

The New York City Council

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Legislation Text

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Int. No. 815

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A Local Law to amend the administrative code of the city of New York and the New York city building code, in relation to the creation of an inland flood hazard area map, climate adaptation planning, and resilient construction for inland areas

Be it enacted by the Council as follows:

Section 1. Subdivision b of section 24-808 of the administrative code of the city of New York, as added by local law number 122 for the year 2021, is amended to read as follows:

b. Not later than September 30, 2022, and every 10 years thereafter, the office, or another agency or office designated by the director, in consultation with the department of city planning, the department of environmental protection, the department of transportation, the department of housing preservation and development, the department of education, the department of citywide administrative services, the department of buildings, and the department of parks and recreation, shall develop and post on the office's website a climate adaptation plan that considers and evaluates a range of climate hazards impacting the city, including its shoreline, and identifies and recommends resiliency and adaptation measures, including potential updates to the zoning resolution and the construction codes, and non-structural risk reduction approaches to protect and prepare the city's residents, property and infrastructure.

§ 2. Chapter 8 of title 24 of the administrative code of the city of New York is amended by adding a new section 24-808.1 to read as follows:

§ 24-808.1 Inland flood hazard area map. a. Definitions. As used in this section, the term "inland flood hazard area" means the area outside the special flood hazard area and shaded X-Zone that would flood with

1.75 inches or greater of rainfall intensity per hour to a height of 4 inches or greater.

b. Inland flood hazard area map. 1. No later than 1 year after the effective date of the local law that added this section, the office, in consultation with the department of buildings and the department of environmental protection, shall create and post on the office's website a map of the inland flood hazard area. Such map shall assume uniformity of rainfall across the city and that the existing drainage system is functioning as intended. Such map shall also indicate a base flood elevation level showing the elevation of surface water within the inland flood area resulting from a flood over a uniform duration of time.

- 2. In creating this map, the office shall consider the following factors:
- (a) The appropriate geographic unit to represent flooding risk at the minimum amount of contiguous area to be considered in determining which areas should be covered by the map;
 - (b) All relevant hydrologic and topographic data necessary to complete the map;
- (c) Whether the office believes that future updates to the special flood hazard area might overlap with any inland flood hazard area indicated on the map; and
- (d) Any relevant information on all buildings in the inland flood hazard area, including building age and occupancy type.
- 3. The office shall review the inland flood hazard area map no less than every 5 years thereafter and update the map as appropriate.
- 4. In creating or updating the map, the office shall provide for a public comment process and provide guidance to the public on the types of technical, topographic, hydrologic or other factual information that would be most useful for consideration.
- § 3. The definition of "COASTAL ZONES AND WATER-SENSITIVE INLAND ZONES" set forth in section 28-104.9.1 of the administrative code of the city of New York, as amended by local law number 126 for the year 2021, is amended to read as follows:

- COASTAL ZONES AND WATER-SENSITIVE INLAND ZONES. Areas of land comprising tidal wetlands, freshwater wetlands, coastal erosion hazard areas, coastal special flood hazard areas or rivervine and other inland special flood hazard areas including the inland flood hazard area established pursuant to section G102.2.3 of Appendix G.
- § 4. Section 28-104.9.4 of the administrative code of the city of New York, as amended by local law number 77 for the year 2023, is amended to read as follows:
- § 28-104.9.4 Compliance with special flood hazard area requirements mandated within special flood hazard areas. Within coastal special flood hazard areas, [and] special flood hazard areas, and inland flood hazard areas, the commissioner shall not approve construction documents for construction or alteration of buildings or structures, including alterations pursuant to section 28-101.4.3 of this code, or for any other activity regulated by section G201 of appendix G of the New York city building code, unless the application complies with the requirements of appendix G of the New York city building code.
- § 5. The definition of "flood hazard area" in section 202 of the New York city building code, as added by local law number 126 for the year 2021, is amended to read as follows:

FLOOD HAZARD AREA. The following [two] three areas:

- 1. The area within a flood plain subject to a 1-percent or greater chance of flooding in any year. Also defined as the "special flood hazard area".
- 2. Where buildings are classified as Flood Design Class 4, the area within a flood plain delineated as shaded X-Zones.
- 3. The area outside the special flood hazard area and shaded X-Zone that would flood with 1.75 inches or greater of rainfall intensity per hour to a height of 4 inches or greater. Also defined as the "inland flood hazard area".
- § 6. Section 202 of the New York city building code is amended by adding new definitions of "inland flood hazard area" and "inland flood hazard map" in appropriate alphabetical order to read as follows:
- **INLAND FLOOD HAZARD AREA.** The area outside the special flood hazard area and shaded X-Zone that would flood with 1.75 inches or greater of rainfall intensity per hour to a height of 4 inches or greater.
- INLAND FLOOD HAZARD MAP (IFHM). The map laying out the boundaries of the inland flood hazard area, as adopted pursuant to Section G102.2.3 of Appendix G.
- § 7. Section G102.1 of appendix G of the New York city building code, as amended by local law number 126 for the year 2021, is amended to read as follows:
- G102.1 General. This appendix, in conjunction with the *New York City Construction Codes*, provides minimum requirements for development located, in whole or in part, in special flood hazard areas, [and] shaded

X-Zones, and inland flood hazard areas within the jurisdiction of New York City, including:

- 1. Subdivisions. This appendix shall apply to the subdivision of land;
- 2. Utilities. This appendix shall apply to the installation of utilities;
- **3. Group U buildings and structures.** This appendix shall apply to placement and replacement of Group U buildings as defined in Section 312;
- **4. Site improvements.** This appendix shall apply to site improvements, including but not limited to, temporary or permanent storage of materials, mining, dredging, filling, grading, paving, excavations, operations and other land disturbing activities;
- **5. Prefabricated buildings and manufactured homes.** This appendix shall apply to placement and replacement of prefabricated buildings and manufactured homes;
- **6. Post-FIRM** or post-IFHM construction. This appendix shall apply to post-FIRM or post -IFHM construction;
- **7. Alterations to post-FIRM or post-IFHM construction.** This appendix shall apply to repair, alteration, reconstruction, rehabilitation or additions to post-FIRM or post-IFHM construction;
- **8. Substantial improvement of pre-FIRM or pre-IFHM construction.** This appendix shall apply to substantial improvement of pre-FIRM or pre-IFHM buildings and structures, including restoration after damage, as if hereafter erected;
- **9. Horizontal enlargements of pre-FIRM** or pre-IFHM construction. This appendix shall apply to horizontal enlargements of pre-FIRM or pre-IFHM buildings and structures to the extent of such horizontal enlargement, including but not limited to additions (whether above or below grade) decks, carports, or similar appendages. The existing portions of the structure shall not be required to comply, unless otherwise required because the alteration is deemed a substantial improvement; and
- 10. Other alterations to pre-FIRM or pre-IFHM construction. This appendix shall apply to repair, alteration, reconstruction, rehabilitation, or additions to pre-FIRM or pre-IFHM buildings and structures. No increase in the degree of noncompliance with this appendix shall be permitted. The requirements of this Item 10 shall be deemed satisfied if the work would not increase the degree of noncompliance with this appendix.
 - 10.1. Work that increases the degree of noncompliance. Work to pre-FIRM or pre-IFHM construction deemed as an increase in the degree of noncompliance includes, but is not limited to:
 - 10.1.1. The conversion of any space below the design flood elevation from nonhabitable space into habitable space;
 - 10.1.2. The creation of a direct communication between a dwelling unit and a space below the design flood elevation;

- 10.1.3. Where a dwelling unit already has space below the design flood elevation or has space with which the dwelling unit directly communicates that is below the design flood elevation, an increase in such space;
- 10.1.4. The conversion of any space below the design flood elevation in a non-residential building (for flood zone purposes) to accessory (as such term is defined in NYC ZR) to a group R-1, R-2, or R-3 occupancy, when such space was not previously accessory to such occupancy;
- 10.1.5. The installation of new components, materials, finishes, plumbing fixtures and equipment below the design flood elevation that are not permitted by this appendix to be located below the design flood elevation, where such similar items did not previously exist, except for new components, materials, finishes, and equipment as permitted by Item 10.2.2;
- 10.1.6. The lowering of the elevation of a floor of a basement (for floodzone purposes), or a portion thereof located below the design flood elevation, except as permitted by Item 10.2.4;
- 10.1.7. An alteration consisting of a change in use, occupancy or how such space is used in a building, or portion thereof, that results in a more restrictive flood design class per ASCE 24; and
- 10.1.8. Any condition not addressed in Items 10.1.1 through 10.1.7 as determined by the commissioner.
- 10.2. **Work that does not increase the degree of noncompliance.** The following work to pre-FIRM or pre-IFHM construction, other than substantial improvements, shall not be deemed as an increase in the degree of noncompliance:
 - 10.2.1. Plumbing fixtures:
 - 10.2.1.1. The in-kind replacement of plumbing fixtures below the design flood elevation; and
 - 10.2.1.2. The installation of new plumbing fixtures in a space within the structure where similar plumbing fixtures already exist, provided that the number of plumbing fixtures is not increased and provided any required backflow prevention and/or sewage ejection is provided in accordance with this appendix.
 - 10.2.2. Components, materials, finishes, equipment, fire protection systems and equipment, and appliances, other than plumbing fixtures:
 - 10.2.2.1. The in-kind replacement of components, materials, finishes, equipment, fire protection systems and equipment, and appliances;
 - 10.2.2.2. The installation of new components, materials, finishes, equipment, fire protection systems and equipment, and appliances, in a space within the

structure where similar pre-FIRM or pre-IFHM items already exist; and

- 10.2.2.3. Within existing nonresidential portions of a nonresidential (for flood zone purposes) building, the installation of new components, materials, finishes, equipment, fire protection systems and equipment, and appliances which serve only the space(s) being altered below the design flood elevation, provided such items, as well as any associated electrical wiring, are designed and/or isolated so as not to affect the operation of building components, systems and wiring of other parts of the building if submerged. This item shall not include increases to the number of plumbing fixtures or the installation of building systems which support other areas of the building.
- 10.2.3. Change in use, occupancy or how such space is used. Alteration consisting of a change in use, occupancy or how such space is used in a nonresidential building (for flood zone purposes), or portion thereof, that does not result in a more restrictive flood design class per ASCE 24, is not a conversion from nonhabitable space into habitable space, and is not otherwise required by Item 10.1.4 to comply with this appendix. Such alteration shall also comply with the provisions of Item 10.2.2; and
- 10.2.4. Pits. The lowering of the elevation of a floor or a portion thereof located below the design flood elevation for pits to accommodate sump pumps, house traps, valve access, cleanouts, ejector pumps and elevators.
- 11. **Retroactive requirements.** This appendix shall apply to retroactive requirements as provided for in Section G312.
- § 8. Section G102.2 of appendix G of the New York city building code is amended by adding a new section G102.2.3 to read as follows:
- G102.2.3 Establishment of inland flood hazard area. The department shall by rule adopt an inland flood hazard map, as created or updated pursuant to Section 24-808.1 of the *Administrative Code*.
- § 9. Section G103.3 of appendix G of the New York city building code is amended by adding a new section G103.3.3 to read as follows:
- G103.3.3 Determination of inland flood elevations. The base flood elevation for the inland flood hazard area shall be as indicated on the adopted inland flood hazard map.
- § 10. Section G104.2.3.1 of appendix G of the New York city building code, as amended by local law number 126 for the year 2021, is amended to read as follows:
- **G104.2.3.1 A-Zones** <u>and inland flood hazard areas</u>. For construction in A-Zones <u>and inland flood hazard areas</u>, the permit application shall include the following certifications, as applicable:

- 1. **Wet floodproofing certification.** For applications involving wet floodproofed enclosures below the design flood elevation, flood zone compliance plans shall include a certification by the applicant, as applicable to the scope of work proposed, that "in accordance with ASCE 24, the use of the enclosure is limited to the parking of vehicles, building access, or storage, and that the design incorporates openings to allow for the automatic entry and exit of floodwaters for equalization of hydrostatic flood forces and flood damage-resistant materials and techniques that minimize damage to a structure by floodwater."
- 2. **Dry floodproofing certification for nonresidential buildings.** For applications involving dry floodproofed buildings and structures that are nonresidential (for flood zone purposes), flood zone compliance plans shall include a certification by the applicant that "the structure is designed to be dry floodproofed with walls that are substantially impermeable to the passage of water and that all walls, floors, and flood shields are designed to resist hydrostatic, hydrodynamic, and other flood-related loads, including the effects of buoyancy resulting from flooding to the elevation listed in Table 6-1 in accordance with ASCE 24."
- 3. **Utility certifications.** For all applications involving utility or mechanical work, including applications where such work is to be filed in a separate, related application, flood zone compliance plans shall include a certification by the applicant that "all heating, ventilation, air conditioning, plumbing, electrical and other services facilities and equipment within the structure or site will be located or constructed so as to prevent water from entering or accumulating within the components during conditions of flooding in accordance with ASCE 24."
- § 11. Section G106.1 of appendix G of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:
- **G106.1 Applicability.** This section shall apply to post-FIRM or post-IFHM construction and substantial improvements where the work results in the issuance of a new or amended certificate of occupancy.
- § 12. Section G106.2 of appendix G of the New York city building code, as amended by local law number 126 for the year 2021, is amended to read as follows:
- G106.2 Enclosed areas subject to flooding in A-Zones or inland flood hazard areas. The certificate of occupancy shall describe all enclosed areas below the design flood elevation that are subject to flooding and that meet the requirements of this appendix for wet floodproofing as "wet floodproofed, subject to flooding". The certificate of occupancy shall indicate the use of wet floodproofed spaces as either parking, storage, building access or crawl spaces. The certificate of occupancy shall be issued with the following restriction: "Levels subject to flooding shall not be used for any other use except as stated on this certificate."
- § 13. Section G201.1.2 of appendix G of the New York city building code, as amended by local law number 126 for the year 2021, is amended to read as follows:
- **G201.1.2 Definitions specific to this appendix.** The following words and terms shall, for the purposes of this appendix, have the meanings shown herein:

DEVELOPMENT. Any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, temporary structures, temporary or permanent storage of materials, mining, dredging, filling, grading, paving, excavations or drilling operations and other land-disturbing activities.

EXISTING CONSTRUCTION. See "Pre-FIRM or pre-IFHM development."

EXISTING STRUCTURE. See "Pre-FIRM or pre-IFHM development."

FLOOD DESIGN CLASS. A classification of buildings and other structures for determination of flood loads and conditions, and determination of minimum elevation requirements on the basis of risk associated with unacceptable performance.

FUNCTIONALLY DEPENDENT FACILITY. A facility that cannot be used for its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for loading and unloading of cargo or passengers and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing, sales or service facilities.

HISTORIC STRUCTURE. Any structure that meets one of the following criteria:

- 1. Listed individually in the National Register of Historic Places;
- 2. Certified by the Secretary of the U.S. Department of the Interior as meeting the requirements for individual listing in the National Register;
- 3. Certified or preliminarily determined by the Secretary of the U.S. Department of the Interior to be contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary of the U.S. Department of the Interior to qualify as a registered historic district;
- 4. Individually listed or preliminarily determined to be eligible for listing in the New York State Register of Historic Places; or
- 5. Individually listed as a landmark by the NYC Landmarks Preservation Commission. Location within a historic district does not alone qualify as being an individually listed landmark.

LETTER OF MAP AMENDMENT (LOMA). An official amendment to the FIRM, issued and approved by the Federal Emergency Management Agency (FEMA), removing structures or tax lots or portions of tax lots from special flood hazard areas, resulting from a demonstration that the pre-FIRM ground elevations are at or above the base flood elevation.

LETTER OF MAP REVISION BASED ON FILL (LOMR-F). An official amendment to the FIRM, issued and approved by the Federal Emergency Management Agency (FEMA), removing structures or tax lots or portions of tax lots from special flood hazard areas, resulting from the post-FIRM placement of compacted fill, such that the new ground elevation is at or above the base flood elevation.

LETTER OF MAP REVISION (LOMR). An official amendment to the FIRM, issued and approved by the Federal Emergency Management Agency (FEMA), removing or adding structures or tax lots or portions of tax lots from special flood hazard areas, which generally results from physical measures implemented that affect

the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the special flood hazard area.

MANUFACTURED HOME. A structure that is transportable in one or more sections, built on a permanent chassis, designed for use with or without a permanent foundation when attached to the required utilities, and constructed to the Federal Mobile Home Construction and Safety Standards and rules and regulations promulgated by the U.S. Department of Housing and Urban Development. The term also includes mobile homes, park trailers, travel trailers and similar transportable structures that are placed on a site for 180 consecutive days or longer.

MANUFACTURED HOME PARK OR SUBDIVISION. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

MARKET VALUE OF STRUCTURE. The price that a buyer is willing, but is not under any duty, to pay for a particular structure to an owner who is willing, but not obligated, to sell, exclusive of the value of the land, or of other buildings or structures on the same tax lot. The market value of a structure shall be determined in accordance with rules promulgated by the commissioner.

NEW CONSTRUCTION. See "Post-FIRM or post-IFHM development."

POST-FIRM DEVELOPMENT. Any development that is not pre-FIRM development.

POST-IFHM DEVELOPMENT. Any development that is not pre-IFHM development.

POST-FIRM STRUCTURE. See "Post-FIRM development."

POST-IFHM STRUCTURE. See "Post-IFHM development."

PRE-FIRM DEVELOPMENT. Any development:

- 1. Completed prior to November 16, 1983;
- 2. Under construction on November 16, 1983, provided that the start of construction was prior to said date; or
- 3. Completed on or after November 16, 1983, but that:
 - 3.1. Was not located within a special flood hazard area at the start of construction; and
 - 3.2. Is now located within a special flood hazard area as a result of a subsequent change to the FIRM.

PRE-IFHM DEVELOPMENT. Any development:

- 1. Completed prior to the later of January 1, 2026 or the effective date of the first rule adopted pursuant to Section G102.2.3;
- 2. Under construction on the later of January 1, 2026 or the effective date of the first rule adopted pursuant to Section G102.2.3, provided that the start of construction was prior to said date; or

- 3. Completed on or after the later of January 1, 2026 or the effective date of the first rule adopted pursuant to Section G102.2.3, but that:
 - 3.1. Was not located within the inland flood hazard area at the start of construction; and
 - 3.2. Is now located within an inland flood hazard area as a result of a subsequent change to the IFHM.

PRE-FIRM STRUCTURE. See "Pre-FIRM development."

PRE-IFHM STRUCTURE. See "Pre IFHM development."

RECREATIONAL VEHICLE. A vehicle that is built on a single chassis, 400 square feet (37.16 m 2) or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light-duty truck, and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect-type utilities and security devices and has no permanently attached additions.

START OF CONSTRUCTION. The date of permit issuance for: (i) post-FIRM or post-IFHM developments; (ii) substantial improvements to pre-FIRM or pre-IFHM structures; and (iii) those pre-FIRM or pre-IFHM developments that, at the time of permit issuance, were not within a special flood hazard area or inland flood hazard area but that, prior to completion, were within a special flood hazard area or inland flood hazard area as a result of map change; provided the actual commencement of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement is within 180 days after the date of permit issuance and such construction activity is not thereafter suspended or abandoned for 180 days or more. For the purposes of this definition:

- 1. The actual commencement of construction means the first placement of permanent construction of a building (including a manufactured home or prefabricated building) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns.
- 2. Permanent construction does not include land preparation (such as clearing, excavation, grading or filling), the installation of streets or walkways, excavation for a basement (for flood zone purposes), footings, piers or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main building.
- 3. For a substantial improvement, the actual commencement of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, regardless of whether that alteration affects the external dimensions of the building.

VARIANCE. A grant of relief from the requirements of this appendix, which permits construction in a manner otherwise prohibited by this appendix.

§ 14. Section G302 of appendix G of the New York city building code, as amended by local law number

126 for the year 2021, is amended to read as follows:

SECTION BC G302 SUBDIVISIONS

- **G302.1 General.** Any subdivision proposal, including proposals for manufactured home parks and subdivisions, or other proposed new development within a special flood hazard area or inland flood hazard area shall be reviewed to verify all of the following:
 - 1. All such proposals are consistent with the need to minimize flood damage.
 - 2. All public utilities and facilities, such as sewer, gas, electric and water systems, are located and constructed to minimize or eliminate flood damage.
 - 3. Adequate drainage is provided to reduce exposure to flood hazards.
- **G302.2 Subdivision requirements.** The following requirements shall apply in the case of any proposed subdivision, including proposals for manufactured home parks and subdivisions, any portion of which lies within a special flood hazard area or inland flood hazard area:
 - 1. The special flood hazard area, including floodways, coastal high-hazard areas and coastal A-Zones, or inland flood hazard area, as appropriate, shall be delineated on tentative and final subdivision plats.
 - 2. Base flood elevations shall be shown on tentative and final subdivision plats.
 - 3. Building lots shall be provided with adequate buildable area, in accordance with the *New York City Zoning Resolution*, outside the floodway.
 - 4. The design criteria for utilities and facilities set forth in this appendix and appropriate *New York City Construction Codes* shall be met.
- § 15. The title of section G304 of appendix G of the New York city building code, as amended by local law number 126 for the year 2021, is amended to read as follows:

SECTION BC G304 POST-FIRM/IFHM CONSTRUCTION, HORIZONTAL ENLARGEMENTS AND SUBSTANTIAL IMPROVEMENTS

- § 16. Section G304.1 of appendix G of the New York city building code, as amended by local law number 126 for the year 2021, is amended to read as follows:
- **G304.1 A-Zone/IFHM** construction standards. In addition to the requirements of ASCE 24, the following standards shall apply to post-FIRM <u>and post-IFHM</u> construction, horizontal enlargements and substantial improvements located within A-Zones, other than Coastal A-Zones, and the inland flood hazard area.
 - **G304.1.1 Residential.** For buildings or structures that are residential (for flood zone purposes), all post-FIRM or post-IFHM new buildings, horizontal enlargements and substantial improvements shall comply with the applicable requirements of this appendix and ASCE 24, and shall be elevated as follows:

- 1. **Lowest floor.** The lowest floor, including the basement (for flood zone purposes), shall be elevated to or above the design flood elevation specified in ASCE 24, Table 2-1;
- 2. **Enclosures below the design flood elevation**. Enclosed spaces below the design flood elevation specified in ASCE 24, Table 2-1, shall be useable solely for parking of vehicles, building access, storage, or crawlspace, and shall be wet floodproofed in accordance with ASCE 24. Breakaway walls are not required in A-Zones or the inland flood hazard area;
 - 2.1. A restrictive declaration noting the above restriction shall be filed with the City Register or County Clerk, and the City Register File Number (CRFN) shall be identified in the permit application and on the certificate of occupancy.
- 3. **Under-floor spaces**. The finished ground level of an under-floor space, such as a crawl space, shall be equal to or higher than the outside finished ground level on at least one side;
- 4. **Materials.** Only flood-damage-resistant materials and finishes shall be utilized below the design flood elevation specified in ASCE 24, Table 5-1;
- 5. **Utilities and equipment.** Utilities and attendant equipment shall be located at or above the design flood elevation specified in ASCE 24, Table 7-1, or with the exception of the items below, shall be constructed so as to prevent water from entering or accumulating within the components during conditions of flooding in accordance with ASCE 24.
 - 5.1. Fire protection systems and equipment. The following fire protection systems and equipment shall be located at or above the design flood elevation specified in ASCE 24, Table 7-1, except that where the system or equipment or portion thereof serves only spaces located below such design flood elevation, the system or equipment or portion thereof may be located at or above such design flood elevation:
 - 5.1.1. Sprinkler control valves that are not outside stem and yoke valves;
 - 5.1.2. Fire standpipe control valves that are not outside stem and yoke valves;
 - 5.1.3. Sprinkler booster pumps and fire pumps;
 - 5.1.4. Dry pipe valve-related electrically operated alarm appurtenances;
 - 5.1.5. Alarm control panels for water and non-water fire extinguishing systems;
 - 5.1.6. Alarm control panels for sprinkler systems, pre-action sprinkler systems, deluge sprinkler systems, and combined dry pipe and pre-action sprinkler systems;
 - 5.1.7. Electrically operated waterflow detection devices serving sprinkler systems; and
 - 5.1.8. Air compressors serving sprinkler systems and pre-action sprinkler systems.
 - 5.2. Fire alarm systems and components. Where a zoning indicator panel is provided at the main

building entrance in accordance with Section 907.6.3.1 of this code and such panel is located at or below 5 feet (1524 mm) above the design flood elevation specified in ASCE 24, Table 7-1, at least one secondary zoning indicator panel complying with the following requirements shall be provided:

- 5.2.1. The secondary zoning indicator panel, associated controls, power supplies and means of transferring control shall be provided at least 5 feet (1524 mm) above the design flood elevation specified in ASCE 24, Table 7-1, in a location accessible to responding Fire Department personnel and approved by the department and the Fire Department and
- 5.2.2. Where the secondary zoning indicator panel or associated controls are only operable upon transfer of control from another zoning indicator panel, such transfer shall be by a means that is approved by the Fire Department.
- 5.3. Fuel-oil piping systems. The following requirements shall apply to fuel-oil piping systems, as defined by Section 202 of the New York City Mechanical Code:
 - 5.3.1. Fill piping that does not terminate in a watertight terminal approved by the department shall terminate at least 3 feet (914 mm) above the design flood elevation specified in ASCE 24, Table 7-1; and
 - 5.3.2. Normal vent piping and emergency vent piping shall terminate at least 3 feet (914 mm) above the design flood elevation specified in ASCE 24, Table 7-1.
- 5.4. Plumbing systems and components. The structure shall comply with the following requirements:
 - 5.4.1. Relief vents and fresh air intakes. Relief vents and fresh air intakes serving building traps in accordance with Section 1002.6 of the New York City Plumbing Code shall be carried above grade and shall terminate in a screened outlet that is located outside of the building and at or above the design flood elevation specified in ASCE 24, Table 7-1; and
 - 5.4.2. Reduced pressure zone backflow preventers.
 - 5.4.2.1. Primary reduced pressure principle backflow preventers complying with the requirements of the Department of Environmental Protection shall be located at or above the design flood elevation specified in ASCE 24, Table 7.1.
 - 5.4.2.2. Secondary reduced pressure principle backflow preventers complying with Section 608.13.2 of the New York City Plumbing Code and backflow preventers with intermediate atmospheric vents complying with Section 608.13.3 of the New York City Plumbing Code shall be located at or above the design flood elevation specified in ASCE 24, Table 7-1.
 - 5.4.3. Relief vents for gas service, equipment, and appliance pressure regulators. Relief vents for gas service, equipment, and appliance pressure regulators complying with the New York City Fuel Gas Code shall be located at or above the design flood elevation specified in ASCE 24, Table 7.1.

- 6. **Certifications.** Applications shall contain applicable certifications in accordance with Section G104.5; and
- 7. **Special inspections**. Special inspections shall be as required by Section G107.
- **G304.1.2 Nonresidential.** For buildings or structures that are nonresidential (for flood zone purposes), all post-FIRM or post-IFHM new buildings, horizontal enlargements and substantial improvements shall comply with the applicable requirements of this appendix and ASCE 24, and shall comply with either of the following:
 - 1. Elevation option. The structure shall comply with Items 1 through 7 of Section G304.1.1; or
 - 2. **Dry floodproofing option**. The structure shall comply with the following:
 - 2.1. Elevation of dry floodproofing. The structure shall be dry floodproofed to or above the design flood elevation specified in ASCE 24, Table 6-1;
 - 2.2. Dwelling units, patient care areas (for flood zone purposes) and sleeping areas. Where dwelling units, patient care areas (for flood zone purposes) or spaces intended to be used by persons for sleeping purposes are located in a building utilizing the dry floodproofing option, the following additional requirements shall be met:
 - 2.2.1. All rooms and spaces within dwelling units, patient care areas (for flood zone purposes) and all spaces intended to be used by persons for sleeping purposes shall be located at or above the design flood elevation;
 - 2.2.2. A restrictive declaration noting the above restriction shall be filed with the City Register or County Clerk, and the City Register File Number (CRFN) shall be identified in the permit application and on the certificate of occupancy.
 - 2.3. Utilities and equipment. Utilities and attendant equipment shall be located within the dry floodproofed enclosure, or may be located outside the dry floodproofed enclosure provided that they are located at or above the design flood elevation specified in ASCE 24, Table 7-1 or are constructed so as to prevent water from entering or accumulating within the components during conditions of flooding in accordance with ASCE 24.
 - 2.3.1. Additional requirements. Notwithstanding the above, utilities and attendant equipment, listed in Items 5.1 through 5.4 of Section G304.1.1, shall not be located in dry floodproofed enclosures and shall be elevated in accordance with Section G304.1.1.
 - 2.4. Fire department connections. Dry floodproofing measures including temporary shields, stairs and ramps shall be located and arranged so as to allow hose lines to be attached to the inlets of fire department connections without interference in accordance with Section 6.4.5 of NFPA 14, as modified by Appendix Q of this code.
 - 2.5. Certifications. Applications shall contain applicable certifications in accordance with Section G104.3.2; and

- 2.6. Special inspections. Special inspections shall be as required by Section G107.
- § 17. Section G305 of appendix G of the New York city building code, as amended by local law number

126 for the year 2021, is amended to read as follows:

SECTION BC G305 MANUFACTURED HOMES

- **G305.1 Elevation.** All new and replacement manufactured homes shall be prohibited in coastal high-hazard areas. Within A-Zones and the inland flood hazard area, all new, replaced or substantially improved manufactured homes shall be elevated such that the lowest floor of the manufactured home is elevated to or above the design flood elevation as specified in ASCE 24, Table 2-1.
- G305.2 Foundations. Within A-Zones and the inland flood hazard area, all new and replacement manufactured homes, including substantial improvement of existing manufactured homes, shall be placed on a permanent, reinforced foundation that is designed in accordance with ASCE 24.
- **G305.3 Anchoring.** Manufactured homes shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Methods of anchoring are authorized to include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- **G305.4** Protection of mechanical equipment and outside appliances. Mechanical equipment and outside appliances shall be elevated to or above the design flood elevation.

Exception: Where such equipment and appliances are designed and installed to prevent water from entering or accumulating within their components and the systems are constructed to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding up to the elevation required by ASCE 24, Table 2-1, the systems and equipment shall be permitted to be located below the elevation required by ASCE 24, Table 2-1. Electrical wiring systems shall be permitted below the design flood elevation provided they conform to the provisions of the New York City Electrical Code.

- **G305.5** Enclosures. Fully enclosed areas below elevated manufactured homes shall comply with the requirements of Section G304.1.1, Item 2.
 - § 18. Section G307 of appendix G of the New York city building code, as amended by local law number

126 for the year 2021, is amended to read as follows:

SECTION BC G307 TANKS

G307.1 Underground tanks. Underground tanks in special flood hazard areas or inland flood hazard areas shall be designed, constructed, installed, and anchored to prevent flotation, collapse and lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of flooding to the design flood elevation, in accordance with ASCE 24.

G307.2 Above-ground tanks. Above-ground tanks in special flood hazard areas or inland flood hazard areas shall be:

- 1. Elevated to or above the design flood elevation specified in ASCE 24, Table 7-1; or
- 2. Designed, constructed, installed, and anchored to prevent flotation, collapse and lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of flooding to the design flood elevation, in accordance with ASCE 24.

G307.3 Tank inlets and vents. In special flood hazard areas <u>and inland flood areas</u>, tank inlets, fill openings, outlets and vents shall be:

- 1. Installed at or above the design flood elevation specified in ASCE 24, Table 7-1, or designed to prevent the inflow of floodwater and outflow of the contents of the tanks during conditions of flooding to the design flood elevation, in accordance with ASCE 24; and
- 2. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of flooding to the design flood elevation, in accordance with ASCE 24.

G307.4 Additional fuel-oil storage capacity. Fuel-oil storage capacity in special flood hazard areas, inland flood hazard areas and shaded X-Zones shall comply with the following:

- 1. In special flood hazard areas, fuel oil on the lowest story having its floor above the applicable design flood elevation shall be limited to 3,000 gallons (11 356 L) and no storage tank may exceed the lesser of 1,500 gallons (5678 L) or the quantity of fuel-oil needed to operate the emergency or standby generator (s) served by such tank for 24 hours; and
- 2. In shaded X-Zones, fuel oil on the lowest story having its floor above the 500-year flood elevation shall be limited to 3,000 gallons (11 356 L) and no storage tank may exceed the lesser of 1,500 gallons (5678 L) or the quantity of fuel-oil needed to operate the emergency or standby generator(s) served by such tank for 24 hours.
- **G307.4.1 Additional requirements.** Where fuel-oil storage capacity exceeds the quantity set forth in Section 1305.11.1.3 of the New York City Mechanical Code, the fuel-oil storage shall comply with Sections G307.4.1.1 and G307.4.1.2 in addition to Section 1305 of the New York City Mechanical Code.
 - **G307.4.1.1** Vault. Each fuel-oil storage tank shall be separately enclosed in a vault complying with all of the following requirements:
 - 1. The walls, floor, and top of such vault shall have a fire-resistance rating of not less than 3 hours;
 - 2. The walls of such vault shall be bonded to the floor of such vault;
 - 3. The top and walls of such vault shall be independent of the building structure;
 - 4. An exterior building wall having a fire-resistance rating of not less than 3 hours shall be permitted

to serve as a wall of such vault; and

- 5. The vault shall be located in a dedicated room or area of the building that is separated vertically and horizontally from other areas of the building by construction having a fire-resistance rating of not less than 2 hours.
- **G307.4.1.2** Extinguishing system. Fuel-oil storage shall be protected with an alternative automatic fire-extinguishing system complying with Section 904.
- **G307.5** Elevation of certain tanks and containers serving flood design class 4 buildings. The following tanks and containers shall be located at or above the design flood elevation specified in ASCE 24, Table 7-1, when serving flood design class 4 buildings. Such tanks and containers must be designed to maintain service to such structure during flood conditions and shall comply with Section 9.7 of ASCE 24:
 - 1. Medical and compressed gas storage tanks, oxygen tanks, and other cryogenic system storage tanks;
 - 2. Hazardous material storage tanks;
 - 3. Stationary compressed gas containers;
 - 4. Stationary cryogenic containers and
 - 5. Stationary flammable gas storage containers.
 - § 19. Section G312 of appendix G of the New York city building code, as amended by local law number

126 for the year 2021, is amended to read as follows:

SECTION BC G312 RETROACTIVE REQUIREMENTS

- **G312.1 General.** Notwithstanding any other provision of the *New York City Construction Codes*, the provisions of this section shall apply retroactively to all buildings and structures specified herein.
- **G312.2 Connections for temporary external generators.** The following buildings shall be provided with connections for temporary external generators in accordance with Sections G304.5.1 through G304.5.4, as applicable, by January 1, 2033, and a report detailing compliance with such requirements shall be filed with the department in accordance with Section G312.2.2 by such date:
 - 1. Buildings whose main use or dominant occupancy is Group I-1 and that are located in a special flood hazard area;
 - 2. Buildings whose main use or dominant occupancy is an adult home, enriched housing, community residence or intermediate care facility that is classified as occupancy Group R pursuant to an exception to Section 308.3.1 or 308.3.2 and that are located in a special flood hazard area;
 - 3. Buildings whose main use or dominant occupancy is Group I-2 hospital and that are located in a special flood hazard area or shaded X-Zone;

- 4. Buildings whose main use or dominant occupancy is Group I-2 nursing home and that are located in a special flood hazard area; and
- 5. Buildings whose main use or dominant occupancy is Group I-2, other than hospitals and nursing homes, and that are located in a special flood hazard area.
- G312.2.1 Modification to the flood hazard area. Where the special flood hazard area or shaded X-Zone is modified on or after the effective date of this section, any building identified in Section G312.2 and newly identified as being within such modified special flood hazard area or shaded X-Zone, and any such building newly identified as being within the inland flood hazard area, shall, no later than 20 years following the adoption of such modification, comply with the retroactive requirements of Section G312.2. The owner of such building shall, no later than 20 years following the adoption of such modification, file with the department a report detailing compliance with such requirements in accordance with Section G312.2.2.
- G312.2.2 Report of compliance. The owner of a building required to comply with the provisions of Section G312.2 shall file with the department, by January 1, 2033, a report prepared by a registered design professional or licensed master electrician (i) certifying that the requirements of Section G312.2 have been satisfied and detailing how such requirements were satisfied or (ii) certifying that the building met or was altered to meet the provisions of any applicable exception in Sections G304.5.1 or G304.5.2.
- **G312.2.3 Filing.** The department may promulgate rules establishing filing fees for the review and examination of such reports.
- G312.3 Connections for temporary external boilers and chillers. Buildings whose main use or dominant occupancy is Group I-2 hospital and that are located in a flood hazard area shall be provided with connections for temporary external boilers and chillers in accordance with Section G304.5.2 by January 1, 2033, and a report detailing compliance with such requirements shall be filed with the department in accordance with Section G312.3.2 by such date.
 - G312.3.1 Modification to the flood hazard area. Where the special flood hazard area or shaded X-Zone is modified on or after the effective date of this section, any building whose main use or dominant occupancy is Group I-2 hospital and that is newly identified as being within such modified special flood hazard area or shaded X-Zone, and any such building newly identified as being within the inland flood hazard area, shall comply with the retroactive requirements of Section G312.3 no later than 20 years following the adoption of such modification. The owner of such building shall file with the department a report detailing compliance with such requirements in accordance with Section 312.3.2 no later than 20 years following the adoption of such modification.
 - G312.3.2 Report of compliance. The owner of a building required to comply with the provisions of Section G312.3 shall file with the department, by January 1, 2033, a report prepared by a registered design professional (i) certifying that the requirements of Section G312.3 have been satisfied and detailing how such requirements were satisfied or (ii) certifying that any boiler and chiller plants that serve the spaces specified in Item 2 of Section G304.5.2 are located at or above the design flood elevation specified in Table 7-1 of ASCE 24.
 - **G312.3.3 Filing.** The department may promulgate rules establishing filing fees for the review and examination of such reports.

§ 20. This local law takes effect immediately. NAW LS #13804 4/10/2024 9:05 AM