite 480
 Hyattsville, MD 20782

Standard reference number	Title	Publication date
GA 216	Application and Finishing of Gypsum Panel Products	2013
GA-253	Application of Gypsum Sheathing	2012
GA-600	Fire- Resistance Design Manual	2009

ICC International Code Council, Inc.
 500 New Jersey Ave., NW, 6th Floor
 Washington, DC 20001

Standard reference number	Title	Publication date
A117.1	Accessible and Usable Buildings and Facilities	2009
ICC 300	Bleachers, Folding and Telescopic Seating and Grandstands	2012
ICC 400	Standard on the Design and Construction of Log Structures	2012
ICC 500	ICC/NSSA Standard for the Design and Construction of Storm Shelters	2014
ICC 600	Standard for Residential Construction in High-wind Regions	2014
IBC	International Building Code	2015
IECC	International Energy Conservation Code	2015
IEBC	International Existing Building Code	2015
IFC	International Fire Code	2015
IFGC	International Fuel Gas Code	2015
IMC	International Mechanical Code	2015

IPC	International Plumbing Code	2015
IPMC	International Property Maintenance Code	2015
IRC	International Residential Code	2015

MSS Manufacturers Standardization Society of the Valve & Fittings Industry, Inc.
127 Park Street, N.E.
Vienna, VA 22180

Standard reference number	Title	Publication date
SP 58	Pipe Hangers and Supports—Materials Design and Manufacture, Selection, Application and Installation	2009

NFPA National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

Standard reference number	Title	Publication date
2	Hydrogen Technologies Code	2011
10	Standard for Portable Fire Extinguishers	2013
11	Standard for Low-, Medium- and High-expansion Foam	2010
12	Standard on Carbon Dioxide Extinguishing Systems	2011
12A	Standard on Halon 1301 Fire Extinguishing Systems	2009
13	Standard for the Installation of Sprinkler Systems	2013
13D	Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes	2013
13R	Standard for the Installation of Sprinkler Systems in Low Rise Residential Occupancies	2013
14	Standard for the Installation of Standpipe and Hose Systems	2013
15	Standard for Water Spray Fixed Systems for Fire Protection	2012
16	Standard for the Installation of Foam-water Sprinkler and Foam-water Spray Systems	2015
17	Standard for Dry Chemical Extinguishing Systems	2013

Standard reference number	Title	Publication date
17A	Standard for Wet Chemical Extinguishing Systems	2013
20	Standard for the Installation of Stationary Pumps for Fire Protection	2013
22	Standard for Water Tanks for Private Fire Protection	2013
24	Standard for Installation of Private Fire Service Mains and Their Appurtenances	2013
25	Standard for the Inspection, Testing and Maintenance of Water-based Fire Protection Systems	2014
30	Flammable and Combustible Liquids Code	2012
30A	Code for Motor Fuel-dispensing Facilities and Repair Garages	2015
30B	Code for the Manufacture and Storage of Aerosol Products	2015
31	Standard for the Installation of Oil-burning Equipment	2011
32	Standard for Dry Cleaning Plants	2011
33	Standard for Spray Application Using Flammable or Combustible Materials	2016
34	Standard for Dipping, Coating and Printing Processes Using Flammable or Combustible Liquids	2015
35	Standard for the Manufacture of Organic Coatings	2011
37	Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines	2015
40	Standard for the Storage and Handling of Cellulose Nitrate Film	2011
51	Standard for the Design and Installation of Oxygen-fuel Gas Systems for Welding, Cutting and Allied Processes	2013
51A	Standard for Acetylene Cylinder Charging Plants	2012
52	Vehicular Gaseous Fuel System Code	2013
55	Compressed Gases and Cryogenic Fluids Code	2013
56	Standard for Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems	2014
58	Liquefied Petroleum Gas Code	2014

Standard reference number	Title	Publication date
59A	Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG)	2013
61	Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities	2013
69	Standard on Explosion Prevention Systems	2014
70	National Electrical Code	2014
72	National Fire Alarm and Signaling Code	2013
80	Standard for Fire Doors and Other Opening Protectives	2013
82	Incinerators, Waste and Linen Handling Systems and Equipment	2014
85	Boiler and Combustion System Hazards Code	2015
86	Standard for Ovens and Furnaces	2015
88A	Parking Structures	2015
91	Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Particulate Solids	2015
92	Standard for Smoke Control Systems	2015
96	Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations	2014
99	Health Care Facilities Code	2015
101	Life Safety Code	2015
105	Standard for Smoke Door Assemblies and Other Opening Protectives	2013
110	Standard for Emergency and Standby Power Systems	2013
111	Standard on Stored Electrical Energy Emergency and Standby Power Systems	2013
120	Standard for Coal Preparation Plants	2015
160	Standard for the Use of Flame Effects Before an Audience	2011
170	Standard for Fire Safety and Emergency Symbols	2015

Standard reference number	Title	Publication date
204	Standard for Smoke and Heat Venting	2015
211	Standard for Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances	2013
221	Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls	2015
241	Standard for Safeguarding Construction, Alteration and Demolition Operations	2013
252	Standard Methods of Fire Tests of Door Assemblies	2012
253	Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source	2015
257	Standard for Fire Test for Window and Glass Block Assemblies	2012
259	Standard Test Method for Potential Heat of Building Materials	2013
260	Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture	2013
261	Method of Test for Determining Resistance of Mock-up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes	2013
262	Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-handling Spaces	2015
265	Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Wall Coverings in Full Height Panels and Walls	2011
268	Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source	2012
275	Standard Method of Fire Tests for the Evaluation of Thermal Barriers	2013
276	Standard Method of Fire Test for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Component	2011
285	Standard Fire Test Method for the Evaluation of Fire Propagation Characteristics of Exterior Non-load-bearing Wall Assemblies Containing Combustible Components	2012
286	Standard methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	2015
288	Standard Methods of Fire Tests of Floor Fire Door Assemblies in Fire-resistance-rated Floor Systems	2012

Standard reference number	Title	Publication date
289	Standard Method of Fire Test for Individual Fuel Packages	2013
303	Fire Protection Standard for Marinas and Boatyards	2011
318	Standard for the Protection of Semiconductor Fabrication Facilities	2015
326	Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair	2010
385	Standard for Tank Vehicles for Flammable and Combustible Liquids	2012
400	Hazardous Materials Code	2013
407	Standard for Aircraft Fuel Servicing	2012
409	Standard for Aircraft Hangars	2011
410	Standard on Aircraft Maintenance	2010
418	Standard for Heliports	2011
484	Standard for Combustible Metals	2015
495	Explosive Materials Code	2013
498	Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives	2013
501	Standard on Manufactured Housing	2013
505	Fire Safety Standard for Powered Industrial Trucks, Including Type Designations, Areas of Use, maintenance and Operation	2013
654	Standard for Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids	2013
655	Standard for the Prevention of Sulfur Fires and Explosions	2012
664	Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities	2012
701	Standard Methods of Fire Tests for Flame-propagation of Textiles and Films	2010
703	Standard for Fire Retardant-Wood and Fire-Retardant Coatings for Building Materials	2015

Standard reference number	Title	Publication date
704	Standard System for Identification of the Hazards of Materials for Emergency Response	2012
720	Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment	2015
750	Standard on Water Mist Fire Protection Systems	2015
853	Standard on Installation of Stationary Fuel Power Plants	2015
914	Code for Fire Protection of Historic Structures	2010
1122	Code for Model Rocketry	2013
1123	Code for Fireworks Display	2014
1124	Code for the Manufacture, Transportation, Storage and Retail Sales of Fireworks and Pyrotechnic Articles	2006
1125	Code of the Manufacture of Model Rocket and High Power Rocket Motors	2012
1126	Standard for the Use of Pyrotechnics Before a Proximate Audience	2011
1127	Code for High Power Rocketry	2013
2001	Standard on Clean Agent Fire Extinguishing Systems	2015

PCA Portland Cement Association
5420 Old Orchard Road
Skokie, IL 60077

Standard reference number	Title	Publication date
100	Prescriptive Design of Exterior Concrete Walls for One- and Two-family Dwellings	2012

PLASA PLASA North America
630 9th Avenue, Suite 609
NYC, NY 10036

Standard reference number	Title	Publication date
ANSI E1.21-2013	Entertainment Technology- Temporary Structures Used for Technical Production of Outdoor Entertainment Event	2013

RMI Rack Manufacturers Institute
8720 Red Oak Boulevard, Suite 201
Charlotte, NC 28217

Standard reference number	Title	Publication date
ANSI MH16.1	Specification for Design, Texting and Utilization of Industrial Steel Storage Racks	2012

SDI Steel Deck Institute
P.O. Box 426
Glenshaw, PA 15116

Standard reference number	Title	Publication date
ANSI NC1.0	Standard for Non-composite Steel Floor Deck	2010
ANSI RD1.0	Standard for Steel Roof Deck	2010
SDI-C	Standard for Composite Steel Floor Deck Slabs	2011

SJI Steel Joist Institute
234 West Cheves Street
Florence, SC 29501

Standard reference number	Title	Publication date
CJ	Standard Specification for Composite Steel Joists, CJ-series	2010
JG	Standard Specification for Joist Girders	2010
K	Standard Specification for Open Web Steel Joists, K-series	2010
LH/DLH	Standard Specification for Longspan Steel Joists, LH-series and Deep Longspan Steel Joists, DLH-series	2010

SMACNA Sheet Metal & Air-Conditioning Contractors National Assoc., Inc.
 4201 Lafayette Center Drive
 Chantilly, VA 20151-1209

Standard reference number	Title	Publication date
SMACNA	HVAC Duct Construction Standards-Metal and Flexible	2005
SMACNA	Fibrous Glass Duct Construction Standards	2003

SPRI Single-Ply Roofing Institute
 465 Waverly Oaks Road, Suite 421
 Waltham, MA 02452

Standard reference number	Title	Publication date
ES-1	Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems	2011
RP- 4	Wind Design Guide for Ballasted Single-ply Roofing Systems	2013

TCNA Tile Council of North America
 100 Clemson Research Blvd,
 Anderson, SC 29625

Standard reference number	Title	Publication date
A108.1A	Installation of Ceramic Tile in the Wet-set Method, with Portland	1999
A108.1B	Installation of Ceramic Tile, quarry Tile on a Cured Portland Cement Mortar Setting Bed with Dry-set or Latex-Portland Mortar (TCNA)	1999
A108.4	Installation of Ceramic Tile with Organic Adhesives or Water-cleanable Tile-setting Epoxy Adhesive (TCNA)	1999
A108.5	Installation of Ceramic Tile with Dry-set Portland Cement Mortar or Latex-Portland Cement Mortar (TCNA)	1999
A108.6	Installation of Ceramic Tile with Chemical-resistant, Water Cleanable Tile-setting and -grouting Epoxy (TCNA)	1999
A108.8	Installation of Ceramic Tile with Chemical-resistant Furan Resin Mortar and Grout (TCNA)	1999
A108.9	Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout (TCNA)	1999
A108.10	Installation of Grout in Tilework (TCNA)	1999

TIA Telecommunications Industry Association
 1320 N. Courthouse Road
 Arlington, VA 22201-3834

Standard reference number	Title	Publication date
222-G	Structural Standards for Antenna Supporting Structures and Antennas	2005

TMS The Masonry Society
 105 South Sunset Street, Suite Q
 Longmont, CO 80501

Standard reference number	Title	Publication date
216	Standard Method for Determining Fire Resistance of Concrete and Masonry Construction Assemblies	2013
302	Standard Method for Determining the Sound Transmission Class Rating for Masonry Walls	2012
402	Building Code Requirements for Masonry Structures	2013
403	Direct Design Handbook for Masonry Structures	2013
602	Specification for Masonry Structures	2013

WCLIB West Coast Lumber Inspection Bureau
 P.O. Box 23145
 Portland, OR 97281

Standard reference number	Title	Publication date
AITC Technical Note 7	Calculation of Fire Resistance of Glued Laminated Timbers	1996
AITC 104	Typical Construction Details	2003
AITC 110	Standard Appearance Grades for Structural Glued Laminated Timber	2001
AITC 113	Standard for Dimensions of Structural Glued Laminated Timber	2010
AITC 117	Standard Specifications for Structural Glued Laminated Timber of Softwood Species	2010
AITC 119	Standard Specifications for Structural Glued Laminated Timber of Hardwood Species	1996
AITC 200	Manufacturing Quality Control Systems Manual for Structural Glued Laminated Timber	2009

WRI Wire Reinforcement Institute, Inc.
942 Main Street, Suite 300
Hartford, CT 06103

Standard reference number	Title	Publication date
WRI / CRSI--81	Design of Slab-on-ground Foundations—with 1996 Update	1996