

*ASCE 24* means a standard titled Flood Resistant Design and Construction that is referenced by the Florida Building Code. ASCE 24 is developed and published by the American Society of Civil Engineers, Reston, VA.

*Base flood* means a flood having a one-percent chance of being equaled or exceeded in any given year. [Also defined in FBC, B, Section 202.] The base flood is commonly referred to as the "100-year flood" or the "one-percent-annual chance flood."

*Base flood elevation* means the elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the flood insurance rate map (FIRM). [Also defined in FBC, B, Section 202.]

*Basement* means the portion of a building having its floor subgrade (below ground level) on all sides. [Also defined in FBC, B, Section 202; see "Basement (for flood loads)".]

*Design flood* means the flood associated with the greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) Area with a floodplain subject to a one-percent or greater chance of flooding in any year; or
- (2) Area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

*Design flood elevation* means the elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as zone AO where the depth number is not specified on the map, the depth number shall be taken as being equal to two feet. [Also defined in FBC, B, Section 202.]

*Development* means any manmade change to improved or unimproved real estate, including but not limited to, buildings or other structures, tanks, temporary structures, temporary or

permanent storage of equipment or materials, mining, dredging, filling, grading, paving, excavations, drilling operations or any other land disturbing activities.

*Encroachment* means the placement of fill, excavation, buildings, permanent structures or other development into a flood hazard area which may impede or alter the flow capacity of riverine flood hazard areas.

*Existing building and existing structure* means any buildings and structures for which the "start of construction" commenced before September 29, 1978. [Also defined in FBC, B, Section 202.]

*Existing manufactured home park or subdivision* means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before September 29, 1978.

*Expansion to an existing manufactured home park or subdivision* means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

*Federal Emergency Management Agency (FEMA)* means the federal agency that, in addition to carrying out other functions, administers the National Flood Insurance Program.

*Flood or flooding* means a general and temporary condition of partial or complete inundation of normally dry land from: [Also defined in FBC, B, Section 202.]

- (1) The overflow of inland or tidal waters.
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

*Flood damage-resistant materials* means any construction material capable of withstanding direct and prolonged contact with floodwaters

without sustaining any damage that requires more than cosmetic repair. [Also defined in FBC, B, Section 202.]

*Flood hazard area* means the greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) The area within a floodplain subject to a one-percent or greater chance of flooding in any year.
- (2) The area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

*Flood insurance rate map (FIRM)* means the official map of the community on which the Federal Emergency Management Agency has delineated both special flood hazard areas and the risk premium zones applicable to the community. [Also defined in FBC, B, Section 202.]

*Flood insurance study (FIS)* means the official report provided by the Federal Emergency Management Agency that contains the flood insurance rate map, the flood boundary and floodway map (if applicable), the water surface elevations of the base flood, and supporting technical data. [Also defined in FBC, B, Section 202.]

*Floodplain administrator* means the office or position designated and charged with the administration and enforcement of this chapter (may be referred to as the floodplain manager).

*Floodplain development permit or approval* means an official document or certificate issued by the community, or other evidence of approval or concurrence, which authorizes performance of specific development activities that are located in flood hazard areas and that are determined to be compliant with this chapter.

*Floodway* means the channel of a river or other riverine watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. [Also defined in FBC, B, Section 202.]

*Floodway encroachment analysis* means an engineering analysis of the impact that a proposed encroachment into a floodway is expected to

have on the floodway boundaries and base flood elevations; the evaluation shall be prepared by a qualified Florida licensed engineer using standard engineering methods and models.

*Florida Building Code* means the family of codes adopted by the Florida Building Commission, including: Florida Building Code, Building; Florida Building Code, Residential; Florida Building Code, Existing Building; Florida Building Code, Mechanical; Florida Building Code, Plumbing; Florida Building Code, Fuel Gas.

*Functionally dependent use* means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, including only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities; the term does not include long-term storage or related manufacturing facilities.

*Highest adjacent grade* means the highest natural elevation of the ground surface prior to construction next to the proposed walls or foundation of a structure.

*Historic structure* means any structure that is determined eligible for the exception to the flood hazard area requirements of the Florida Building Code, Existing Building, Chapter 12 Historic Buildings.

*Letter of map change (LOMC)* means an official determination issued by FEMA that amends or revises an effective flood insurance rate map or flood insurance study. Letters of map change include:

*Letter of map amendment (LOMA)* means an amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective flood insurance rate map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

*Letter of map revision (LOMR)* means a revision based on technical data that may show changes to flood zones, flood elevations,

special flood hazard area boundaries and floodway delineations, and other planimetric features.

*Letter of map revision based on fill (LOMR-F)* means a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

*Conditional letter of map revision (CLOMR)* means a formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective flood insurance rate map or flood insurance study; upon submission and approval of certified as-built documentation, a letter of map revision may be issued by FEMA to revise the effective FIRM.

*Light-duty truck* means as defined in 40 C.F.R. 86.082-2, any motor vehicle rated at 8,500 pounds gross vehicular weight rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less, which is:

- (1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or
- (2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or
- (3) Available with special features enabling off-street or off-highway operation and use.

*Lowest floor* means the lowest floor of the lowest enclosed area of a building or structure, including basement, but excluding any unfinished or flood-resistant enclosure, other than a basement, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure

in violation of the non-elevation requirements of the Florida Building Code or ASCE 24. [Also defined in FBC, B, Section 202.]

*Manufactured home* means a structure, transportable in one or more sections, which is eight feet or more in width and greater than 400 square feet, and which is built on a permanent, integral chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle" or "park trailer." [Also defined in 15C-1.0101, F.A.C.]

*Manufactured home park or subdivision* means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

*Market value* means the price at which a property will change hands between a willing buyer and a willing seller, neither party being under compulsion to buy or sell and both having reasonable knowledge of relevant facts. As used in this chapter, the term refers to the market value of buildings and structures, excluding the land and other improvements on the parcel. Market value may be established by a qualified independent appraiser, actual cash value (replacement cost depreciated for age and quality of construction), or tax assessment value adjusted to approximate market value by a factor provided by the property appraiser.

*New construction* means for the purposes of administration of this chapter and the flood resistant construction requirements of the Florida Building Code, structures for which the "start of construction" commenced on or after September 29, 1978 and includes any subsequent improvements to such structures.

*New manufactured home park or subdivision* means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after September 29, 1978.

*Park trailer* means a transportable unit which has a body width not exceeding 14 feet and which is built on a single chassis and is designed to provide seasonal or temporary living quarters when connected to utilities necessary for operation of installed fixtures and appliances. [Defined in section 320.01, F.S.]

*Recreational vehicle* means a vehicle, including a park trailer, which is: [see in F.S. § 320.01.]

- (1) Built on a single chassis;
- (2) Four hundred square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light-duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

*Special flood hazard area* means an area in the floodplain subject to a one-percent or greater chance of flooding in any given year. Special flood hazard areas are shown on FIRMs as zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE or V. [Also defined in FBC, B Section 202.]

*Start of construction* means the date of issuance of permits for new construction and substantial improvements, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement is within 180 days of the date of the issuance. The actual start of construction means either the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns.

Permanent construction does not include land preparation (such as clearing, grading, or filling), the installation of streets or walkways, excavation for a basement, 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 buildings. For a substantial

improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building. [Also defined in FBC, B Section 202.]

*Substantial damage* means damage of any origin sustained by a building or structure whereby the cost of restoring the building or structure to its before-damaged condition would equal or exceed 50 percent of the market value of the building or structure before the damage occurred. [Also defined in FBC, B Section 202.]

*Substantial improvement* means any repair, reconstruction, rehabilitation, addition, or other improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either: [Also defined in FBC, B, Section 202.]

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

*Variance* means a grant of relief from the requirements of this chapter, or the flood resistant construction requirements of the Florida Building Code, which permits construction in a manner that would not otherwise be permitted by this chapter or the Florida Building Code.

*Watercourse* means a river, creek, stream, channel or other topographic feature in, on, through, or over which water flows at least periodically.  
(Ord. No. 19-23, § 2, 6-13-19)



## **ARTICLE III. FLOOD RESISTANT DEVELOPMENT**

### **DIVISION 1. BUILDINGS AND STRUCTURES**

#### **Sec. 90-110. Design and construction of buildings, structures and facilities exempt from the Florida Building Code.**

Pursuant to section 90-52 of this chapter, buildings, structures, and facilities that are exempt from the Florida Building Code, including substantial improvement or repair of substantial damage of such buildings, structures and facilities, shall be designed and constructed in accordance with the flood load and flood resistant construction requirements of ASCE 24. Structures exempt from the Florida Building Code that are not walled and roofed buildings shall comply with the requirements of article III, division 7 of this chapter.

(Ord. No. 19-23, § 2, 6-13-19)

#### **Secs. 90-111—90-119. Reserved.**

### **DIVISION 2. SUBDIVISIONS**

#### **Sec. 90-120. Minimum requirements.**

Subdivision proposals, including proposals for manufactured home parks and subdivisions, shall be reviewed to determine that:

- (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
- (2) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
- (3) Adequate drainage is provided to reduce exposure to flood hazards; in zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

(Ord. No. 19-23, § 2, 6-13-19)

#### **Sec. 90-121. Subdivision plats.**

Where any portion of proposed subdivisions, including manufactured home parks and subdivisions, lies within a flood hazard area, the following shall be required:

- (1) Delineation of flood hazard areas, floodway boundaries and flood zones, and design flood elevations, as appropriate, shall be shown on preliminary plats;
- (2) Where the subdivision has more than 50 lots or is larger than five acres and base flood elevations are not included on the FIRM, the base flood elevations determined in accordance with section 90-61 of this chapter; and
- (3) Compliance with the site improvement and utilities requirements of article III, division 3 of this chapter.

(Ord. No. 19-23, § 2, 6-13-19)

#### **Secs. 90-122—90-129. Reserved.**

### **DIVISION 3. SITE IMPROVEMENTS, UTILITIES AND LIMITATIONS**

#### **Sec. 90-130. Minimum requirements.**

All proposed new development shall be reviewed to determine that:

- (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
- (2) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
- (3) Adequate drainage is provided to reduce exposure to flood hazards; in zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-131. Sanitary sewage facilities.**

All new and replacement sanitary sewage facilities, private sewage treatment plants (including all pumping stations and collector systems), and on-site waste disposal systems shall be designed in accordance with the standards for onsite sewage treatment and disposal systems in Chapter 64E-6, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the facilities and discharge from the facilities into flood waters, and impairment of the facilities and systems.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-132. Water supply facilities.**

All new and replacement water supply facilities shall be designed in accordance with the water well construction standards in Chapter 62-532.500, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the systems.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-133. Limitations on sites in regulatory floodways.**

No development, including but not limited to site improvements, and land disturbing activity involving fill or regrading, shall be authorized in the regulatory floodway unless the floodway encroachment analysis required in section 90-62 of this chapter demonstrates that the proposed development or land disturbing activity will not result in any increase in the base flood elevation.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-134. Limitations on placement of fill.**

Subject to the limitations of this chapter, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid draw-down of floodwaters, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, if intended to support buildings and structures (zone A only), fill shall comply with the requirements of the Florida Building Code.

(Ord. No. 19-23, § 2, 6-13-19)

**Secs. 90-135—90-139. Reserved.****DIVISION 4. MANUFACTURED HOMES****Sec. 90-140. General.**

All manufactured homes installed in flood hazard areas shall be installed by an installer that is licensed pursuant to F.S. § 320.8249, and shall comply with the requirements of Chapter 15C-1, F.A.C. and the requirements of this chapter.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-141. Limitations on installation in floodways.**

New installations of manufactured homes shall not be permitted in floodways.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-142. Foundations.**

All new manufactured homes and replacement manufactured homes installed in flood hazard areas shall be installed on permanent, reinforced foundations that are designed in accordance with the foundation requirements of the Florida Building Code Residential Section R322.2 and this chapter. Foundations for manufactured homes subject to section 90-146 of this chapter are permitted to be reinforced piers or other foundation elements of at least equivalent strength.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-143. Anchoring.**

All new manufactured homes and replacement manufactured homes shall be installed using methods and practices which minimize flood damage and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring include, but are not limited to, use of over-the-top or frame ties to ground anchors. This anchoring requirement is in addition to applicable state and local anchoring requirements for wind resistance.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-144. Elevation.**

Manufactured homes that are placed, replaced, or substantially improved shall comply with section 90-145 or 90-146 of this chapter, as applicable.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-145. General elevation requirement.**

Unless subject to the requirements of section 90-146 of this chapter, all manufactured homes that are placed, replaced, or substantially improved on sites located: (a) outside of a manufactured home park or subdivision; (b) in a new manufactured home park or subdivision; (c) in an expansion to an existing manufactured home park or subdivision; or (d) in an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated such that the bottom of the frame is at or above the elevation required, as applicable to the flood hazard area, in the Florida Building Code, Residential Section R322.2 (zone A).

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-146. Elevation requirement for certain existing manufactured home parks and subdivisions.**

Manufactured homes that are not subject to section 90-145 of this chapter, including manufactured homes that are placed, replaced, or substantially improved on sites located in an existing manufactured home park or subdivision, unless on a site where substantial damage as result of flooding has occurred, shall be elevated such that either the:

- (1) Bottom of the frame of the manufactured home is at or above the elevation required in the Florida Building Code, Residential Section R322.2 (zone A); or
- (2) Bottom of the frame is supported by reinforced piers or other foundation ele-

ments of at least equivalent strength that are not less than 48 inches in height above grade.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-147. Enclosures.**

Enclosed areas below elevated manufactured homes shall comply with the requirements of the Florida Building Code, Residential Section R322.2 for such enclosed areas.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-148. Utility equipment.**

Utility equipment that serves manufactured homes, including electric, heating, ventilation, plumbing, and air conditioning equipment and other service facilities, shall comply with the requirements of the Florida Building Code, Residential Section R322.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-149. Reserved.**

## DIVISION 5. RECREATIONAL VEHICLES AND PARK TRAILERS

**Sec. 90-150. Temporary placement.**

Recreational vehicles and park trailers placed temporarily in flood hazard areas shall:

- (1) Be on the site for fewer than 180 consecutive days; or
- (2) Be fully licensed and ready for highway use, which means the recreational vehicle or park model is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanent attachments such as additions, rooms, stairs, decks and porches.

(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-151. Permanent placement.**

Recreational vehicles and park trailers that do not meet the limitations in section 90-150 of

this chapter for temporary placement shall meet the requirements of article III, division 4 of this chapter for manufactured homes.  
(Ord. No. 19-23, § 2, 6-13-19)

**Secs. 90-152—90-159. Reserved.**

**DIVISION 6. TANKS**

**Sec. 90-160. Underground tanks.**

Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty.  
(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-161. Above-ground tanks, not elevated.**

Above-ground tanks that do not meet the elevation requirements of section 90-162 of this chapter shall be permitted in flood hazard areas provided the tanks are anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris.  
(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-162. Above-ground tanks, elevated.**

Above-ground tanks in flood hazard areas shall be attached to and elevated to or above the design flood elevation on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area.  
(Ord. No. 19-23, § 2, 6-13-19)

**Sec. 90-163. Tank inlets and vents.**

Tank inlets, fill openings, outlets and vents shall be:

- (1) At or above the design flood elevation or fitted with covers designed to prevent

the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and

- (2) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

(Ord. No. 19-23, § 2, 6-13-19)

**Secs. 90-164—90-169. Reserved.**

**DIVISION 7. OTHER DEVELOPMENT**

**Sec. 90-170. General requirements for other development.**

All development, including manmade changes to improved or unimproved real estate for which specific provisions are not specified in this chapter or the Florida Building Code, shall:

- (1) Be located and constructed to minimize flood damage;
- (2) Meet the limitations of section 90-133 of this chapter if located in a regulated floodway;
- (3) Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;
- (4) Be constructed of flood damage-resistant materials; and
- (5) Have mechanical, plumbing, and electrical systems above the design flood elevation or meet the requirements of ASCE 24, except that minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations.

(Ord. No. 19-23, § 2, 6-13-19)