

PALM BEACH COUNTY BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date: June 11, 2024 [ ] Consent [ ] Regular [ ] Workshop [ X ] Public Hearing

Department: Planning, Zoning & Building Submitted By: Building Division Submitted For: Building Division

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends a motion to adopt: An Ordinance of The Board of County Commissioners (BOCC) of Palm Beach County, Florida, Repealing Ordinance 2020-028: The Palm Beach County Amendments to the Florida Building Code (FBC), 7th Edition, (2020) Chapter 1, "Administration" (FBC-Building) and Figures 1609.3 (1), (2), and (3), Basic Wind Speed Maps (FBC-Building), and Appendix F, "Proposed Construction Building Codes for Turf and Landscape Irrigation Systems" (FBC-Plumbing); Adopting the Palm Beach County Amendments to the Florida Building Code (FBC), 8th Edition (2023), Chapter 1, "Scope and Administration" (FBC-Building), and Figures 1609.3 (1), (2), (3), and (4) Wind Loads and Maps (FBC-Building), Appendix Q "Tiny Houses" (FBC-Residential), and Appendix F, "Proposed Construction Building Codes for Turf and Landscape Irrigation Systems" (FBC-Plumbing); Providing for Applicability; Providing for Repeal of Laws in Conflict; Providing for inclusion in the Code of Laws and Ordinances; Providing for a Savings Clause; Providing for Severability; and Providing for an Effective Date.

Summary: The Florida Legislature enacted Florida Statute Section 553.73, mandating a statewide (FBC) and allowing local governments to adopt their own Administrative Chapter of the FBC. This proposed ordinance adopts an updated Chapter 1 "Scope and Administration" of the FBC 8th Edition (2023) applicable to the unincorporated area of Palm Beach County, and in those municipalities having an Interlocal Agreement for the provision of County plan review and inspection services. As in past code updates, this Administrative Chapter 1 is based on the language adopted by the Florida Building Commission, along with model language developed by the Building Officials Association of Florida (BOAF), which was further refined by the Palm Beach County Building Code Advisory Board (BCAB) and adapted specifically to align with Palm Beach County regulations. Figures 1609.3 (1), (2), (3) and (4) have been modified pursuant to changes in the FBC 8th Edition (2023), in accordance with Florida Statute Section 553.73 and Section 1609.3 of the FBC, and changes in the reference standard ASCE-7-2022. This section provides for local governments to clarify and establish specific wind speed/wind borne debris lines using physical landmarks, whenever possible. This proposed ordinance also adopts FBC 8th Edition (2023) Appendix Q of the FBC-Residential volume allowing the construction of tiny houses. This proposed ordinance also repeals and re-adopts an updated FBC 8th Edition (2023) Appendix F of the FBC-Plumbing volume regulating new irrigation systems helping to conserve water and protect the public water supply. These Construction codes shall apply to all irrigation systems used on residential and commercial landscape areas, excluding use of reclaimed waters. They address the design requirements, water quality, materials, installation, inspection and testing for such systems. These construction codes do not apply to irrigation systems for golf courses, nurseries, greenhouses, or agricultural production systems. Unincorporated (RM)

Background and Policy Issues: Continued on page 3

Attachments:

- 1. Ordinance repealing Ordinance 2020-028 in its entirety and adopting the Palm Beach County Amendments to the Florida Building Code, 8th Edition (2023)
- Exhibit A - Palm Beach County Amendments to the Florida Building Code, 8th Edition (2023), Chapter 1, Scope and Administration;
- Exhibit B - Figures 1609.3(1), (2), (3) and (4), Wind Loads and Maps, Palm Beach County Amendment to the Florida Building Code, Building Volume, 8th Edition (2023). (Palm Beach County static representation, maps of greater detail function as a GIS layer available to the public.);
- Exhibit C - Appendix Q of the Florida Building Code, Residential Volume, 8th Edition (2023);
- Exhibit D - Appendix F of the Florida Building Code, Plumbing Volume, 8th Edition (2023)

Recommended by: [Signature] May 20, 2024 Department Director Date

Approved By: [Signature] 6/3/2024 Assistant County Administrator Date

**II. FISCAL IMPACT ANALYSIS**

**A. Five Year Summary of Fiscal Impact:**


Fiscal Years	2024	2025	2026	2027	2028
Capital Expenditures	0	0	0	0	0
Operating Costs	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income(County)	0	0	0	0	0
In-Kind Match(County)	0	0	0	0	0
<b>NET FISCAL IMPACT</b>	0	0	0	0	0
#ADDITIONAL FTE	0	0	0	0	0
POSITIONS (CUMULATIVE)	0	0	0	0	0

Is Item Included in Current Budget?    Yes   X      No       
 Is this item using Federal Funds?        Yes         No   X    
 Is this item using State Funds?          Yes         No   X  

**Budget Account No:**  
 Fund 1400                      Dept 600                      Unit 6107

**B. Recommended Sources of Funds/Summary of Fiscal Impact:**

**C. Departmental Fiscal Review:**

  
 \_\_\_\_\_

**III. REVIEW COMMENTS:**

**A. OFMB Fiscal and/or Contract Dev. and Control Comments:**

*ADAM 5/21/24*                      *Trunde P. Mackells 5/29/24*  
 OFMB    *OA 5/17*                      Contract Dev. & Control  
*KK 5/17*                                      *Ind 5/29/24*

**B. Legal Sufficiency**

  
 \_\_\_\_\_  
 Assistant County Attorney                      *5/30/24*

**C. Other Department Review**

\_\_\_\_\_  
 Department Director

**(THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT.)**

**Continued from page 1**

**Background and Policy Issues:**

The Florida Building Commission updates the FBC on a triannual basis. The most recent update, the FBC 8th Edition (2023), went into effect at midnight on December 31, 2023. Florida Statute Section 553.73(4)(a) authorizes local governments to adopt local amendments to the administrative provisions of the FBC to clarify and aid in the enforcement of the FBC as long as these amendments do not weaken or diminish the code itself. Because of the new code, Palm Beach County is required to update its existing Local Amendments to Chapter 1 to ensure consistency with the new code edition.

On March 15, 2023, the BCAB appointed a subcommittee to review the 2023 changes to the Chapter 1 for the FBC. The subcommittee conducted two public meetings to review and refine local Chapter 1 model to the new FBC. Input was sought from the public, construction industry members, and local building officials. The goals of the subcommittee were to clarify and improve the Chapter 1 for the 2023 building code, retain enhancements made in previous versions, and ensure consistency with the 2023 FBC. On August 16, 2023, BCAB considered the proposed Chapter 1 at a public meeting, and recommended approval to the BOCC.

Significant changes to the Local Amendments to Chapter 1 of the FBC for this cycle include: (1) Mandatory structural inspections for condominium and cooperative buildings 3 stories and taller; (2) Simplified permitting process for fire alarm, and fire sprinklers system projects; (3) Enhancements and clarification to simplify enforcement for violations.

If approved, Palm Beach County will also readopt Appendix Q of the FBC-Residential Volume and Appendix F of the FBC-Plumbing Volume. Appendix Q to adopt a methodology allowing the construction of tiny houses, for affordability and workforce housing purposes. Appendix F is regulating new irrigation systems helping to conserve water and protect the public water supply.

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA, REPEALING ORDINANCE 2020-028: PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE (FBC), 7<sup>th</sup> EDITION 2020, CHAPTER 1, "ADMINISTRATION" (FBC-BUILDING) AND FIGURES 1609.3 (1), (2) AND (3), BASIC WIND SPEED MAPS (FBC-BUILDING), AND APPENDIX F, "PROPOSED CONSTRUCTION BUILDING CODES FOR TURF AND LANDSCAPE IRRIGATION SYSTEMS" (FBC-PLUMBING); ADOPTING THE PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE (FBC), 8TH EDITION (2023), CHAPTER 1, "SCOPE AND ADMINISTRATION" (FBC-BUILDING), AND FIGURES 1609.3 (1), (2), (3) AND (4), WIND LOADS AND MAPS (FBC-BUILDING), APPENDIX Q "TINY HOUSES" (FBC-RESIDENTIAL), AND APPENDIX F, "PROPOSED CONSTRUCTION BUILDING CODES FOR TURF AND LANDSCAPE IRRIGATION SYSTEMS" (FBC-PUMBING); PROVIDING FOR APPLICABILITY; PROVIDING FOR REPEAL OF LAWS IN CONFLICT; PROVIDING FOR INCLUSION IN THE CODE OF LAWS AND ORDINANCES; PROVIDING FOR A SAVINGS CLAUSE; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, Chapter 125, Florida Statutes, empowers counties to provide for the health, safety and general welfare including the enactment and enforcement of construction and related technical standards and regulations; and

WHEREAS, the Florida Legislature has enacted Chapter 98-827, Laws of Florida, as amended by Chapter 98-419, Chapter 2000-141 and Chapter 2001-186, Laws of Florida, which adopts the Florida Building Code and supplants all locally-adopted building codes; and

WHEREAS, Section 553.73(4)(a), Florida Statutes, authorizes Palm Beach County to adopt amendments to the administrative provisions of the Florida Building Code to meet local conditions; and

WHEREAS, Section 553.73(4)(b), Florida Statutes, authorized Palm Beach County to adopt technical amendments to the Florida Building Code to meet local conditions; and

WHEREAS, the adoption of these amendments will be in the public interest by strengthening the Florida Building Code, for the health, safety, and general welfare of citizens in the unincorporated area of Palm Beach County.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA, that:

Section 1. REPEAL OF ORDINANCE 2020-028 PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE (FBC), 2020 7<sup>th</sup> EDITION, CHAPTER 1, "ADMINISTRATION" (FBC-BUILDING) AND FIGURES 1609.3 A, B, AND C BASID WIND SPEED MAPS (FBC-BUILDING), APPENDIX Q "TINY HOUSES" (FBC-RESIDENTIAL), AND APPENDIX F "CONSTRUCTION BUILDING CODES FOR TURF AND LANDSCAP IRRIGATION SYSTEMS" (FBC-PLUMBING):

1  
2 The Palm Beach County Amendments to the Florida Building Code (FBC), 2020 7<sup>th</sup> Edition,  
3 Chapter 1 “Administration” (FBC-Building), “Exhibit A”, and Figures 1609.3 A, B, and C, Basic Wind  
4 Speed Maps (FBC-Building), “Exhibit B”, Appendix Q “ Tiny Houses” (FBC- Residential), Exhibit C,  
5 and Appendix F “Construction Building Codes for Turf and Landscape Irrigation Systems (FBC-  
6 Plumbing), “Exhibit D”, and are hereby repealed.

7 **Section 2. ADOPTION OF THE PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA**  
8 **BUILDING CODE (FBC), 8TH EDITION, (2023), CHAPTER 1, “ADMINISTRATION” (FBC-**  
9 **BUILDING), AND FIGURES 1609.3 (1), (2), (3) AND (4), WIND LOADS AND MAPS (FBC-**  
10 **BUILDING), AND APPENDIX F, “PROPOSED CONSTRUCTION BUILDING CODES FOR**  
11 **TURF AND LANDSCAPE IRRIGATION SYSTEMS” (FBC-PLUMBING):**

12  
13 The Palm Beach County Amendments to the Florida Building Code (FBC), 8<sup>th</sup> Edition, (2023),  
14 Chapter 1, “Administration” (FBC-Building), attached hereto as Exhibit A, and Figures 1609.3 (1), (2),  
15 and (3) and (4), Wind Loads Maps (FBC-Building), attached hereto as Exhibit B, Appendix Q “ Tiny  
16 Houses” (FBC-Residential), Exhibit C, and Appendix F, “Proposed Construction Building Codes for Turf  
17 and Landscape Irrigation Systems (FBC-Plumbing), attached hereto as Exhibit D, are hereby adopted and  
18 incorporated herein, by reference.

19 **Section 3. APPLICABILITY:**

20 The Florida Building Code, as amended by Exhibit A, Exhibit B, Exhibit C and Exhibit D, and  
21 attached hereto and incorporated herein by reference, shall be the minimum construction standards for the  
22 unincorporated areas of Palm Beach County and for those municipalities within Palm Beach County for  
23 which Palm Beach County Planning, Zoning, and Building Department provides construction code plan  
24 review and inspection services pursuant to Interlocal Agreement, adopted in accordance with Chapter  
25 163, Florida Statutes.

26 **Section 4. REPEAL OF LAWS IN CONFLICT:**

27 All ordinances, or parts of ordinances of Palm Beach County, Florida, which are in conflict with  
28 this Ordinance are hereby repealed. All or any part of these laws, which pertain to Palm Beach County,  
29 Florida, which conflict with this Ordinance, or parts of this Ordinance are hereby repealed.

30 **Section 5. INCLUSION IN THE CODE OF LAWS AND ORDINANCES:**

31 The provisions of this Ordinance shall become and be made part of the Code of Laws and  
32 Ordinances of Palm Beach County, Florida. The sections of this Ordinance may be renumbered or  
33 relettered to accomplish such, and the word “ordinance” may be changed to “section,” “article,” or other  
34 appropriate word.

35 **Section 6. SAVINGS CLAUSE:**

36 All provisions of Ordinance 2020-028 Palm Beach County Amendments to the Florida Building  
37 Code, 2017 Edition, Chapter 1 “Administration”, Basic Wind Speed Maps, Appendix Q “Tiny Houses”

1 (FBC-Residential) and Appendix F “Construction Building Codes for Turf and Landscape Irrigation  
2 Systems” as originally enacted and amended, are specifically preserved and remain in full force and effect  
3 for the limited purpose of enforcing any alleged violations, enforcement orders, ongoing enforcement  
4 actions, permits, and all other orders relating to said Ordinance, which occurred prior to its repeal.

5 **Section 5. SEVERABILITY:**

6 If any section, paragraph, sentence, clause, or word of this ordinance is for any reason held by the  
7 Court to be unconstitutional, inoperative or void, such holding shall not affect the remainder of the  
8 Ordinance.

9 **Section 6. EFFECTIVE DATE:**

10 The provisions of this Ordinance shall become effective as provided by law.

11 APPROVED and ADOPTED by the Board of County Commissioners of Palm Beach County,  
12 Florida, on the \_\_\_\_ day of \_\_\_\_\_ 2024.

13  
14 **ATTEST:**

15  
16 **JOSEPH ABRUZZO,**  
17 **CLERK AND COMPTROLLER**

**PALM BEACH COUNTY, FLORIDA, BY ITS**  
**BOARD OF COUNTY COMMISSIONERS**

18  
19  
20 By: \_\_\_\_\_  
21 **Deputy Clerk**

By: \_\_\_\_\_  
**Mayor**

22  
23  
24 **APPROVED AS TO FORM AND**  
25 **LEGAL SUFFICIENCY**

26  
27  
28  
29 By: \_\_\_\_\_  
30 **County Attorney**

31  
32  
33 **Filed with the Department of State on the \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.**

PALM BEACH COUNTY AMENDMENTS TO THE  
THE FLORIDA BUILDING CODE, 8<sup>th</sup> Edition (2023)

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**TABLE OF CONTENTS**

**SECTION 101** ..... 4

**GENERAL** ..... 4

**SECTION 102** ..... 6

**APPLICABILITY** ..... 6

**SECTION 103** ..... 9

**DEPARTMENT OF BUILDING SAFETY** ..... 9

**SECTION 104** ..... 9

**DUTIES AND POWERS OF THE BUILDING OFFICIAL** ..... 9

**SECTION 105** ..... 11

**PERMITS** ..... 11

**SECTION 106** ..... 23

**FLOOR AND ROOF DESIGN LOADS** ..... 23

**SECTION 107** ..... 23

**SUBMITTAL DOCUMENTS** ..... 23

**SECTION 108** ..... 31

**TEMPORARY STRUCTURES AND USES** ..... 31

**SECTION 109** ..... 32

**FEES** ..... 32

**SECTION 110** ..... 32

**INSPECTIONS** ..... 32

**SECTION 111** ..... 44

**CERTIFICATE OF OCCUPANCY** ..... 44

**SECTION 112** ..... 45

**SERVICE UTILITIES** ..... 45

**SECTION 113** ..... 46

**CONSTRUCTION BOARD OF ADJUSTMENTS AND APPEALS** ..... 46

**SECTION 114** ..... 48

**VIOLATIONS** ..... 48

**SECTION 115** ..... 49

**STOP WORK ORDER** ..... 49

**SECTION 116** ..... 49

**UNSAFE BUILDINGS, STRUCTURES, EQUIPMENT AND SYSTEMS** ..... 49

**SECTION 117** ..... 53

**VARIANCES IN FLOOD HAZARD AREAS** ..... 53

**SECTION 118** ..... 53

**(RESERVED)** ..... 53

**SECTION 119** ..... 53

**SEVERABILITY** ..... 53

PART 1—SCOPE AND APPLICATION

SECTION 101

GENERAL

**101.1 Title.** These regulations shall be known as the *Florida Building Code*, hereinafter referred to as “this code.”

**101.2 Scope.** The provisions of this code shall apply to the construction, *alteration*, relocation, 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.

**Exception:**

1. Detached one- and two-family *dwelling*s and multiple single-family *dwelling*s (*townhouses*) not more than three *stories* above *grade plane* in height with a separate *means of egress* and their accessory structures not more than three stories above grade plane in height, shall comply with the *Florida Building Code, Residential*.
2. Code Requirements that address snow loads and earthquake protection are pervasive; they are left in place but shall not be utilized or enforced because Florida has no snow load or earthquake threat.

**101.2.1 Appendices.** . Provisions in the appendices shall not apply unless specifically adopted. Palm Beach County has adopted Appendix “Q” in the Florida Building Code, Residential Volume: Tiny Houses and Appendix “F” in the Florida Building Code, Plumbing Volume: Proposed Construction Building Codes for Turf and Landscape Irrigation Systems.

**101.2.2** Florida Building Code, Residential Construction standards or practices which are not covered by Florida Building Code, Residential volume shall be in accordance with the provisions of Florida Building Code, Building.

**101.3 Intent.** The purpose of this code is to establish the minimum requirements to safeguard the public health, safety 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 and to provide safety to fire fighters and emergency responders during emergency operations.

**101.3.1 Quality control.** Quality control of materials and workmanship is not within the purview of this code except as it relates to the purposes stated herein.

**101.3.2 Warranty and Liability.** The permitting, plan review or inspection of any building, system or plan by this jurisdiction, under the requirements of this code, shall not be construed in any court as a warranty of the physical condition of such building, system or plan or their adequacy. This jurisdiction shall not be liable in tort for damages or hazardous or illegal condition or inadequacy in such building, system or plan, nor for any failure of any component of such, which may occur subsequent to such inspection or permitting. Further, no employee shall be liable in tort for damage from such conditions, in accordance with Section 768.28 Florida Statutes, as may be amended or replaced.

**101.4 Referenced codes.** The other codes listed in Sections 101.4.1 through 101.4.11 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

**101.4.1 Gas.** The provisions of the *Florida Building Code, Fuel Gas* shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

**101.4.2 Mechanical.** The provisions of the *Florida Building Code, Mechanical* shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

**101.4.3 Plumbing.** The provisions of the *Florida Building Code, Plumbing* shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system.

**101.4.4 Property maintenance.** Chapter 14, Article I of the Palm Beach County Code of Ordinances (“Property Maintenance Code”) governs the maintenance of existing properties in Palm Beach County except as otherwise regulated by this code.

**101.4.5 Fire prevention.** For provisions related to fire prevention, refer to the *Florida Fire Prevention Code*. The *Florida Fire Prevention Code* 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 systems and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

**101.4.6 Energy.** The provisions of the *Florida Building Code, Energy Conservation* shall apply to all matters governing the design and construction of buildings for energy efficiency.

**101.4.7 Existing buildings.** The provisions of the *Florida Existing Building Code* shall apply to matters governing the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

**101.4.8 Accessibility.** For provisions related to accessibility, refer to the *Florida Building Code, Accessibility*.

**101.4.9 Manufactured buildings.** For additional administrative and special code requirements, see Section 458, *Florida Building Code, Building* and Rule 61-41 *Florida Administrative Code*.

**101.4.10 Electrical.** The provisions of Chapter 27 of the Florida Building Code, Building Volume shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

**101.4.11 Flood Damage Prevention** Palm Beach County Unified Land Development Code (ULDC) shall be considered part of the requirements of this code relative to flood control. Conflicting requirements between the Florida Building Code and Article 18 of the ULDC shall be resolved in favor of the requirement that offers the greatest degree of flood damage prevention or alternatives that would provide an equivalent degree of flood damage prevention and an equivalent method of construction.

**101.5 Building Official.** Whenever the building official is mentioned in this code, it is also intended to mean the building official’s designee, wherever applicable.

**101.6 Department.** Whenever “department” or “department of building safety” is mentioned in this code, it is also intended to mean the Palm Beach County Building Division, where applicable.

## SECTION 102 APPLICABILITY

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

**102.1.1** The *Florida Building Code* does not apply to, and no code enforcement action shall be brought with respect to, zoning requirements, land use requirements and owner specifications or programmatic requirements which do not pertain to and govern the design, construction, erection, alteration, modification, repair or demolition of public or private buildings, structures or facilities or to programmatic requirements that do not pertain to enforcement of the *Florida Building Code*. Additionally, a local code enforcement agency may not administer or enforce the *Florida Building Code, Building* to prevent the siting of any publicly owned facility, including, but not limited to, correctional facilities, juvenile justice facilities, or state universities, community colleges, or public education facilities, as provided by law.

**102.2 Building.** The provisions of the *Florida Building Code* shall apply to the construction, erection, alteration, modification, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every public and private building, structure or facility or floating residential structure, or any appurtenances connected or attached to such buildings, structures or facilities. Additions, alterations, repairs and changes of use or occupancy group in all buildings and structures shall comply with the provisions provided in the *Florida Building Code, Existing Building*. The following buildings, structures and facilities, except for those located in a Special Flood Hazard Area are exempt from the *Florida Building Code* as provided by law, and any further exemptions shall be as determined by the legislature and provided by law:

- (a) Building and structures specifically regulated and preempted by the federal government.
- (b) Railroads and ancillary facilities associated with the railroad.
- (c) Nonresidential farm buildings on farms.
- (d) Temporary buildings or sheds used exclusively for construction purposes.
- (e) Reserved-Mobile or modular structures used as temporary offices, except that the provisions of Part II (Section 553.501-553.513, *Florida Statutes*) relating to accessibility by persons with disabilities shall apply to such mobile or modular structures. Permits shall be required for structural support and tie down, electric supply and all other such utility connections to such mobile or modular structures as required by this jurisdiction.
- (f) Those structures or facilities of electric utilities, as defined in Section 366.02, *Florida Statutes*, which are directly involved in the generation, transmission, or distribution of electricity.
- (g) Temporary sets, assemblies, or structures used in commercial motion picture or television production, or any sound-recording equipment used in such production, on or off the premises.
- (h) Chickees constructed by the Miccosukee Tribe of Indians of Florida or the Seminole Tribe of Florida. As used in this paragraph, the term "chickee" means an open-sided wooden hut that has a thatched roof of palm or palmetto or other traditional materials, and that does not incorporate any electrical, plumbing, or other non-wood features.
- (i) Family mausoleums not exceeding 250 square feet (23 m<sup>2</sup>) in area which are prefabricated and assembled on site or preassembled and delivered on site and have walls, roofs, and a floor constructed of granite, marble, or reinforced concrete.
- (j) Temporary housing provided by the Department of Corrections to any prisoner in the state correctional system.
- (k) A building or structure having less than 1,000 square feet (93 m<sup>2</sup>) which is constructed and owned by a natural person for hunting and which is repaired or reconstructed to the same dimension and condition as existed on January 1, 2011, if the building or structure:

1. Is not rented or leased or used as a principal residence;
2. Is not located within the 100-year floodplain according to the Federal Emergency Management Agency's current Flood Insurance Rate Map; and
3. Is not connected to an off-site electric power or water supply.

(l) A drone Port as defined in s.330.41(2)

(m) Service providers of water, sewer, storm, gas, cable, telephone, or other similar utility systems are exempt to the point of service connection for the building or structure. Additional telecommunication exemptions may be found in Section 489.503(14), Florida Statutes.

However, these structures may be subject to local zoning and/or land development regulations.

**102.2.1** In addition to the requirements of Section 553.79 and 553.80, *Florida Statutes*, facilities subject to the provisions of Chapter 395, *Florida Statutes*, and Part II of Chapter 400, *Florida Statutes*, shall have facility plans reviewed and construction surveyed by the state agency authorized to do so under the requirements of Chapter 395, *Florida Statutes*, and Part II of Chapter 400, *Florida Statutes*, and the certification requirements of the federal government.

**102.2.2** Residential buildings or structures moved into or within a county or municipality shall not be required to be brought into compliance with the state minimum building code in force at the time the building or structure is moved, provided:

1. The building or structure is structurally sound and in occupiable condition for its intended use;
2. The occupancy use classification for the building or structure is not changed as a result of the move;
3. The building is not substantially remodeled;
4. Current fire code requirements for ingress and egress are met;
5. Electrical, gas and plumbing systems meet the codes in force at the time of construction and are operational and safe for reconnection; and
6. Foundation plans are sealed by a professional engineer or architect licensed to practice in this state, if required by the *Florida Building Code*, Building for all residential buildings or structures of the same occupancy class.
7. The requirements of Florida Building Code, Existing Building Volume, are also satisfied.

**102.2.3** The *building official* shall apply the same standard to a moved residential building or structure as that applied to the remodeling of any comparable residential building or structure to determine whether the moved structure is substantially remodeled. The cost of the foundation on which the moved building or structure is placed shall not be included in the cost of remodeling for purposes of determining whether a moved building or structure has been substantially remodeled.

**102.2.4** This section does not apply to the jurisdiction and authority of the Department of Agriculture and Consumer Services to inspect amusement rides or the Department of Financial Services to inspect state-owned buildings and boilers.

**102.2.5** Each enforcement district shall be governed by a board, the composition of which shall be determined by the affected localities.

1. At its own option, each enforcement district or local enforcement agency may adopt rules granting to the owner of a single-family residence one or more exemptions from the Florida Building Code relating to:
  - a. Addition, alteration, or repairs performed by the property owner upon his or her own property, provided any addition or alteration shall not exceed 1,000 square feet (93 m<sup>2</sup>) or the square footage of the primary structure, whichever is less.

b. Addition, alteration, or repairs by a non-owner within a specific cost limitation set by rule, provided the total cost shall not exceed \$5,000 within any 12-month period.

c. Building and inspection fees.

2. However, the exemptions under subparagraph 1 do not apply to single-family residences that are located in mapped flood hazard areas, as defined in the code, unless the enforcement district or local enforcement agency has determined that the work, which is otherwise exempt, does not constitute a substantial improvement, including the repair of substantial damage, of such single-family residences.

3. Each code exemption, as defined in sub-subparagraphs 1a, 1b, and 1c shall be certified to the local board 10 days prior to implementation and shall only be effective in the territorial jurisdiction of the enforcement district or local enforcement agency implementing it.

4. Each enforcement district or local enforcement agency may establish an alternative permitting program for replacing nonstructural components of building systems in a residential dwelling unit. A licensed contractor performing such work for the resident shall also be exempt from individual permits and inspections if either the owner or the licensed contractor obtains a valid Annual Permit per Section 105.1.1 of this code and all such work is reported as required in Section 105.1.2 of this code for compliance evaluation. No added capacity, system expansion or new building work of any type shall be excluded from individual permit and inspection by this provision.

**102.2.6** This section does not apply to swings and other playground equipment accessory to a one- or two-family dwelling.

**Exception:** Electrical service to such playground equipment shall be in accordance with Chapter 27 of this code.

**102.3 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 this code.

**102.4 Referenced codes and standards.** The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.4.1 and 102.4.2.

**102.4.1 Conflicts.** Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

**102.4.2 Provisions in referenced codes and standards.** Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code or the Florida Codes listed in Section 101.4, the provisions of this code or the Florida Codes listed in Section 101.4, as applicable, shall take precedence over the provisions in the referenced code or standard.

**102.5 Partial invalidity.** In the event that any part or provision of this 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.

**102.6 Existing structures.** The legal occupancy of any structure 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 Florida Building Code, Existing Building, the Florida Fire Prevention Code, and Property Maintenance Code

**102.6.1 Buildings not previously occupied.** A building or portion of a building that has not been previously occupied or used for its intended purpose in accordance with the laws in existence at the time of its completion shall comply with the provisions of the Florida Building Code or Florida Residential Code, as applicable, for new construction or with any current permit for such occupancy.

**102.6.2 Buildings previously occupied.** The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as otherwise specifically provided in this code, the Florida Fire Prevention Code Property Maintenance Code, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

## 102.7 Relocation of manufactured buildings.

(1) Relocation of an existing manufactured building does not constitute an alteration.

(2) A relocated building shall comply with wind speed requirements of the new location, using the appropriate wind speed map. If the existing building was manufactured in compliance with the Standard Building Code (prior to March 1, 2002), the wind speed map of the Standard Building Code shall be applicable. If the existing building was manufactured in compliance with the Florida Building Code (after March 1, 2002), the wind speed map of the Florida Building Code shall be applicable.

(3) A relocated building shall comply with the flood hazard area requirements of the new location, if applicable.

**102.8 Existing mechanical equipment.** An agency or local government may not require that existing mechanical equipment located on or above the surface of a roof be installed in compliance with the requirements of the Florida Building Code except during reroofing when the equipment is being replaced or moved during reroofing and is not in compliance with the provisions of the Florida Building Code relating to roof-mounted mechanical units.

## PART 2—ADMINISTRATION AND ENFORCEMENT

### SECTION 103

#### DEPARTMENT OF BUILDING SAFETY

**103.1 Creation of enforcement agency.** The Department of Building Safety is hereby created and the official in charge thereof shall be known as the building official.

**103.2 Appointment.** The building official shall be appointed by the chief appointing authority of the jurisdiction.

**103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

For the maintenance of existing properties, see: (what you have referenced in 101.4.4)

**103.4 Restrictions on employees.** An employee connected with the division shall not be financially interested in the furnishing of labor, material, or appliances for the construction, alteration, or maintenance of a building, structure, service, system, or in the making of plans or of specifications thereof, unless he/she is the owner of such. An employee shall not engage in any other work which is inconsistent with his/her duties, or conflicts with the interests of the division, or which violates Florida Statutes Section 112.313(7)(a) or the Palm Beach County Code of Ethics.

### SECTION 104

#### DUTIES AND POWERS OF THE BUILDING OFFICIAL

**104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code. The building official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

**104.2 Applications and permits.** The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings, structures, and service systems, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the building official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the building official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and

where required by this code, the building official shall require the building to meet the requirements of Section 1612 or R322 of this code, and ULDC Article 18, Flood Damage Prevention.

**104.3 Notices and orders.** The building official shall issue all necessary notices or orders to ensure compliance with this code.

**104.4 Inspections.** The building official shall make all of the required inspections, or the building official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

**104.5 Identification.** The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**104.6 Right of entry.**

**104.6.1** Where it is necessary to make an inspection to enforce the provisions of this code, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this code which makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.

**104.6.2** When the building official obtains a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care or control of any building, structure, or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the building official for the purpose of inspection and examination pursuant to this code.

**104.7 Department records.** The building official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records per FS 119.

**104.8 Liability.** The building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be civilly or criminally rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer, employee, or board member because of an act performed by that officer, employee, or board member in the lawful discharge of duties and under the provisions of this code shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**104.8.1 Legal defense.** Any suit or criminal complaint instituted against an officer, employee, or board member because of an act performed by that officer, employee, or board member in the lawful discharge of duties and under the provisions of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**104.9 Approved materials and equipment.** Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

**104.9.1 Used materials and equipment.** The use of used materials which meet the requirements of this code for new materials is permitted. Used equipment and devices shall not be reused unless approved by the building official.



**104.10 Modifications.** Wherever there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the building official shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the department of building safety.

**104.10.1 Flood hazard areas.** The building official shall coordinate with the floodplain administrator to review requests submitted to the building official that seek approval to modify the strict application of the flood resistant construction requirements of the Florida Building Code to determine whether such requests require the granting of a variance pursuant to Section 117.

**104.11 Alternative materials, design and methods of construction and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
  - 2.1 Quality.
  - 2.2 Strength
  - 2.3 Effectiveness
  - 2.4 Fire Resistance
  - 2.5 Durability
  - 2.6 Safety
  - 2.7 Level of Sanitation

Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.

**104.11.1 Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

**104.11.2 Tests.** Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

**104.12 Requirements not covered by code.** Any requirements necessary for strength, stability or proper operation of an existing or proposed building, structure, electrical, gas, mechanical or plumbing system, or for the public safety, health and general welfare, not specifically covered by this or other technical codes, shall be determined by the building official.

## **SECTION 105** **PERMITS**

**105.1 Required.** Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any impact-resistant coverings, electrical, gas, mechanical or plumbing, fire protection system, or accessible or flood resistant site element, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.

**105.1.1 Annual facility permit.** In lieu of an individual permit for each alteration to an existing electrical, gas, mechanical or plumbing or interior nonstructural office system(s), the building official is authorized to issue an annual permit for any occupancy to facilitate routine or

emergency service, repair, refurbishing, minor renovations of service systems or manufacturing equipment installations/relocations. The building official shall be notified of major changes and shall retain the right to make inspections at the facility site as deemed necessary. An annual facility permit shall be assessed with an annual fee and shall be valid for one year from date of issuance. A separate permit shall be obtained for each facility and for each construction trade, as applicable. The permit application shall contain a general description of the parameters of work intended to be performed during the year.

**105.1.2 Annual Facility permit records.** The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such records at all times or such records shall be filed with the building official as designated. The building official is authorized to revoke such permit, if code violations are found to exist.

**105.1.3 Food permit.** In accordance with 500.12, Florida Statutes, a food permit from the Department of Agriculture and Consumer Services is required of any person who operates a food establishment or retail store.

**105.1.4 Public swimming pool.** The local enforcing agency may not issue a building permit to construct, develop, or modify a public swimming pool without proof of application, whether complete or incomplete, for an operating permit pursuant to Section 514.031, Florida Statutes. A certificate of completion or occupancy may not be issued until such operating permit is issued. The local enforcing agency shall conduct their review of the building permit application upon filing and in accordance with Chapter 553, Florida Statutes. The local enforcing agency may confer with the Department of Health, if necessary, but may not delay the building permit application review while awaiting comment from the Department of Health.

**105.2 Work exempt from permit.** Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction, to include work in any special flood hazard area. Exemptions granted under this section do not relieve the owner or contractor from their duty to comply with applicable provisions of the Florida Building Code, and requirements of the local floodplain management ordinance. As determined by the building official, permits shall not be required for the following

**Building:**

1. Building permits are not required for replacement or repair work having a value of less than \$1,000.00, providing, however, that such work will not adversely affect the structural integrity, fire rating, exit access or egress requirements.
2. Cabinets and countertops with no reconfiguration for 1&2 Family Dwellings, painting, papering, carpeting, and similar finish work, with no electrical or plumbing work.
3. Temporary motion picture, television and theater sets and scenery.
4. Traditional swings and other standard playground equipment accessory to detached one and two-family dwellings, as determined by the building official, but they may be subject to Zoning permits.
5. Retractable awnings supported by an exterior wall and do not require additional support of Groups R-3 and U occupancies, but they may be subject to Zoning permits.
6. Non-fixed and movable fixtures, cases, racks, and counters not over 5 feet 9 inches (1753 mm) in height.

**Electrical:**

**Repairs and maintenance:** Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

**Radio and television transmitting stations:** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

**Temporary testing systems:** A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

**Gas:**

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

**Mechanical:**

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds (5 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.
8. The installation, replacement, removal or metering of any electrical load management control device where installed by a utility service provider.

**Plumbing:**

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
3. The replacement of common household plumbing fixtures to existing supply lines and sanitary connections in 1&2 Family Dwellings. This does not include water heaters, bathtubs and showers.

**105.2.1 Emergency repairs.** Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official. Notification shall be given to the building official, including the work address, nature of emergency, and scope of work immediately, or by the next business day.

**105.2.2. Minor repairs.** Ordinary minor repairs may be made with the approval of the building official without a permit, provided the repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring systems or mechanical equipment or other work affecting public health or general safety, and such repairs shall not violate any of the provisions of the technical codes.

**105.2.3 Public service agencies.** A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.

**105.3 Application for permit.** To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the building department for that purpose.

Permit application forms shall be in the format prescribed by a local administrative board, if applicable, and must comply with the requirements of Section 713.135(5) and (6), Florida Statutes.

Each application shall be inscribed with the date of application, and the code in effect as of that date. For a building permit for which an application is submitted prior to the effective date of the Florida Building Code, the state minimum building code in effect in the permitting jurisdiction on the date of the application governs the permitted work for the life of the permit and any extension granted to the permit.

Effective October 1, 2017, a local enforcement agency shall post each type of building permit application on its website. Completed applications must be able to be submitted electronically to the appropriate building department. Accepted methods of electronic submission include, but are not limited to, e-mail submission of applications in portable document format or submission of applications through an electronic fill-in form available on the building department's website or through a third-party submission management software. Payments, attachments, or drawings required as part of the permit application may be submitted in person in a non-electronic format, at the discretion of the building official.

**105.3.1 Action on application.** The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefore. If the building official is satisfied that the proposed work conforms to the requirements of this code and laws and ordinances applicable thereto, the building official shall issue a permit therefore as soon as practicable. When authorized through contractual agreement with a school board, in acting on applications for permits, the building official shall give first priority to any applications for the construction of, or addition or renovation to, any school or educational facility.

**105.3.1.1** If a state university, Florida college or public school district elects to use a local government's code enforcement offices, fees charged by counties and municipalities for enforcement of the Florida Building Code on buildings, structures, and facilities of state universities, state colleges, and public school districts shall not be more than the actual labor and administrative costs incurred for plans review and inspections to ensure compliance with the code.

**105.3.1.2** No permit may be issued for any building construction, erection, alteration, modification, repair, or addition unless the applicant for such permit provides to the enforcing agency which issues the permit any of the following documents which apply to the construction for which the permit is to be issued and which shall be prepared by or under the direction of an engineer registered under Chapter 471, Florida Statutes:

1. Plumbing documents for any new building or addition which requires a plumbing system with more than 250 fixture units or which costs more than \$125,000.
2. Fire sprinkler documents for any new building or addition which includes a fire sprinkler system which contains 50 or more sprinkler heads. Personnel as authorized by chapter 633 Florida Statutes, may design a new fire protection system of 49 or fewer sprinklers; and may design the alteration of an existing fire sprinkler system if the alteration consists of the relocation, addition or deletion of 49 or fewer sprinklers, notwithstanding the size of the existing fire sprinkler system; or may design the alteration of an existing fire sprinkler system if the alteration consists of the relocation or deletion of 249 or fewer sprinklers, the addition of up to 49 sprinklers, as long as the cumulative total number of fire sprinklers being added, relocated, or deleted does not exceed 249, notwithstanding the size of the existing fire sprinkler system, if there is no change of occupancy of the affected areas, as defined in this Code and the Florida Fire Prevention Code, and there is no change in the water demand as defined in NFPA 13, "Standard for the Installation of Sprinkler Systems," and if the occupancy hazard classification as defined in NFPA 13 is reduced or remains the same as a result of the alteration.

Fire sprinkler documents for any new building or addition which includes a fire sprinkler system which contains 50 or more sprinkler heads.

Personnel as authorized by chapter 633 Florida Statutes may design;

- (a) a new fire protection system of 49 or fewer sprinklers;

- (b) the alteration of an existing fire sprinkler system if the alteration consists of the relocation, addition or deletion of 49 or fewer sprinklers, notwithstanding the size of the existing fire sprinkler system;
- (c) the alteration of an existing fire sprinkler system if the alteration consists of the relocation or deletion of 249 or fewer sprinklers, notwithstanding the size of the existing fire sprinkler system, if there is no change of occupancy of the affected areas, as defined in this Code and the Florida Fire Prevention Code, and there is no change in the water demand as defined in NFPA 13, "Standard for the Installation of Sprinkler Systems," and if the occupancy hazard classification as defined in NFPA 13 is reduced or remains the same as a result of the alteration.

3. Heating, ventilation, and air-conditioning documents for any new building or addition which requires more than a 15-ton-per-system capacity which is designed to accommodate 100 or more persons or for which the system costs more than \$125,000. This paragraph does not include any document for the replacement or repair of an existing system in which the work does not require altering a structural part of the building or for work on a residential one, two, three or four-family structure.

An air-conditioning system may be designed by an installing air-conditioning contractor certified under Chapter 489, Florida Statutes, to serve any building or addition which is designed to accommodate fewer than 100 persons and requires an air-conditioning system with a value of \$125,000 or less; and when a 15-ton-per system or less is designed for a singular space of a building and each 15-ton system or less has an independent duct system. Systems not complying with the above require design documents that are to be sealed by a professional engineer.

**Example 1:** When a space has two 10-ton systems with each having an independent duct system, the contractor may design these two systems since each unit (system) is less than 15 tons.

**Example 2:** Consider a small single-story office building which consists of six individual offices where each office has a single three-ton package air conditioning heat pump. The six heat pumps are connected to a single water cooling tower. The cost of the entire heating, ventilation and air-conditioning work is \$47,000 and the office building accommodates fewer than 100 persons. Because the six mechanical units are connected to a common water tower this is considered to be an 18-ton system.

**NOTE:** It was further clarified by the Commission that the limiting criteria of 100 persons and \$125,000 apply to the building occupancy load and the cost for the total air-conditioning system of the building.

4. Any specialized mechanical, electrical, or plumbing document for any new building or addition which includes a medical gas, oxygen, steam, vacuum, toxic air filtration, halon, or fire detection and alarm system which costs more than \$5,000.

Exception:

Simplified permitting process for fire alarm system projects.—

(1) As used in this section, the term:

(a) "Component" means valves, fire sprinklers, escutcheons, hangers, compressors, or any other item deemed acceptable by the local enforcing agency. For purposes of this paragraph, a valve does not include pressure-regulating, pressure-reducing, or pressure-control valves

(b) "Contractor" means a person who is qualified to engage in the business of electrical or alarm system contracting pursuant to a certificate or registration issued by the department under part II of chapter 489, Florida Statutes

(c) "Fire alarm system project" means a fire alarm system alteration of a total of 20 or fewer initiating devices and notification devices, or the installation or replacement of a fire communicator connected to an existing fire alarm control panel in an existing commercial, residential, apartment, cooperative, or condominium building.

(2)(a) A local enforcement agency may require a contractor, as a condition of obtaining a permit for a fire alarm system project, or fire sprinkler system project to submit a completed application and payment.

(b) A local enforcement agency may not require a contractor to submit plans or specifications as a condition of obtaining a permit for a fire alarm system project or fire sprinkler system project.

(3) A local enforcement agency must issue a permit for a fire alarm system project or fire sprinkler system project in person or electronically.

(4) A local enforcement agency must require at least one inspection of a fire alarm system project or fire sprinkler system project to ensure compliance with applicable codes and standards. If a fire alarm system project or fire sprinkler system project fails an inspection, the contractor must take corrective action as necessary to pass inspection.

(5) (a) For a fire alarm system project A contractor must keep a copy of the plans and specifications at a fire alarm system project worksite and make such plans and specifications available to the inspector at each inspection.

(b) For a fire sprinkler system project to alter an existing fire protection system, a contractor must keep a copy of the plans and specifications at the fire sprinkler system project worksite and make such plans and specifications available to the inspector at each inspection.

(c) For a fire sprinkler system project to install or replace a component, a contractor must keep a copy of the manufacturer's installation instructions and any pertinent testing instructions needed to certify or accept the component at the fire sprinkler system project worksite and make such documents available to the inspector at each inspection. and the addition of up to 49 sprinklers, as long as the cumulative total number of fire sprinklers being added, relocated, or deleted does not exceed 249

5. Electrical documents. See Florida Statutes 471.003(2)(h). Any electrical system meeting the following thresholds are required to be designed by a Florida Registered Engineer. Any system which;

(a) Requires an electrical system with a value greater than \$125,000; and

(b) Requires an aggregate service capacity of greater than 600 amperes (240 volts) on a residential electrical system or greater than 800 amperes (240 volts) on a commercial or industrial electrical system, or any multi-phase system;

Documents requiring an engineer seal by this part shall not be valid unless a professional engineer who possesses a valid certificate of registration has signed, dated, and stamped such document as provided in Section 471.025, Florida Statutes.

6. All public swimming pools and public bathing places defined by and regulated under Chapter 514, Florida Statutes

### **105.3.1.3 Reviewing application for building permit.**

1. When reviewing an application for a building permit, a local government may not request additional information from the applicant more than three times, unless the applicant waives such limitation in writing.

2. If a local government requests additional information from an applicant and the applicant submits the requested additional information to the local government within 30 days after receiving the request, the local government must, within 15 days after receiving such information:

a. Determine if the application is properly completed;

b. Approve the application;

c. Approve the application with conditions;

d. Deny the application; or

e. Advise the applicant of information, if any, that is needed to deem the application properly completed or to determine the sufficiency of the application.

3. If a local government makes a second request for additional information from the applicant and the applicant submits the requested additional information to the local government within 30 days after receiving the request, the local government must, within 10 days after receiving such information:

- a. Determine if the application is properly completed;
- b. Approve the application;
- c. Approve the application with conditions;
- d. Deny the application; or
- e. Advise the applicant of information, if any, that is needed to deem the application properly completed or to determine the sufficiency of the application.

4. Before a third request for additional information may be made, the applicant must be offered an opportunity to meet with the local government to attempt to resolve outstanding issues. If a local government makes a third request for additional information from the applicant and the applicant submits the requested additional information to the local government within 30 days after receiving the request, the local government must, within 10 days after receiving such information unless the applicant waived the local government's limitation in writing, determine that the application is complete and:

- a. Approve the application;
- b. Approve the application with conditions; or
- c. Deny the application.

5. If the applicant believes the request for additional information is not authorized by ordinance, rule, statute, or other legal authority, the local government, at the applicant's request, must process the application and either approve the application, approve the application with conditions, or deny the application.

**105.3.2 Time limitation of application.** An application for a permit for any proposed work shall be deemed to have been abandoned becoming null and void 180 days after the date of filing, or for any 180 day period of abandonment or suspension during the application process, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing prior to the abandonment date, with justifiable cause demonstrated. Abandoned applications shall be subject to destruction in accordance with state law. The fee for renewal, re-issuance, and extension of a permit application shall be

set forth by the administrative authority. There may be fees or requirements from other government agencies for permit application extensions and renewals.

**105.3.3** An enforcing authority may not issue a building permit for any building construction, erection, alteration, modification, repair or addition unless the permit either includes on its face or there is attached to the permit the following statement: "NOTICE: In addition to the requirements of this permit, there may be additional restrictions applicable to this property that may be found in the public records of this county, such as the requirement for Home or Property Owners Association approval, and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies."

**105.3.4** A building permit for a single-family residential dwelling must be issued within 30 working days of application therefore unless unusual circumstances require a longer time for processing the application or unless the permit application fails to satisfy the Florida Building Code or the enforcing agency's laws or ordinances.

**105.3.5 Identification of minimum premium policy.** Except as otherwise provided in Chapter 440, Florida Statutes, Workers' Compensation, every employer shall, as a condition to receiving a building permit, show proof that it has secured compensation for its employees as provided in Section 440.10 and 440.38, Florida Statutes.

**105.3.6 Asbestos removal contractor exemption.** Refer to Section 105.9 for additional requirements. A licensed asbestos removal contractor is not required when moving, removal or disposal of asbestos-containing materials on a residential building where the owner

occupies the building, the building is not for sale or lease, and the work is performed according to the owner-builder limitations provided in this paragraph. To qualify for exemption under this paragraph, an owner must personally appear and sign the building permit application. The permitting agency shall provide the person with a disclosure statement in substantially the following form:

**Disclosure Statement:** State law requires asbestos abatement to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own asbestos abatement contractor even though you do not have a license. You must supervise the construction yourself. You may move, remove or dispose of asbestos-containing materials on a residential building where you occupy the building and the building is not for sale or lease, or the building is a farm outbuilding on your property. If you sell or lease such building within 1 year after the asbestos abatement is complete, the law will presume that you intended to sell or lease the property at the time the work was done, which is a violation of this exemption. You may not hire an unlicensed person as your contractor. Your work must be done according to all local, state and federal laws and regulations which apply to asbestos abatement projects. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances.

**105.3.7 Applicable Code for Manufactured Buildings.** Manufacturers should be permitted to complete all buildings designed and approved prior to the effective date of a new code edition, provided a clear signed contract is in place. The contract shall provide specific data mirroring that required by an application for permit, specifically, without limitation, date of execution, building owner or dealer, and anticipated date of completion. However, the construction activity must commence within 6 months of the contract's execution. The contract is subject to verification by the Department of Business and Professional Regulation.

**105.3.8** A local government may not require a contract between a builder and an owner for the issuance of a building permit or as a requirement for the submission of a building permit application.

**105.3.9 Public right of way.** A permit shall not be given by the building official for the construction of any building, or for the alteration of any building where said building is to be changed and such change will affect the exterior walls, bays, balconies, or other appendages or projections fronting on any street, alley or public lane, or for the placing on any lot or premises of any building or structure removed from another lot or premises, unless the applicant has received a right of way permit from the authority having jurisdiction over the street, alley or public lane

**105.4 Conditions of the permit.** The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of any other federal, state and local laws, ordinances, codes and regulations. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of any other federal, state and local laws, ordinances, codes and regulations shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction or of any other federal, state and local laws, ordinances, codes and regulations.

**105.4.1 Permit intent.** A permit issued shall be construed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes, nor shall issuance of a permit prevent the building official from thereafter requiring a correction of errors in plans, construction or violations of this code. Every permit issued shall become invalid unless the work authorized by such permit is commenced within six months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of six months after the time the work is commenced.

**105.4.1.1** If work has commenced and the permit is revoked, becomes null and void, or expires because of lack of progress or abandonment, a new permit covering the proposed construction shall be obtained before proceeding with the work.

**105.4.1.2** If a new permit, or revalidation (renewal) of the original permit, is not obtained within 180 days from the date the initial permit became null and void, the building official is authorized to require that any work which has been commenced or completed be removed from the building site. Alternately, a new permit may be issued on application, providing the work in place and required to



complete the structure meets all applicable regulations in effect at the time the initial permit became null and void and any regulations which may have become effective between the date of expiration and the date of issuance of the new permit.

**105.4.1.3** Work shall be considered to be in active progress when the permit has received an approved inspection within 180 days. This provision shall not be applicable in case of civil commotion or strike or when the building work is halted due directly to judicial injunction, order or similar process, or due to action by an environmental or archeological agency having jurisdiction. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 3 months each. The extension shall be requested in writing and justifiable cause demonstrated, prior to expiration.

**105.4.1.4** The fee for renewal, reissuance and extension of a permit shall be set forth by the administrative authority. There may be fees or requirements from other government agencies for permit extensions and renewals.

**105.4.1.5** After the Building Division issues a permit, the Building Division may not make or require any substantive changes to the plans or specifications except changes required for compliance with the Florida Building Code, the Florida Fire Prevention Code, or the Life Safety Code, or local amendments thereto. If a Building Division makes or requires substantive changes to the plans or specifications after a permit is issued, the Building Division must identify the specific plan features that do not comply with the applicable codes, identify the specific code chapters and sections upon which the finding is based, and provide the information to the permit holder in writing.

**105.5 Expiration.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated as determined by the building official.

**105.5.2** For the purposes of this subsection, a closed permit shall mean a permit for which all requirements for completion have been satisfied or a permit that has been administratively closed by the building official.

**105.5.3** For the purposes of this subsection, an open permit shall mean a permit that has not satisfied all requirements for completion as defined in 105.5.2.

**105.5.4** Closing out or resolving open or expired permits shall be the responsibility of the permit applicant and the property owner. Failure to close out or resolve open permits may result in a referral of the matter to the Palm Beach County Construction Industry Licensing Board (CILB) or Local Construction Regulation Board (LCRB), as applicable, and the Palm Beach County Code Enforcement Division

**105.6 Denial or revocation.** Whenever a permit required under this section is denied or revoked because the plan, or the construction, erection, alteration, modification, repair, or demolition of a building, is found by the local enforcing agency to be not in compliance with the Florida Building Code, the local enforcing agency shall identify the specific plan or project features that do not comply with the applicable codes, identify the specific code chapters and sections upon which the finding is based, and provide this information to the permit applicant. If the local building code administrator or inspector finds that the plans are not in compliance with the Florida Building Code, the local building code administrator or inspector shall identify the specific plan features that do not comply with the applicable codes, identify the specific code chapters and sections upon which the finding is based, and provide this information to the local enforcing agency. The local enforcing agency shall provide this information to the permit applicant.

**105.6.1** Pursuant to Section 553.79(16), Florida Statutes, a local enforcement agency may not deny issuance of a building permit to; issue a notice of violation to; or fine, penalize sanction or assess fees against an arm's-length purchaser of a property for value solely because a building permit applied for by a previous owner of the property was not closed. The local enforcement agency shall maintain all rights and remedies against the property owner and contractor listed on the permit.

**105.6.2** Pursuant to Section 553.79(16), Florida Statutes, a local enforcement agency may not deny issuance of a building permit to a contractor solely because the contractor is listed on other building permits that were not closed. However, the local enforcement agency shall maintain all other rights and remedies against the contractor listed on the permit(s), including, but not limited to, potential referral to the appropriate licensing authority for potential discipline.

**105.6.3 Misrepresentation of application.** The building official may revoke a permit or approval, issued under the provisions of this code, when there has been any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.

**105.6.4 Violation of code provisions.** The building official may require correction or revoke the permit upon determination by the building official that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the building, structure, electrical, gas, mechanical or plumbing systems for which the permit was issued is in violation of, or not in conformity with, the provisions of this code.

**105.7 Placement of permit.** The building permit or a copy shall be kept on the site of the work until the completion of the project.

**105.8 Notice of commencement.** In accordance with Section 713.135, Florida Statutes, when any person applies for a building permit, the authority issuing such permit shall print on the face of each permit card in no less than 14-point, capitalized, boldfaced type: "WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

**105.9 Asbestos.** The enforcing agency shall require each building permit for the demolition or renovation of an existing structure to contain an asbestos notification statement which indicates the owner's or operator's responsibility to comply with the provisions of Section 469.003, Florida Statutes, and to notify the Department of Environmental Protection of his or her intentions to remove asbestos, when applicable, in accordance with state and federal law. Refer to Section 105.3.6 "Asbestos Removal Contractor Exemption" of this code for additional requirements.

**105.10 Certificate of protective treatment for prevention of termites.** A weather-resistant job-site posting board shall be provided to receive duplicate treatment certificates as each required protective treatment is completed, providing a copy for the person the permit is issued to and another copy for the building permit files. The treatment certificate shall provide the product used, identity of the applicator, time and date of the treatment, site location, area treated, chemical used, percent concentration and number of gallons used, to establish a verifiable record of protective treatment. If the soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval. For a bait system, see Section 1816.1.7 of the Florida Building Code for contract document requirements.

**105.11 Notice of termite protection.** A permanent sign which identifies the termite treatment provider and need for reinspection and treatment contract renewal shall be provided. The sign shall be posted near the water heater or electric panel.

**105.12 Work starting before permit issuance.** Upon written request and approval of the building official, the scope of work delineated in the building permit application and plan may be started prior to the final approval and issuance of the permit, provided any work completed is entirely at risk of the permit applicant and the work does not proceed past the first required inspection. This provision only applies to the Florida Building Code; all other agency approvals necessary for construction must be secured prior to this provision being applied.

**105.13 Phased permit approval.** After submittal of the appropriate construction documents, the building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted. Corrections may be required to meet the requirements of the technical codes. This provision only applies to the Florida Building Code; all other agency approvals necessary for construction must be secured prior to this provision being applied.

**105.14 Permit issued on basis of an affidavit.** The building official may accept a sworn affidavit from a registered architect or engineer stating that the plans submitted conform to the technical codes. For buildings and structures, the affidavit shall state that the plans conform to the laws as to egress, type of construction and general arrangement and, if accompanied by drawings, show the structural design and that the plans and design conform to the requirements of the technical codes as to strength, stresses, strains, loads and stability. Whenever a permit is issued in reliance upon an affidavit or whenever the work to be covered by a permit involves installation under conditions which, in the opinion of the building official, are hazardous or complex, the building official shall require that the architect or engineer who signed the affidavit or prepared the drawings or computations shall supervise such work. In addition, they shall be responsible for conformity to the permit, provide copies of inspection reports as inspections are performed, and upon completion make and file with the building official written affidavit that the work has been done in conformity to the reviewed plans and with the structural provisions of the technical codes. In the event such architect or engineer is not available, the owner shall employ in his stead a competent person or agency whose qualifications are reviewed by the building official. The building official shall ensure that any person conducting plans review is qualified as a plans examiner under Part XII of Chapter 468, Florida Statutes, and that any person conducting inspections is qualified as a building inspector under Part III of Chapter 468, Florida Statutes. Nothing aforesaid shall preclude plan review or inspections by the building official (See also Section 107.6).

**105.14.1 Affidavits in flood hazard areas** Permit issued on basis of an affidavit shall not extend to the flood load and flood resistance requirements of the Florida Building Code and the building official shall review and inspect those requirements.

**105.15 Opening protection.** When any activity requiring a building permit that is applied for on or after July 1, 2008, and for which the estimated cost is \$50,000 or more for a site built single-family detached residential structure that is located in the wind borne debris region as defined in this Code and that has an insured value of \$750,000 or more, or, if the site built single-family detached residential structure is uninsured or for which documentation of insured value is not presented, has a just valuation for the structure for purposes of ad valorem taxation of \$750,000 or more; opening protections as required within this Code or Florida Building Code, Residential for new construction shall be provided.

**Exception:** Where defined wind-borne debris regions have not changed, single family detached residential structures permitted subject to the Florida Building Code are not required to comply with this section.

**105.16 Inspection of existing residential building not impacted by construction.**

(a) A local enforcing agency, and any local building code administrator, inspector, or other official or entity, may not require as a condition of issuance of a one- or two-family residential building permit the inspection of any portion of a building, structure, or real property that is not directly impacted by the construction, erection, alteration, modification, repair, or demolition of the building, structure, or real property for which the permit is sought.

(b) This subsection does not apply to a building permit sought for:

1. A substantial improvement as defined in Section 161.54, Florida Statutes or as defined in the Florida Building Code.
2. A change of occupancy as defined in the Florida Building Code.
3. A conversion from residential to nonresidential or mixed use pursuant to Section 553.507(2)(a), Florida Statutes or as defined in the Florida Building Code.
4. A historic building as defined in the Florida Building Code.

(c) This subsection does not prohibit a local enforcing agency, or any local building code administrator, inspector, or other official or entity, from:

1. Citing any violation inadvertently observed in plain view during the ordinary course of an inspection conducted in accordance with the prohibition in paragraph (a).
2. Inspecting a physically nonadjacent portion of a building, structure, or real property that is directly impacted by the construction, erection, alteration, modification, repair, or demolition of the building, structure, or real property for which the permit is sought in accordance with the prohibition in paragraph (a).
3. Inspecting any portion of a building, structure, or real property for which the owner or other person having control of the building, structure, or real property has voluntarily consented to

the inspection of that portion of the building, structure, or real property in accordance with the prohibition in paragraph (a).

4. Inspecting any portion of a building, structure, or real property pursuant to an inspection warrant issued in accordance with Sections 933.20-933.30, Florida Statutes.

#### **105.17 Streamlined low-voltage alarm system installation permitting.**

(1) As used in this section, the term:

(a) "Contractor" means a person who is qualified to engage in the business of electrical or alarm system contracting pursuant to a certificate or registration issued by the department under part II of chapter 489, Florida Statutes.

(b) "Low-voltage alarm system project" means a project related to the installation, maintenance, inspection, replacement, or service of a new or existing alarm system, as defined in Section 489.505, Florida Statutes, including video cameras and closed-circuit television systems used to signal or detect a burglary, fire, robbery, or medical emergency, that is hardwired and operating at low voltage, as defined in the National Electrical Code Standard 70, current edition, or a new or existing low-voltage electric fence. The term also includes ancillary components or equipment attached to a low-voltage alarm system, or low-voltage electric fence, including, but not limited to, home-automation equipment, thermostats, closed-circuit television systems, access controls, battery recharging devices, and video cameras.

(c) "Low-voltage electric fence" means an alarm system, as defined in s. 489.505, that consists of a fence structure and an energizer powered by a commercial storage battery not exceeding 12 volts which produces an electric charge upon contact with the fence structure.

(d) "Wireless alarm system" means a burglar alarm system or smoke detector that is not hardwired

(2) Notwithstanding any provision of this Code, this section applies to all low-voltage alarm system projects for which a permit is required by a local enforcement agency. However, a permit is not required to install, maintain, inspect, replace, or service a wireless alarm system, including any ancillary components or equipment attached to the system.

3. A low-voltage electric fence must meet all of the following requirements to be permitted as a low-voltage alarm system project and no further permit shall be required for the low-voltage alarm system project other than as provided in this section:

- (a) The electric charge produced by the fence upon contact must not exceed energizer characteristics set forth in paragraph 22.108 and depicted in Figure 102 of International Electrotechnical Commission Standard No. 60335-2-76, Current Edition.
- (b) A nonelectric fence or wall must completely enclose the low-voltage electric fence. The low-voltage electric fence may be up to 2 feet higher than the perimeter nonelectric fence or wall.
- (c) The low-voltage electric fence must be identified using warning signs attached to the fence at intervals of not more than 60 feet.
- (d) The low-voltage electric fence shall not be installed in an area zoned exclusively for single-family or multi-family residential use.
- (e) The low-voltage electric fence shall not enclose the portions of a property which are used for residential purposes.

(4) This section does not apply to the installation or replacement of a fire alarm if a plan review is required.

(5) A local enforcement agency shall make uniform basic permit labels available for purchase by a contractor to be used for the installation or replacement of a new or existing alarm system at a cost as indicated in Section 553.793, Florida Statutes. The local enforcement agency may not require the payment of any additional fees, charges, or expenses associated with the installation or replacement of a new or existing alarm.

(a) A local enforcement agency may not require a contractor, as a condition of purchasing a label, to submit information other than identification information of the licensee and proof of registration or certification as a contractor.

(b) A label is valid for 1 year after the date of purchase and may only be used within the jurisdiction of the local enforcement agency that issued the label. A contractor may purchase labels in bulk for one or more unspecified current or future projects.

(6) A contractor shall post an unused uniform basic permit label in a conspicuous place on the premises of the low-voltage alarm system project site before commencing work on the project.

(7) A contractor is not required to notify the local enforcement agency before commencing work on a low-voltage alarm system project. However, a contractor must submit a Uniform Notice of a Low-Voltage Alarm System Project as provided under subsection (7) to the local enforcement agency within 14 days after completing the project. A local enforcement agency may take disciplinary action against a contractor who fails to timely submit a Uniform Notice of a Low-Voltage Alarm System Project.

(8) The Uniform Notice of a Low-Voltage Alarm System Project may be submitted electronically or by facsimile if all submissions are signed by the owner, tenant, contractor, or authorized representative of such persons. The Uniform Notice of a Low-Voltage Alarm System Project shall be in the format prescribed by the local enforcement agency and must comply with the requirements of Section 553.793(7), Florida Statutes.

(9) A local enforcement agency may coordinate directly with the owner or customer to inspect a low-voltage alarm system project may be inspected by the local enforcement agency to ensure compliance with applicable codes and standards. If a low-voltage alarm system project fails an inspection, the contractor must take corrective action as necessary to pass inspection.

(10) A municipality, county, district, or other entity of local government may not adopt or maintain in effect any ordinance or rule regarding a low-voltage alarm system project that is inconsistent with this section.

(11) A uniform basic permit label shall not be required for the subsequent maintenance, inspection, or service of an alarm system that was permitted in accordance with this section. The provisions of this act are not intended to impose new or additional licensure requirements on persons licensed in accordance with the applicable provisions of chapter 489, Florida Statutes.

## SECTION 106 FLOOR AND ROOF DESIGN LOADS

**106.1 Live loads posted.** Where the live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed 50 psf (2.40 kN/m<sup>2</sup>), such design live loads shall be conspicuously posted by the owner or the owner's authorized agent in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices. For residential construction where roof trusses have been designed for 30 psf for light attic storage, a durable sign shall be posted in the attic area at final building inspection.

**106.2 Issuance of certificate of occupancy.** A certificate of occupancy required by Section 111 shall not be issued until the floor and attic load signs, required by Section 106.1, have been installed.

**106.3 Restrictions on loading.** It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by this code.

## SECTION 107 SUBMITTAL DOCUMENTS

**107.1 General.** Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data shall be submitted in two or more sets with each permit application in accordance with Florida Statute 553.79. The construction documents shall be prepared by a registered design professional where required by Chapter 471, Florida Statutes & 61G15 Florida Administrative Code or Chapter 481, Florida Statutes & 61G1 Florida Administrative Code. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional. Electronic media documents shall be submitted when required by the building official, in a format acceptable to the building official, and may require only one set of submittals.

**Exception:** The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the

nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

If the design professional is an architect, interior designer, or engineer legally registered under the laws of this state regulating the practice of architecture or interior design as provided for in Chapter 481, Florida Statutes, Part I, or landscape architecture as provided for in Chapter 481, Florida Statutes, Part II, or engineering as provided for in Chapter 471, Florida Statutes, then he or she shall affix his or her official seal to said drawings, specifications and accompanying data, as required by Florida Statute.

**107.2 Construction documents.** Construction documents shall be in accordance with Sections 107.2.1 through 107.2.6.

**107.2.1 Information on construction documents.**

Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official. Such drawings and specifications shall contain information, in the form of notes or otherwise, as to the quality of materials, where quality is essential to conformity with the technical codes. Such information shall be specific, and the technical codes shall not be cited as a whole or in part, nor shall the term "legal" or its equivalent be used as a substitute for specific information. All information, drawings, specifications and accompanying data shall bear the name and signature of the person responsible for the design. (See also Section 107.1 of this code.)

**107.2.1.1 For roof assemblies required by the code,** the construction documents shall illustrate, describe and delineate the type of roofing system, materials, fastening requirements, flashing requirements and wind resistance rating that are required to be installed. Product evaluation and installation shall indicate compliance with the wind criteria required for the specific site or a statement by an architect or engineer certifying suitability for the specific site must be submitted with the construction documents.

**107.2.1.2 Additional data.** The building official may require details, computations, stress diagrams, and other data necessary to describe the construction or installation and the basis of calculations. All drawings, specifications and accompanying data required by the building official to be prepared by an architect or engineer shall be affixed with their official seal, signature and date as state law requires.

**107.2.1.3 Quality of building plans.** Building plans shall be drawn to a minimum 1/8 inch scale upon substantial paper, cloth or other acceptable medium. The building official may establish, through Division policy, other standards for plans and specifications, including electronic format, in order to provide conformity to its electronic permit review and record retention program. This policy may include such things as minimum size, shape, contrast, clarity, or other items related to records management. Electronic media must be compatible with the archive requirements of Florida Statutes.

**107.2.2 Fire protection system shop drawings.** Shop drawings for the fire protection system(s) shall be submitted to indicate conformance to this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

**107.2.3 Means of egress.** The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

**107.2.4 Exterior wall envelope.** Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

**107.2.5 Exterior balcony and elevated walking surfaces.** Where balcony or other elevated walking surfaces are exposed to water from direct or blowing rain, snow or irrigation, and the structural framing is protected by an impervious moisture barrier the construction documents shall include details for all element of the impervious moisture barrier system. The construction documents shall include manufacturer's installation instructions.

**107.2.6 Site plan.** The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

**107.2.6.1 Design flood elevations.** Where design flood elevations are not specified, they shall be established in accordance with Section 1612.3.1. Design flood elevations shall be uniformly specified utilizing the currently effective NAVD 88.

**107.2.6.2** For the purpose of inspection and record retention, site plans for a building may be maintained in the form of an electronic copy at the worksite. These plans must be open to inspection by the building official or a duly authorized representative, as required by the Florida Building Code.

**107.2.7 Structural information.** The construction documents shall provide the information specified in Section 1603 of this code and include shoring details, where applicable, for new construction and alterations. Where construction includes excavation, shoring details shall demonstrate protection of the angle of repose for foundation systems of existing adjacent structures.

**107.3 Examination of documents.** The building official shall examine or cause to be examined the accompanying submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

**Exceptions:**

1. Building plans approved pursuant to Section 553.77(3), Florida Statutes, and state-approved manufactured buildings are exempt from local codes enforcing agency plan reviews except for provisions of the code relating to erection, assembly or construction at the site. Erection, assembly and construction at the site are subject to local permitting and inspections. Photocopies of plans approved according to FAC 61-41.009, Florida Administrative Code, shall be sufficient for local permit application documents of record for the modular building portion of the permitted project.

2. Industrial construction on sites where design, construction and fire safety are supervised by appropriately licensed design and inspection professionals and which contain adequate in-house fire departments and rescue squads is exempt, subject to approval by the building official, from review of plans and inspections, providing the appropriate licensed design and inspection professionals certify that applicable codes and standards have been met and supply appropriate approved drawings to local building and fire-safety inspectors.

**107.3.1 Approval of construction documents.** When the building official issues a permit, the construction document shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

**107.3.2 Previous approvals.** This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within six months after the effective date of this code and has not been abandoned.

**107.3.3 Phased approval.** The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building



operation and without assurance that a permit for the entire structure will be granted. This provision only applies to the Florida Building Code; all other agency approvals necessary for construction must be secured prior to this provision being applied.

**107.3.4 Design professional in responsible charge.** Where it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner or the owner's authorized agent to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner or the owner's authorized agent shall designate a **successor** registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner or the owner's authorized agent if the registered design professional in responsible charge is changed or is unable to continue to perform the duties. Successor registered design professional in responsible charge licensed under Chapter 471 Florida Statutes shall comply with Section 471.025(4) Florida Statute and the procedure set forth in 61G15-27.001 Florida Administrative Code; or licensed under Chapter 481 Florida Statutes shall comply with Section 481.221(6) Florida Statute and the procedure set forth in 61G1-18.002 Florida Administrative Code.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building. Those products which are regulated by FAC Rule 61G20 shall be reviewed and approved in writing by the designer of record prior to submittal for jurisdictional approval.

**107.3.4.1 Deferred submittals.** For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the building official.

Deferral of any submittal items shall have the prior approval of the building official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the building official.

Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the deferred submittal documents have been approved by the building official.

**107.3.4.2** Certifications by contractors authorized under the provisions of Section 489.115(4)(b), Florida Statutes, shall be considered equivalent to sealed plans and specifications by a person licensed under Chapter 471, Florida Statutes, or Chapter 481 Florida Statutes, by local enforcement agencies for plans review for permitting purposes relating to compliance with the wind-resistance provisions of the code or alternate methodologies approved by the Florida Building Commission for one- and two-family dwellings. Local enforcement agencies may rely upon such certification by contractors that the plans and specifications submitted conform to the requirements of the code for wind resistance. Upon good cause shown, local government code enforcement agencies may accept or reject plans sealed by persons licensed under Chapters 471, 481 or 489, Florida Statutes.

**107.3.5 Minimum plan review criteria for buildings.** The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout; all fenestration and building envelope penetrations; flashing; and rough opening dimensions; and all exterior elevations:

**Commercial Buildings:**

Building

1. Site requirements:

Parking

Fire access

Vehicle loading

Driving/turning radius

Fire hydrant/water supply/post indicator valve (PIV)

Set back/separation (assumed property lines)

Location of specific tanks, water lines and sewer lines

Flood hazard areas, flood zones, and design flood elevations



2. Occupancy group and special occupancy requirements shall be determined ( cross check with the energy code submittal).
3. Minimum type of construction shall be determined (see Table 503).
4. Fire-resistant construction requirements shall include the following components:
  - Fire-resistant separations
  - Fire-resistant protection for type of construction
  - Protection of openings and penetrations of rated walls
  - Fire blocking and draftstopping and calculated fire resistance
5. Fire suppression systems shall include:
  - Early warning smoke evacuation systems
  - Schematic fire sprinklers
  - Standpipes
  - Pre-engineered systems
  - Riser diagram
6. Life safety systems shall be determined and shall include the following requirements:
  - Occupant load and egress capacities
  - Early warning
  - Smoke control
  - Stair pressurization
  - Systems schematic
  - Safeguards during construction, as applicable
7. Occupancy load/egress requirements shall include:
  - Occupancy load
  - Gross
  - Net
  - Means of egress
  - Exit access
  - Exit
  - Exit discharge
  - Stairs construction/geometry and protection
  - Doors
  - Emergency lighting and exit signs
  - Specific occupancy requirements
  - Construction requirements
  - Horizontal exits/exit passageways
8. Structural requirements shall include:
  - Soil conditions/analysis
  - Termite protection
  - Design loads
  - Wind requirements
  - Building envelope
  - Impact resistant coverings or systems
  - Structural calculations (if required)
  - Foundation
  - Flood requirements in accordance with Section 1612, including lowest floor elevations, enclosures, flood damage-resistant materials
  - Wall systems
  - Floor systems
  - Roof systems
  - Threshold inspection plan
  - Stair systems
9. Materials shall be reviewed and shall at a minimum include the following:
  - Wood
  - Steel
  - Aluminum
  - Concrete
  - Plastic
  - Glass
  - Masonry
  - Gypsum board and plaster

Insulating (mechanical)  
Roofing  
Deck coatings  
Insulation  
Building envelope portions of the Energy Code (including calculation and mandatory requirements)

10. Accessibility requirements shall include the following:

Site requirements  
Accessible route  
Vertical accessibility  
Toilet and bathing facilities  
Drinking fountains  
Equipment  
Special occupancy requirements  
Fair housing requirements

11. Interior requirements shall include the following:

Interior finishes (flame spread/smoke development)  
Light and ventilation  
(including corresponding portion of the energy code)  
Sanitation

12. Special systems:

Elevators  
Escalators  
Lifts

13. Energy Code submittal

14. Swimming pools:

Barrier requirements  
Spas  
Wading pools

15. Location and installation details. The specific location and installation details of each fire door, fire damper, ceiling damper and smoke damper shall be shown and properly identified on the building plans by the designer.

## **Electrical**

1. Electrical:

Wiring  
Services  
Feeders and branch circuits  
Overcurrent protection  
Grounding  
Wiring methods and materials  
GFCIs  
Electrical portions of the Energy Code (including calculation and mandatory requirements)

2. Equipment
3. Special occupancies
4. Emergency systems
5. Communication systems
6. Low voltage
7. Load calculations
8. Design flood elevation

## **Plumbing**

1. Minimum plumbing facilities
2. Fixture requirements
3. Water supply piping
4. Sanitary drainage
5. Water heaters
6. Vents
7. Roof drainage
8. Back flow prevention
9. Irrigation
10. Location of water supply line

11. Grease traps
12. Environmental requirements
13. Plumbing risers
14. Design flood elevation
15. Water/plumbing portions of the Energy Code (including calculation and mandatory requirements)

#### **Mechanical**

1. Mechanical portions of the Energy calculations
2. Exhaust systems:
  - Clothes dryer exhaust
  - Kitchen equipment exhaust
  - Specialty exhaust systems
3. Equipment
4. Equipment location
5. Make-up air
6. Roof-mounted equipment
7. Duct systems
8. Ventilation
9. Combustion air
10. Chimneys, fireplaces and vents
11. Appliances
12. Boilers
13. Refrigeration
14. Bathroom ventilation
15. Laboratory
16. Design flood elevation
17. Smoke and/or Fire Dampers

#### **Gas**

1. Gas piping
2. Venting
3. Combustion air
4. Chimneys and vents
5. Appliances
6. Type of gas
7. Fireplaces
8. LP tank location
9. Riser diagram/shutoffs
10. Design flood elevation
11. Gas portions of the Energy Code (including calculation and mandatory requirements)

#### **Demolition**

1. Asbestos removal

#### **Residential (one- and two-family):**

1. Site requirements:
  - Drainage Plan (professionally prepared)
  - Set back/separation (assumed property lines)
  - Location of septic tanks
2. Fire-resistant construction (if required)
3. Fire protection systems, when required
4. Smoke and/or carbon monoxide alarm detector locations
5. Egress
  - Egress window size and location stairs construction requirements
6. Structural requirements shall include:
  - Wall section from foundation through roof, including assembly and materials, connector tables, wind requirements, and structural calculations (if required)
  - Termite protection
  - Design loads
  - Wind requirements
  - Building envelope
  - Foundation
  - Wall systems
  - Floor systems
  - Roof systems

7. Flood hazard areas, flood zones, design flood elevations, lowest floor elevations, enclosures, equipment, and flood damage-resistant materials
8. Accessibility requirements: show/identify accessible bath
9. Impact resistant coverings or systems
10. Residential Energy Code submittal (including calculation and mandatory requirements)
11. Electrical:
  - Electric service riser with wire sizes, conduit detail and grounding detail
  - Complete load calculations, Panel schedules
12. Mechanical:
  - Equipment and location, Duct systems
13. Plumbing:
  - Plumbing riser
14. Gas:
  - Gas piping
  - Venting
  - Combustion air
  - Chimneys and vents
  - Appliances
  - Type of gas
  - Fireplaces
  - LP tank location
  - Riser diagram/shutoffs
15. Swimming Pools
  - Barrier requirements
  - Spas
  - Wading pools

**Manufactured buildings/housing -**

1. Site requirements
  - Setback/separation (assumed property lines)
  - Location of septic tanks (if applicable)
  - Structural
  - Wind zone
  - Flood Anchoring
  - Blocking
2. Plumbing
  - List potable water source and meter size (if applicable)
3. Mechanical
  - Exhaust systems
  - Clothes dryer exhaust
  - Kitchen equipment exhaust
4. Electrical exterior disconnect location

**Exemptions.**

Plans examination by the building official shall not be required for the following work:

1. Replacing existing equipment such as mechanical units, water heaters, etc.
2. Reroofs (as determined by local jurisdiction)
3. Minor electrical, plumbing and mechanical repairs
4. Annual maintenance permits
5. Prototype plans

Except for local site adaptations, siding, foundations and/or modifications.

Except for structures that require waiver.

6. Manufactured buildings plan except for foundations and modifications of buildings on site and as listed above in manufactured buildings/housing.

**107.4 Amended construction documents.** Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

**107.5 Retention of construction documents.** One set of approved construction documents shall be retained by the building official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws.

**107.6 Affidavits.** The building official may accept a sworn affidavit from a registered architect or engineer stating that the plans submitted conform to the technical codes. For buildings and structures, the affidavit shall state that the plans conform to the laws as to egress, type of construction and general arrangement and, if accompanied by drawings, show the structural design and that the plans and design conform to the requirements of the technical codes as to strength, stresses, strains, loads and stability. The building official may without any examination or inspection accept such affidavit, provided the architect or engineer who made such affidavit agrees to submit to the building official copies of inspection reports as inspections are performed and upon completion of the structure, electrical, gas, mechanical or plumbing systems a certification that the structure, electrical, gas, mechanical or plumbing system has been erected in accordance with the requirements of the technical codes. Where the building official relies upon such affidavit, the architect or engineer shall assume full responsibility for compliance with all provisions of the technical codes and other pertinent laws or ordinances. The building official shall ensure that any person conducting plans review is qualified as a plans examiner under Part XII of Chapter 468, Florida Statutes, and that any person conducting inspections is qualified as a building inspector under Part XII of Chapter 468, Florida Statutes. Nothing aforesaid shall preclude plan review or inspections by the building official (See also Section 105.14). On applications in which private provider services are utilized, all time frames shall adhere to time frames as indicated in Florida Statutes 553.791 (7).

**107.6.1 Building permits issued in special flood hazard areas on the basis of an affidavit.** Pursuant to the requirements of federal regulation for participation in the National Flood Insurance Program (44 C.F.R. Parts 59 and 60), the authority granted to the building official to issue permits, to rely on inspections, and to accept plans and construction documents on the basis of affidavits and plans submitted pursuant to Sections 105.14 and 107.6, shall not extend to the flood load and flood resistance construction requirements of the Florida Building Code.

**107.6.2 Affidavits Provided Pursuant to Section 553.791, Florida Statutes.** For a building or structure in a flood hazard area, the building official shall review any affidavit certifying compliance with the flood load and flood-resistant construction requirements of the Florida Building Code.

**107.7 If the local building code administrator or inspector finds that the plans are not in compliance with the Florida Building Code, the local building code administrator or inspector shall identify the specific plan features that do not comply with the applicable codes, identify the specific code chapters and sections upon which the finding is based, and provide this information to the Building Division . If the building code administrator, plans examiner, or inspector requests another Building Division employee or a person contracted by the Building Division to review the plans and that employee or person identifies specific plan features that do not comply with the applicable codes, the building code administrator, plans examiner, or inspector must provide this information to the Building Division . The Building Division shall provide this information to the permit applicant.**

## **SECTION 108 TEMPORARY STRUCTURES AND USES**

**108.1 General.** The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

**108.2 Conformance.** Temporary structures and uses shall comply with the requirements in Section 3103.

**108.3 Temporary power.** The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70.

**108.4 Termination of approval.** The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure to be removed or use to be discontinued.

## SECTION 109 FEES

**109.1 Payment of fees.** A permit shall not be valid until the fees prescribed by law have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

**109.2 Schedule of permit fees.** On buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

**109.2.1 Types of Fees Enumerated.** Fees may be charged for but not limited to the following:

- Permits;
- Plans examination;
- Certificates of competency (including fees for applications, examinations, renewal, late renewal, and reciprocity);
- Re-inspections;
- Administrative fees (including fees for investigative and legal costs incurred in the context of certain disciplinary cases heard by the board);
- Variance requests;
- Administrative appeals;
- Violations; and
- Other fees as established by local resolution or ordinance.

**109.3 Building permit valuations.** The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the building official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. Final building permit valuation shall be set by the building official.

**109.4 Work commencing before permit issuance.** Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits or without prior approval from the building official as permitted in Section 105.2.2 or 105.12 shall be subject to a fee established by the building official that shall be in addition to the required permit fees or as provided by local ordinance. This provision shall not apply to emergency work when delay would clearly have placed life or property in imminent danger. But in all such cases the required permit(s) must be applied for within three (3) business days and any unreasonable delay in obtaining those permit(s) shall result in the charge of a double fee. The payment of a double fee shall not preclude or be deemed a substitute for prosecution for commencing work without first obtaining a permit. The building official may grant extensions of time or waive fees when justifiable cause has been demonstrated in writing.

**109.5 Related fees.** The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

**109.6 Refunds.** The building official is authorized to establish and publish a refund policy through local ordinance or resolution.

## SECTION 110 INSPECTIONS

**110.1 General.** Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain exposed and provided with access for inspection purposes until approved.

Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. **It shall be the duty** of the owner or the owner's authorized agent to cause the work to remain exposed and provided with access for inspection purposes. The building official shall be permitted to require a boundary line survey prepared by a qualified surveyor whenever

the boundary lines cannot be readily determined in the field. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

**110.1.1 Manufacturers and fabricators.** When deemed necessary by the building official, he/she shall make, or cause to be made, an inspection of materials or assemblies at the point of manufacture or fabrication. A record shall be made of every such examination and inspection and of all violations of the technical codes.

**110.1.2 Inspection service.** The building official may make, or cause to be made, the inspections required by Section 110. He or she may accept reports of department inspectors, independent inspectors or of recognized inspection services, provided that after investigation he/she is satisfied as to their licensure, qualifications and reliability. A certificate required by any provision of this code shall not be based on such reports unless the same are recorded by the building code inspector or the architect or engineer performing building code inspections in a manner specified by the building official. The building official shall ensure that all persons making such inspections shall be certified in accordance to Chapter 468 Florida Statutes; or licensed under Chapter 471 or 481 Florida Statutes.

The building official may require the owner to employ an inspection service in the following instances:

1. For buildings or additions of Type I construction;
2. For all major structural alterations;
3. Where the concrete design is based on compressive strength in excess of 5000 pounds per square inch;
4. For pile driving;
5. For buildings with an area greater than 20,000 square feet;
6. For buildings more than two stories in height; or
7. For buildings and structures of unusual design or methods of construction.

Such inspectors shall be present when work is underway on the structural elements of the building to adequately attest to its compliance. Such inspectors shall be a registered architect, or engineer. An employee of the architect or engineer licensed under Chapter 468, Part XII, Florida Statutes may perform the inspections, under the direction of and with final certification from the architect or engineer. Such inspectors shall submit weekly progress reports including the daily inspections to the building official, and including a code compliance opinion of the resident inspector.

At the completion of the construction work or project, the architect or engineer shall submit a certificate of compliance to the building official, stating that the work was done in compliance with this code and in accordance with the permitted drawing. Final inspection shall be made by the building official before a Certificate of Occupancy or Certificate of Completion is issued; and confirmation inspections may be made at any time to monitor activities and resident inspectors.

**110.1.3 Affidavit for inspection.** With specific prior approval of, and in a format acceptable to the building official, an affidavit for certification of inspection may be accepted from the permit qualifier; when accompanied by extensive photographic evidence of sufficient detail to demonstrate code compliance. The photographic evidence shall be comprehensive in the display of the installation and/or construction and job location identifiers. The affidavit and accompanying photographs shall be provided to the inspector onsite, at the next scheduled inspection. If the photographs are found to be insufficient by the building official to demonstrate compliance with this code and/or the permitted document, or clearly display location identifiers, or are missing, the inspector shall require the contractor to obtain the services of a registered Florida professional engineer to inspect and certify the installation and/or construction.

**110.1.3.1 Exception:** Affidavits may not be accepted for inspection of elements of construction which require inspection by the local jurisdiction under the requirements of Title 44, Code of Federal Regulations, Parts 59 and 60, and the local flood damage prevention ordinance.

**110.2 Preliminary inspection.** Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.

**110.2.1 Existing building inspections.** Before issuing a permit, the building official may examine or cause to be examined any building, electrical, gas, mechanical, or plumbing systems for which an application has been received for a permit to enlarge, alter, repair, move, demolish, install, or change the occupancy. The building official may inspect the buildings, structures, electrical, gas, mechanical and plumbing systems, from time to time, before, during and upon completion of the work for which a permit was issued. The building official shall make a record of every such examination and inspection and of all observed violations of the technical codes. Additional regulations in the Florida Building Code, Existing Building Volume, may apply.

**110.3 Required inspections.** The building official or private provider upon notification from the permit holder or his or her agent shall make the following inspections, or any other such inspection as deemed necessary and shall either release that portion of the construction or shall notify the permit holder or his or her agent of any violations which must be corrected in order to comply with the technical codes. The building official shall determine the timing and sequencing of when inspections occur and what elements are inspected at each inspection.

## **Building**

1. Foundation inspection. To be made after trenches are excavated, any required reinforcing steel is in place, forms erected and shall at a minimum include the following building components:

- Stem-wall
- Monolithic slab-on-grade
- Piling/pile caps
- Footers/grade beams

1.1. Slab Inspection: Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.

**1.2.A foundation/Form board** survey prepared and certified by a registered surveyor may be required, prior to approval of the slab inspection. The survey shall certify placement of the building on the site, illustrate all surrounding setback dimensions and shall be available at the job site for review by the building inspector. For smaller projects at the discretion of the building official, In lieu of providing a survey, the contractor may elect to uncover all property line markers and string-up all property lines in preparation for inspection.

1.3. In flood hazard areas, upon placement of the lowest floor, including basement, and prior to further vertical construction, the elevation certification, as required in Section 1612.5 of this code, shall be submitted to the building official and approved.

## **2. Shell Inspections**

2.1 Framing inspection. To be made after the roof, all framing, fire blocking and bracing is in place, all concealing wiring, all pipes, chimneys, ducts and vents are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved and shall at a minimum include the following building components:

- Window/door framing
- Window U-factor/SHGC as indicated on approved energy calculations
- Vertical cells/columns
- Lintel/tie beams
- Framing/trusses/bracing/connectors (including truss layout and engineered drawings)



- Draft stopping/fire blocking
- Curtain wall framing
- Energy insulation (Insulation R-factor as indicated on approved energy calculations)
- Accessibility.
- Verify rough opening dimensions are within tolerances.
- Window/door buck attachment

2.1. Insulation Inspection: To be made after the framing inspection is approved and the insulation is in place, according to approved energy calculation submittal Includes wall and ceiling insulation.

2.2. **Lath and gypsum board inspection for fire-resistance-rated or shear assemblies.** Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

3. Sheathing inspection. To be made either as part of a dry-in inspection or done separately at the request of the contractor after all roof and wall sheathing and fasteners are complete and shall at a minimum include the following building components:

- Roof sheathing
- Wall sheathing
- Continuous air barrier
- Exterior Siding/Cladding
- Sheathing fasteners
- Roof/wall dry-in.

NOTE: Sheathing fasteners installed and found to be missing the structural member (shiners) shall be removed and properly reinstalled prior to installation of the dry-in material.

**Exception:** ring shank nails shall be bent over and a new fastener installed.

4. **Exterior wall coverings.** Shall at a minimum include the following building components in progress inspections:

- Exterior wall coverings and veneers
- Soffit coverings

5. **Roofing inspection.** Shall at a minimum be made in at least two inspections and include the following building components:

- Dry-in
- Insulation
- Roof coverings (including In Progress as necessary)
- Insulation on roof deck (according to submitted energy calculation)
- Flashing
- Sheathing

5.1.Re-Roof sheathing inspection. An affidavit with a notarized signature of a state or locally licensed roofing contractor for the installation of additional sheathing fasteners as required by the Existing Building Code may be accepted at the discretion of the building official.

6. Final inspection. To be made after the building, including all sub-trade inspections, is completed and ready for occupancy.

6.1. In flood hazard areas, as part of the final inspection, a final certification of the lowest floor elevation or the elevation to which a building is dry floodproofed, as applicable, shall be submitted to the authority having jurisdiction.

7. Swimming pool inspection. First inspection to be made after excavation and installation of reinforcing steel, bonding and main drain and prior to placing of concrete shell.

- a. Steel reinforcement inspection
- b. Underground electric inspection.
- c. Underground piping inspection including a pressure test.
- d. Underground electric inspection under deck area (including the equipotential bonding)
- e. Underground piping inspection under deck area..
- f. Deck inspection: to be made prior to installation of the deck material (with forms, deck drains, and any reinforcement in place
- g. Safety Inspection; Made prior to filling the pool with the bonding connections made, the proper drain covers installed and the final barriers installed.
- h. Final pool piping.
- i. Final Electrical inspection.
- j. Final inspection to be made when the swimming pool is complete and all required enclosure requirements are in place.

In order to pass final inspection and receive a certificate of completion, a residential swimming pool must meet the requirements relating to pool safety features as described in Section 454.2.17 and R4501.17 of this code.

8. Demolition inspections. First inspection to be made after all utility connections have been disconnected and secured in such manner that no unsafe or unsanitary conditions shall exist during or after demolition operations.

Final inspection to be made after all demolition work is completed.

9. Manufactured building inspections. The building department shall inspect construction of foundations; connecting buildings to foundations; installation of parts identified on plans as site installed items, joining the modules, including utility crossovers; utility connections from the building to utility lines on site; and any other work done on site which requires compliance with the Florida Building Code. Additional inspections may be required for public educational facilities (see Section 453.27.20 of this code).

10. Where impact resistant coverings or impact resistant systems are installed, the building official shall schedule adequate inspections of impact resistant coverings or impact resistant systems to determine the following:

The system indicated on the plans was installed.

The system is installed in accordance with the manufacturer's installation instructions and the product approval.

## Electrical

1. Underground inspection. To be made after trenches or ditches are excavated, conduit or cable installed, and before any backfill is put in place.
2. Rough-in inspection. To be made after the roof, framing, fireblocking and bracing is in place and prior to the installation of wall or ceiling membranes.
3. Power release inspection. To be made after the building electrical system is substantially complete, or completed in phases, with all circuitry installed and electrical fixtures and devices in place, or properly tagged and safed-off.
3. Final inspection. Shall include a hot check of the system after the building electrical system is complete, all required electrical fixtures are in place and properly connected or protected, and the structure is ready for occupancy.

4. Existing Swimming Pools. To be made after all repairs or alterations are complete, all required electrical equipment, GFCI protection, and equipotential bonding are in place on said alterations or repairs.

## **Plumbing**

1. Underground inspection. To be made after trenches or ditches are excavated, piping installed, and before any backfill is put in place.
2. Rough-in inspection. To be made after the roof, framing, fireblocking and bracing is in place and all soil, waste and vent piping is complete, and prior to this installation of wall or ceiling membranes.

-includes plumbing provisions of the energy code and approved energy calculations provisions.

3. Final inspection. To be made after the building plumbing system is complete, all plumbing fixtures are in place and properly connected, and the structure is ready for occupancy.

Note: See Section 312 of the Florida Building Code, Plumbing for required tests.

## **Mechanical**

1. Underground inspection. To be made after trenches or ditches are excavated, underground duct and fuel piping installed, and before any backfill is put in place.
2. Rough-in inspection. To be made after the roof, framing, fire blocking and bracing are in place and all ducting, and other concealed components are complete, and prior to the installation of wall or ceiling membranes.

-includes mechanical provisions of the energy code and approved energy calculations provisions.

3. Final inspection. To be made after the building mechanical system is complete, the mechanical system is in place and properly connected, and the structure is ready for occupancy.

## **Gas**

1. Underground piping and tanks. To be made after trenches or ditches are excavated, underground gas piping is installed, and before backfill is put in place.
2. Rough piping inspection. To be made after all new piping authorized by the permit has been installed, and before any such piping has been covered or concealed or any fixtures or gas appliances have been connected.

-includes gas provisions of the energy code and approved energy calculations provisions.

3. Final piping inspection. To be made after all piping authorized by the permit has been installed and after all portions which are to be concealed by plastering or otherwise have been so concealed, and before any fixtures or gas appliances have been connected. This inspection shall include a pressure test.

4. Final inspection. To be made on all new gas work authorized by the permit and such portions of existing systems as may be affected by new work or any changes, to ensure compliance with all the requirements of this code and to assure that the installation and construction of the gas system is in accordance with reviewed plans.

## **Site Debris**

1. The contractor and/or owner of any active or inactive construction project shall be responsible for the clean-up and removal of all construction debris or any other miscellaneous discarded articles during the course of the construction project and prior to receiving final inspection approval. Construction job sites must be kept clean and in a safe condition at all times. (See also Section 110.9 of this code)

2. All debris shall be kept in such a manner as to prevent it from being spread by any means.

**110.3.1 Footing and foundation inspection.** Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job. (See also Section 110.3 of this code)

**110.3.2 Concrete slab and under-floor inspection.**

Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.

**110.3.3 Lowest floor elevation.** In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in Section 1612.4 of the Florida Building Code, Building and Section R322 of the Florida Building Code, Residential, shall be submitted to the building official and approved.

**110.3.4 Frame inspection.** Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.

**110.3.5 Lath, gypsum board and gypsum panel product inspection.** Lath, gypsum board and gypsum panel product inspections shall be made after lathing, gypsum board and gypsum panel products, interior and exterior, are in place, but before any plastering is applied or gypsum board and gypsum panel product joints and fasteners are taped and finished.

**110.3.1 Footing and foundation inspection.** Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job. (See also Section 110.3 of this code)

**110.3.2 Concrete slab and under-floor inspection. (Reserved).** (See Section 110.3, Building 1.1 of this code.)

**110.3.3 Lowest floor elevation. (Reserved).** (See Section 110.3, Building 1.2 of this code.)

**110.3.4 Frame inspection. (Reserved).** (See Section 110.3, Shell 2.4 of this code.)

**110.3.5 Lath, gypsum board and gypsum panel product inspection. (Reserved).** (See Section 110.3, Shell 2.6 of this code.)

**Exception:** Gypsum board and gypsum panel products that are not part of a fire-resistance-rated assembly or a shear assembly.

**110.3.6 Weather-exposed balcony and walking surface waterproofing.** Where balcony or other elevated walking surfaces are exposed to water from direct or blowing rain, snow or irrigation, and the structural framing is protected by an impervious moisture barrier, all elements of the impervious-moisture-barrier system shall not be concealed until inspected and approved.

**110.3.7 Fire- and smoke-resistant penetrations.**

Protection of joints and penetrations in fire-resistance rated assemblies, smoke barriers and smoke partition shall not be concealed from view until inspected and approved.

**110.3.8 Energy efficiency inspections.** Inspections shall be made to determine compliance with FBC, Energy Conservation and confirm with the approved energy code submittal (by appropriate trade) and corresponding mandatory requirements and shall include, but not be limited to, inspections for: corresponding envelope insulation R- and U-values, fenestration U-value and Solar Heat Gain Coefficient, duct system R-value, and HVAC, lighting, electrical and water-heating equipment efficiency.

**110.3.9 Other inspections.** In addition to the inspections specified in Sections 110.3 through 110.3.7, the building official is authorized to make or require other inspections of any construction

work to ascertain compliance with the provisions of this code and other laws that are enforced by the building division.

#### **110.3.10 Special inspections. Reserved.**

**110.3.10.1 Reinforcing steel and structural frames.** Reinforcing steel or structural frame work of any part of any building or structure shall not be covered or concealed without first obtaining a release from the building official. Certification that field welding and structural bolted connections meet design requirements shall be submitted to the building official, upon request.

**110.3.11 Final inspection.** The final inspection shall be made after all work required by the building permit is completed.

**110.3.11.1 Flood hazard documentation.** If located in a flood hazard area, , coastal high hazard areas or coastal A zones, documentation as required in Section 1612.5 of the Florida Building Code, Building; and/or Section R322 of the Florida Building Code, Residential, shall be submitted to the building official prior to the final inspection.

**110.3.11.2 Commercial Energy Code documentation.** If required by energy code path submittal, confirmation that commissioning result requirements have been received by building owner.

**110.3.11.3 Residential Energy Code documentation.** If required by energy code path submittal (Section R405), confirmation that the envelope and duct test requirements shall be received by building official.

**110.3.12 Termites.** Building components and building surroundings required to be protected from termite damage in accordance with Section 1503.7, Section 2304.13 or Section 2304.11.6, specifically required to be inspected for termites in accordance with Section 2114, or required to have chemical soil treatment in accordance with Section 1816 shall not be covered or concealed until the release from the building official has been received. (See also 105.10 and 105.11 of this code.)

**110.3.13 Impact resistant coverings or systems.** Where impact resistant coverings or systems are installed to meet requirements of this code, the building official shall schedule adequate inspections of impact resistant coverings or systems to determine the following:

1. The system indicated on the plans was installed.
2. The system is installed in accordance with the manufacturer's installation instructions and the product approval.

**110.4 Inspection agencies.** The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

**110.5 Inspection requests.** It shall be the duty of the holder of the building permit or their duly authorized agent to notify the building official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

**110.6 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

**110.7 Shoring.** For threshold buildings, shoring and associated formwork or falsework shall be designed and inspected by a Florida licensed professional engineer, prior to any required mandatory inspections by the threshold building inspector.

#### **110.8 Threshold building.**

**110.8.1** During new construction or during repair or restoration projects in which the structural system or structural loading of a building is being modified, the enforcing agency shall require a special inspector to perform structural inspections on a threshold building pursuant to a structural inspection plan prepared by the engineer or architect of record. The structural inspection plan must

be submitted to the enforcing agency prior to the issuance of a building permit for the construction of a threshold building. The purpose of the structural inspection plans is to provide specific inspection procedures and schedules so that the building can be adequately inspected for compliance with the permitted documents. The special inspector may not serve as a surrogate in carrying out the responsibilities of the building official, the architect, or the engineer of record. The contractor's contractual or statutory obligations are not relieved by any action of the special inspector.

**110.8.2** The special inspector shall determine that a professional engineer who specializes in shoring design has inspected the shoring and reshoring for conformance with the shoring and reshoring plans submitted to the enforcing agency. A fee simple title owner of a building, which does not meet the minimum size, height, occupancy, occupancy classification, or number-of-stories criteria which would result in classification as a threshold building under Section 553.71(7), Florida Statutes, may designate such building as a threshold building, subject to more than the minimum number of inspections required by the Florida Building Code.

**110.8.3** The fee owner of a threshold building shall select and pay all costs of employing a special inspector, but the special inspector shall be responsible to the enforcement agency. The inspector shall be a person certified, licensed or registered under Chapter 471, Florida Statutes, as an engineer or under Chapter 481, Florida Statutes, as an architect.

**110.8.4** Each enforcement agency shall require that, on every threshold building:

**110.8.4.1** The special inspector, upon completion of the building and prior to the issuance of a certificate of occupancy, file a signed and sealed statement with the enforcement agency in substantially the following form: "To the best of my knowledge and belief, the above described construction of all structural load-bearing components complies with the permitted documents, and the shoring and reshoring conforms to the shoring and reshoring plans submitted to the enforcement agency."

**110.8.4.2** Any proposal to install an alternate structural product or system to which building codes apply be submitted to the enforcement agency for review for compliance with the codes and made part of the enforcement agency's recorded set of permit documents.

**110.8.4.3** All shoring and reshoring procedures, plans and details be submitted to the enforcement agency for recordkeeping. Each shoring and reshoring installation shall be supervised, inspected and certified to be in compliance with the shoring documents by the contractor.

**110.8.4.4** All plans for the building which are required to be signed and sealed by the architect or engineer of record contain a statement that, to the best of the architect's or engineer's knowledge, the plans and specifications comply with the applicable minimum building codes and the applicable fire-safety standards as determined by the local authority in accordance with this Section and Chapter 633, Florida Statutes.

**110.8.5** No enforcing agency may issue a building permit for construction of any threshold building except to a licensed general contractor, as defined in Section 489.105(3)(a), Florida Statutes, or to a licensed building contractor, as defined in Section 489.105(3)(b), Florida Statutes, within the scope of her or his license. The named contractor to whom the building permit is issued shall have the responsibility for supervision, direction, management and control of the construction activities on the project for which the building permit was issued.

**110.8.6** The building department may allow a special inspector to conduct the minimum structural inspection of threshold buildings required by this code, Section 553.73, Florida Statutes, without duplicative inspection by the building department. The building official is responsible for ensuring that any person conducting inspections is qualified as a building inspector under Part XII of Chapter 468, Florida Statutes, or certified as a special inspector under Chapter 471 or 481, Florida Statutes. Inspections of threshold buildings required by Section 553.79(5), Florida Statutes, are in addition to the minimum inspections required by Section 110.3 of this code.

## **110.9 Mandatory structural inspections for condominium and cooperative buildings.**

**10.9.1 General.** The Legislature finds that maintaining the structural integrity of a building throughout its service life is of paramount importance in order to ensure that buildings are

structurally sound so as to not pose a threat to the public health, safety, or welfare. As such, the Legislature finds that the imposition of a statewide structural inspection program for aging condominium and cooperative buildings in this state is necessary to ensure that such buildings are safe for continued use.

**110.9.2. As used in this section, the terms:**

(a) "Milestone inspection" means a structural inspection of a building, including an inspection of load-bearing walls and the primary structural members and primary structural systems as those terms are defined in s. 627.706, Florida Statutes, by a licensed architect or engineer authorized to practice in this state for the purposes of attesting to the life safety and adequacy of the structural components of the building and, to the extent reasonably possible, determining the general structural condition of the building as it affects the safety of such building, including a determination of any necessary maintenance, repair, or replacement of any structural component of the building. The purpose of such inspection is not to determine if the condition of an existing building is in compliance with the Florida Building Code or the firesafety code.

(b) "Substantial structural deterioration" means substantial structural distress that negatively affects a building's general structural condition and integrity. The term does not include surface imperfections such as cracks, distortion, sagging, deflections, misalignment, signs of leakage, or peeling of finishes unless the licensed engineer or architect performing the phase one or phase two inspection determines that such surface imperfections are a sign of substantial structural deterioration.

**110.9.3.** A condominium association under chapter 718, Florida Statutes, and a cooperative association under chapter 719, Florida Statutes, must have a milestone inspection performed for each building that is three stories or more in height by December 31 of the year in which the building reaches 30 years of age, based on the date the certificate of occupancy for the building was issued, and every 10 years thereafter. If the building is located within 3 miles of a coastline as defined in s. 376.031, Florida Statutes, the condominium association or cooperative association must have a milestone inspection performed by December 31 of the year in which the building reaches 25 years of age, based on the date the certificate of occupancy for the building was issued, and every 10 years thereafter. The condominium association or cooperative association must arrange for the milestone inspection to be performed and is responsible for ensuring compliance with the requirements of this section. The condominium association or cooperative association is responsible for all costs associated with the inspection. This subsection does not apply to a single-family, two-family, or three-family dwelling with three or fewer habitable stories above ground.

- (a) An owner or owners of a building that is three stories or more in height as determined by the Florida Building Code and that is subject, in whole or in part, to the condominium or cooperative form of ownership as a residential condominium under chapter 718 or a residential cooperative under chapter 719 must have a milestone inspection performed by December 31 of the year in which the building reaches 30 years of age, based on the date the certificate of occupancy for the building was issued, and every 10 years thereafter. If a building reached 30 years of age before July 1, 2022, the building's initial milestone inspection must be performed before December 31, 2024. If a building reaches 30 years of age on or after July 1, 2022, and before December 31, 2024, the building's initial milestone inspection must be performed before December 31, 2025. If the date of issuance for the certificate of occupancy is not available, the date of issuance of the building's certificate of occupancy shall be the date of occupancy evidenced in any record of the local building official.
- (b) The local enforcement agency may determine that local circumstances, including environmental conditions such as proximity to salt water as defined in s. 379.101, require that a milestone inspection must be performed by December 31 of the year in which the building reaches 25 years of age, based on the date the certificate of occupancy for the building was issued, and every 10 years thereafter.
- (c) The local enforcement agency may extend the date by which a building's initial milestone inspection must be completed upon a showing of good cause by the

owner or owners of the building that the inspection cannot be timely completed if the owner or owners have entered into a contract with an architect or engineer to perform the milestone inspection and the inspection cannot reasonably be completed before the deadline or other circumstance to justify an extension.

- (d) The local enforcement agency may accept an inspection report prepared by a licensed engineer or architect for a structural integrity and condition inspection of a building performed before July 1, 2022, if the inspection and report substantially comply with the requirements of this section. Notwithstanding when such inspection was completed, the condominium or cooperative association must comply with the unit owner notice requirements in Section 110.9.9. The inspection for which an inspection report is accepted by the local enforcement agency under this paragraph is deemed a milestone inspection for the applicable requirements in chapters 718 and 719. If a previous inspection and report is accepted by the local enforcement agency under this paragraph, the deadline for the building's subsequent 10-year milestone inspection is based on the date of the accepted previous inspection.

**110.9.4.** The milestone inspection report must be arranged by a condominium or cooperative association and any owner of any portion of the building which is not subject to the condominium or cooperative form of ownership. The condominium association or cooperative association and any owner of any portion of the building which is not subject to the condominium or cooperative form of ownership are each responsible for ensuring compliance with the requirements of this section. The condominium association or cooperative association is responsible for all costs associated with the milestone inspection attributable to the portions of a building which the association is responsible to maintain under the governing documents of the association. This section does not apply to a single-family, two-family, or three-family dwelling with three or fewer habitable stories above ground.

If a milestone inspection is required under this section and the building's certificate of occupancy was issued on or before July 1, 1992, the building's initial milestone inspection must be performed before December 31, 2024. If the date of issuance for the certificate of occupancy is not available, the date of issuance of the building's certificate of occupancy shall be the date of occupancy evidenced in any record of the local building official.

**110.9.5.** Upon determining that a building must have a milestone inspection, the local enforcement agency must provide written notice of such required inspection to the condominium association or cooperative association and any owner of any portion of the building which is not subject to the condominium or cooperative form of ownership, as applicable, by certified mail, return receipt requested. The condominium or cooperative association must notify the unit owners of the required milestone inspection within 14 days after receipt of the written notice from the local enforcement agency and provide the date that the milestone inspection must be completed. Such notice may be given by electronic submission to unit owners who consent to receive notice by electronic submission or by posting on the association's website.

**110.9.6.** Phase one of the milestone inspection must be completed within 180 days after the owner or owners of the building receive the written notice under Section 110.9.5. For purposes of this section, completion of phase one of the milestone inspection means the licensed engineer or architect who performed the phase one inspection submitted the inspection report by e-mail, United States Postal Service, or commercial delivery service to the local enforcement agency.

**110.9.7.** A milestone inspection consists of two phases:

**110.9.7.1.** For phase one of the milestone inspection, a licensed architect or engineer authorized to practice in this state shall perform a visual examination of habitable and nonhabitable areas of a building, including the major structural components of a building, and provide a qualitative assessment of the structural conditions of the building. If the architect or engineer finds no signs of substantial structural deterioration to any building components under visual examination, phase two of the inspection, as provided in Section 110.9.7.2, is not required. An architect or engineer



who completes a phase one milestone inspection shall prepare and submit an inspection report pursuant to Section 110.9.8.

**110.9.7.2** A phase two of the milestone inspection must be performed if any substantial structural deterioration is identified during phase one. A phase two inspection may involve destructive or nondestructive testing at the inspector's direction. The inspection may be as extensive or as limited as necessary to fully assess areas of structural distress in order to confirm that the building is structurally sound and safe for its intended use and to recommend a program for fully assessing and repairing distressed and damaged portions of the building. When determining testing locations, the inspector must give preference to locations that are the least disruptive and most easily repairable while still being representative of the structure. If a phase two inspection is required, within 180 days after submitting a phase one inspection report the architect or engineer performing the phase two inspection must submit a phase two progress report to the local enforcement agency with a timeline for completion of the phase two inspection. An inspector who completes a phase two milestone inspection shall prepare and submit an inspection report pursuant to subsection 110.9.8.

**110.9.8.** Upon completion of a phase one or phase two milestone inspection, the architect or engineer who performed the inspection must submit a sealed copy of the inspection report with a separate summary of, at minimum, the material findings and recommendations in the inspection report to the condominium association or cooperative association, and to the building official of the local government which has jurisdiction. The inspection report must, at a minimum, meet all of the following criteria:

- (a) Bear the seal and signature, or the electronic signature, of the licensed engineer or architect who performed the inspection.
- (b) Indicate the manner and type of inspection forming the basis for the inspection report.
- (c) Identify any substantial structural deterioration, within a reasonable professional probability based on the scope of the inspection, describe the extent of such deterioration, and identify any recommended repairs for such deterioration.
- (d) State whether unsafe or dangerous conditions, as those terms are defined in the Florida Building Code, were observed.
- (e) Recommend any remedial or preventive repair for any items that are damaged but are not substantial structural deterioration.
- (f) Identify and describe any items requiring further inspection.

**110.9.9.** Within 45 days after receiving the applicable inspection report, the condominium or cooperative association must distribute a copy of the inspector-prepared summary of the inspection report to each condominium unit owner or cooperative unit owner, regardless of the findings or recommendations in the report, by United States mail or personal delivery at the mailing address, property address, or any other address of the owner provided to fulfill the association's notice requirements under chapter 718 or chapter 719, as applicable, and by electronic transmission to the e-mail address or facsimile number provided to fulfill the association's notice requirements to unit owners who previously consented to receive notice by electronic transmission; must post a copy of the inspector prepared summary in a conspicuous place on the condominium or cooperative property; and must publish the full report and inspector-prepared summary on the association's website, if the association is required to have a website.

**110.9.10.** A local enforcement agency may prescribe timelines and penalties with respect to compliance with this section.

**110.9.11.** A board of county commissioners or municipal governing body may adopt an ordinance requiring that a condominium or cooperative association and any other owner that is subject to this section schedule or commence repairs for substantial structural deterioration within a specified timeframe after the local enforcement agency receives a phase two inspection report; however, such repairs must be commenced within 365 days after receiving such report. If an owner of the building fails to submit proof to the local enforcement agency that repairs have been scheduled or have commenced for

substantial structural deterioration identified in a phase two inspection report within the required timeframe, the local enforcement agency must review and determine if the building is unsafe for human occupancy.

**110.10 Impact of construction.** All construction activity regulated by this code shall be performed in a manner so as not to adversely impact the condition of adjacent property, unless such activity is permitted to affect said property pursuant to a consent granted by the applicable property owner, under terms or conditions agreeable to the applicable property owner. This includes, but is not limited to, the control of dust, noise, water or drainage runoffs, debris, and the storage of construction materials. New construction activity shall not adversely impact legal historic surface water drainage flows serving adjacent properties, and may require special drainage design complying with engineering standards to preserve the positive drainage patterns of the affected sites. Accordingly, developers, contractors and owners of all new residential development, including additions, pools, patios, driveways, decks or similar items, on existing properties resulting in a significant decrease of permeable land area on any parcel or has altered the drainage flow on the developed property shall, as a permit condition, provide a professionally prepared drainage plan clearly indicating compliance with this paragraph. Upon completion of the improvement, a certification from a licensed professional, as appropriate under Florida law, shall be submitted to the inspector in order to receive approval of the final inspection.

## SECTION 111

### CERTIFICATE OF OCCUPANCY

**111.1 Use and occupancy.** A building or structure shall not be used or occupied, and a change in the existing use or occupancy classification of a building or structure or portion thereof shall not be made, until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

**111.1.1** A change of use within an existing use or occupancy classification of a building or structure or portion thereof shall require a new certificate of occupancy in accordance with Chapter 10 of the Florida Building Code Existing Building Volume.

**Exception:** Certificates of occupancy are not required for work exempt from permits under Section 105.2. of this code.

**111.2 Certificate issued.** After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that contains the following:

1. The building permit number.
2. The address of the structure.
3. The name and address of the owner or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued.
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
6. For buildings and structures in flood hazard areas, a statement that documentation of the as-built lowest floor elevation has been provided and is retained in the records of the authority having jurisdiction
7. The name of the building official.
8. The edition of the code under which the permit was issued.
9. The use and occupancy, in accordance with the provisions of Chapter 3.

10. The type of construction as defined in Chapter 6.
11. The design occupant load.
12. If an automatic sprinkler system is provided, whether the sprinkler system is required.
13. Any special stipulations and conditions of the building permit.

**111.2.1 Completion Agreement** To allow the issuance of a Certificate of Occupancy or Certificate of Completion prior to the completion of certain administrative or construction requirements, except those requirements that may pose a life safety hazard, the building official is authorized to require the applicant to place a surety in escrow with a third-party independent escrow agent. The applicant shall submit a certified estimate of costs and fees necessary to complete the outstanding requirements. Certified costs estimates shall be subject to the approval of the building official. Upon approval of the certified cost estimate, the applicant shall submit an approved escrow agreement, in a format acceptable to the building official, and proof of deposit from the designated escrow agent no later than 60 days prior to the anticipated date of final inspection. Upon confirmation that the outstanding administrative or construction requirements have been completed, the applicant shall submit a written request to the building official to authorize the release of escrow funds.

**111.3 Temporary occupancy.** The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid. This provision is only for the Florida Building Code; all other Agency approvals necessary for construction must be secured prior to this provision being applied.

**111.4 Revocation.** The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code or of any other federal, state, or local law, or any other applicable ordinance, code, or regulation..

**111.5 Certificate of Completion.** A Certificate of Completion is proof that a structure or system is complete and for certain types of permits is released for use and may be connected to a utility system. This certificate does not grant authority to occupy a building, such as shell building, prior to the issuance of a Certificate of Occupancy.

**111.6 Fixturing, Stocking, or Decorating.** The building official is authorized to issue approval for fixturing, stocking, or decorating, when appropriate, to allow the builder to prepare the structure for permanent occupancy. The building may not be open to the general public or be used for the transaction of any commerce. Such approval requires the approval of the Fire Marshal, when applicable.

#### **111.7 Digital Submittal Requirements for New Construction.**

**111.7.1 Building Footprints.** The building official is authorized to require the submittal of digital shape (CAD) files, in a specific format, depicting a geo-referenced footprint with elevation for all new structures as a condition of the issuance of a Certificate of Occupancy.

**111.7.2 Subdivision Topography.** The building official is authorized to require the developer to submit electronic topographical data and re-delineated 100-year floodplain boundaries to the Federal Emergency Management Agency (FEMA) for all new subdivisions or lots over 5 acres in unrecorded plats for the purposes of updating and maintaining the community's flood maps through the Letter of Map Revision process.

**111.7.3 Elevation Certificates and Final Surveys.** The building official is authorized to require the submittal of digital copies of elevation certificates, final surveys and other paperwork required by the Florida Building Code to be submitted and approved prior to scheduling a final inspection for the associated trade.

## **SECTION 112**

### **SERVICE UTILITIES**

**112.1 Connection of service utilities.** No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required, until released by the building official and a Certificate of Occupancy or Certificate of Completion is issued. The servicing utility company shall not connect the power supply until notified by the building official.

**112.2 Temporary connection.** The building official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power for the purpose of testing building service systems or for use under a temporary or partial Certificate of Occupancy.

**112.3 Authority to disconnect service utilities.** The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section 101.4 in case of emergency where necessary to eliminate an immediate hazard to life or property or when such utility connection has been made without the approval required by Section 112.1 or 112.2. The building official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

## SECTION 113

### CONSTRUCTION BOARD OF ADJUSTMENTS AND APPEALS

**113.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business.

**113.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of this code.

**113.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

#### **113.4 Membership and Terms.**

**113.4.1 Membership.** The Construction Board of Adjustment and Appeals shall consist of nine regular members plus two alternate members. Regular board members shall be composed of individuals with knowledge and experience in the technical codes to include, to the greatest extent possible, an architect, engineer, two Division I contractors (GC, BC, or RC), electrical contractor, HVAC contractor, plumbing contractor, a member at large from the public, and any other contractor licensed category. In addition to the regular members, there should be two alternate members, one member with the qualifications referenced above and one member at large from the public. A board member shall not act in a case in which he or she has a personal or financial interest.

**113.4.2 Terms.** The terms of office of the regular board members shall be for three (3) years and staggered so no more than one-third of the board is appointed or replaced in any 12-month period. The two alternates shall serve three-year terms. Vacancies shall be filled for an unexpired term in the manner in which original appointments are required to be made. No board member shall be appointed or re-appointed to this board for more than three (3) consecutive, three (3) year terms.

**113.4.3 Quorum and voting.** A simple majority of the occupied seats of the board shall constitute a quorum. In varying any provision of this code, the affirmative votes of the majority present, but not less than three affirmative votes, shall be required. In modifying a decision of the building official, not less than four affirmative votes, but not less than a majority of the board members present, shall be required. In the event that regular members are unable to attend a meeting, the alternate members shall vote.

**113.4.4 Secretary of board.** The building official or his/her authorized representative shall act as secretary of the board and shall make a record of all of its proceedings, which shall set forth the reasons for its decision, the vote of each member, the absence of a member, and any failure of a member to vote.

**113.4.5 Removal from office.** Members shall be automatically removed for lack of attendance. Lack of attendance is defined as a failure to attend three (3) consecutive meetings or a failure to attend more than one-half of the meetings scheduled during a calendar year. Participation for less than three-fourths of a meeting shall be the same as a failure to attend a meeting. Members removed pursuant to this provision shall not continue to serve on the board and such removal shall create a vacancy.

**113.5 Powers.** The Construction Board of Adjustments and Appeals shall have the power, as further defined in 113.6 of this code, to hear appeals of decisions and interpretations of the building official and consider variances of the technical codes.

#### **113.6 Appeals.**

**113.6.1 Decision of the building official.** The owner of a building, structure or service system, or duly authorized agent, may appeal a decision of the building official to the Construction Board of Adjustment and Appeals whenever any one of the following conditions are claimed to exist:

1. The building official rejected or refused to approve the mode or manner of construction proposed to be followed or materials to be used in the installation or alteration of a building, structure or service system.
2. The provisions of this code do not apply to this specific case.
3. That an equally good or more desirable form of installation can be employed in any specific case, which the building official has rejected or refused.
4. The true intent and meaning of this code or any of the regulations hereunder have been misconstrued or incorrectly interpreted.

**113.6.2 Variances.** The Construction Board of Adjustments and Appeals, when upon written request, has been so appealed to and after a hearing, may vary the application of any provision of this code to any particular case when, in its opinion, the enforcement thereof would do manifest injustice and would be contrary to the spirit and purpose of this or the technical codes or public interest, and also finds all of the following:

1. That special conditions and circumstances exist which are peculiar to the building, structure or service system involved and which are not applicable to others.
2. That the special conditions and circumstances do not result from the action or inaction of the applicant.
3. That granting the variance requested will not confer on the applicant any special privilege that is denied by this code to other buildings, structures or service system.
4. That the variance granted is the minimum variance that will make possible the reasonable use of the building, structure or service system.
5. That the grant of the variance will be in harmony with the general intent and purpose of this code and will not be detrimental to the public health, safety and general welfare.

**113.6.2.1 Conditions of the variance.** In granting the variance, the board may prescribe a reasonable time limit within which the action for which the variance is required shall be commenced or completed or both. In addition, the board may prescribe appropriate conditions and safeguards in conformity with this code. Violation of the conditions of a variance shall be deemed a violation of this code.

**113.6.3 Notice of appeal.** Notice of appeal shall be in writing and filed within 30 calendar days after the building official renders the decision. Appeals shall be in a form acceptable to the building official.

**113.6.4 Unsafe or dangerous buildings or service systems.** In the case of a building, structure or service system, which in the opinion of the building official, is unsafe, unsanitary or dangerous, the building official may, in the order, limit the time for such appeals to a shorter period.

### **113.7 Procedures of the board.**

**113.7.1 Rules and regulations.** The board shall establish rules and regulations for its own procedure not inconsistent with the provisions of this code. The board shall meet on the second Thursday of each month, as needed, or at the call of the chairperson, subsequent to a request to call a meeting by the secretary. The board shall meet at the second regular meeting if a notice of appeal has been received fewer than 15 business days before a regular meeting.

**113.7.1.1 Rules of Evidence.** Formal rules of evidence shall not apply, but fundamental due process should be observed and govern the proceedings. Upon determination by the chairperson, irrelevant, immaterial, or unduly repetitious evidence may be excluded, but all other evidence of a type commonly relied upon by reasonable, prudent persons in the conduct of their affairs shall be admissible, whether or not such evidence would be admissible in a trial in the courts of Florida. Any part of the evidence may be received in written form. The Board may request certain evidence from the appellant to be provided by an architect or engineer registered in the State of Florida, in which case, said evidence shall be signed, sealed, and dated.

**113.7.1.2 Testimony.** Any member of the Board or the attorney representing the Board may inquire of, or question, any witness before the Board. Any member of the Board, the appellant or his/her attorney, and/or the building official shall be permitted to inquire of any witness before the Board. The Board may consider testimony presented by the building official, the appellant, or any other witness.

**113.7.2 Decisions.** The Construction Board of Adjustment and Appeals shall, in every case, reach a decision without unreasonable or unnecessary delay. Each decision of the board shall also include the reasons for the decision. If a decision of the board reverses or modifies a refusal, order, or disallowance of the building official or varies the application of any provision of this code, the building official shall immediately take action in accordance with such decision. Every decision shall be promptly filed in writing in the office of the building official and shall be open to public inspection. A certified copy of the decision shall be sent by mail or otherwise to the appellant and a copy shall be kept in the office of the building official for two weeks after filing. Every decision of the board shall be final; subject however to such remedy as any aggrieved party might have at law or in equity.

**113.8 Local Construction Regulation Board.** The local government may also utilize this Board to convene as the Local Construction Regulation Board (LCRB), as provided in Florida Statute 489.113. The LCRB may deny, suspend, revoke or limit the authority of a certified contractor to obtain a building permit or permit with specific conditions, if the LCRB has found such contractor, through a public hearing, to be guilty of fraud or a willful building code violation within the county or municipality that the LCRB represents. The LCRB may also, deny, suspend, revoke or limit the authority of a certified contractor to obtain a building permit or permit with specific conditions, if it has proof through the public hearing process, that a contractor has been found guilty in another county or municipality within the past 12 months, of fraud or a willful building code violation and after providing notice of an opportunity to be heard to the contractor, finds that such fraud or violation would have been fraud or a violation if committed in the county or municipality that the LCRB represents. Notification of and information concerning such permit denial shall be submitted to the division within 15 days after the LCRB decides to deny the permit.

## **SECTION 114**

### **VIOLATIONS**

**114.1 Unlawful acts.** It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure, system, site, or equipment regulated by this code, or any applicable law, ordinance, rule, or regulation; or cause same to be done, in conflict with or in violation of any of the provisions of this code or any applicable law, ordinance, rule, or regulation. Pursuant to Section 125.69, Florida Statutes, Such violation of this code shall be a misdemeanor and shall be punishable by a fine not to exceed \$500 and/or by imprisonment in the county jail not to exceed 60 days, and may be subject to additional penalties as prescribed by law. Each day or portion thereof shall be considered a separate offense.

**114.2 Notice of violation.** The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

**114.3 Prosecution of violation.** If the notice of violation is not complied with promptly, the building official is authorized to request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

**114.3.1** Nothing in this section shall prevent the County from imposing fines, liens, or seek injunctive relief, or exercising other enforcement powers as permitted by law.

**114.4 Violation penalties.** Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law.

**114.4.1** Code enforcement and penalties of Chapter 162 Florida Statutes Part I shall be authorized if building work begins without payment of all required fees, and for the purposes of enforcing this code, building code enforcement officials licensed under Florida Statute 468 Part XII are deemed "Code Inspectors," as defined in Florida Statute 162.04.

**114.4.2 Citations.** The building official is authorized to issue citations for violations of this Code pursuant to 8.5 Article II County Code of Ordinances

## SECTION 115

### STOP WORK ORDER

**115.1 Authority.** Whenever the building official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or dangerous or unsafe, the building official is authorized to issue a stop work order.

**115.2 Issuance.** The stop work order shall be in writing and shall be given to the owner of the property involved, the owner's authorized agent or the person performing the work. The stop work order shall also be posted at the site and remain posted at the site until the building official authorizes its removal. It shall be unlawful for any person, firm or corporation or its officers, agents, or other servants, to remove the posting without written authorization from the building official. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work will be permitted to resume.

**115.3 Unlawful continuance.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

## SECTION 116

### UNSAFE BUILDINGS, STRUCTURES, EQUIPMENT AND SYSTEMS

**116.1 Unsafe buildings, structures, equipment or systems.** Buildings, structures, existing equipment, or systems that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe.

**116.1.1** When the building official determines a building, structure, electrical, gas, mechanical or plumbing equipment or system or portion thereof is unsafe, as set forth in this code the building

official shall provide the record owner(s) of the real property upon which the unsafe building, structure, equipment or system is located, a written notice stating the defects thereof, by certified mail, return receipt requested. This notice shall require the owner within thirty (30) business days of delivery of this notice to complete specified repairs or improvements, or to demolish and remove the building, structure, electrical, gas, mechanical or plumbing equipment or system or portion thereof.

**116.1.1.1** In addition to the written notice being sent by certified mail, return receipt requested to the record owner(s) of the real property upon which the unsafe building, structure, equipment or system is located, the building official shall post a copy of the notice in a conspicuous place in the county courthouse, and upon the building, structure, equipment or system, and a copy shall be recorded in the public records of Palm Beach County.

**116.1.1.2** In addition, a copy of the notice, as outlined in this sub-section, shall be published simultaneously for two consecutive weekends in a newspaper of local circulation. Such notice shall be substantially in the following form:

**NOTICE OF INTENT TO DEMOLISH OR SUBSTANTIALLY REPAIR AND INSPECT**

(Insert Date of Notice)

The owner or other interested parties for the structure located at (address), are hereby notified that Palm Beach County, Florida, will proceed to have the building, structure, equipment or system repaired, demolished or removed thirty (30) calendar days after the date of this Notice, if said building, structure, equipment or system is not substantially repaired, demolished or removed by that date. All costs incurred by the County in connection with the repair, demolition or removal will be assessed against the property.

If, as a result of this Notice, the building, structure, equipment or system is substantially repaired, demolished, or removed by the owner, notice is hereby given that work to abate the unsafe condition requires building permits and inspections for code compliance, and all related fees are required to be paid prior to performing the work or receiving certification of code compliance.

To request an extension of time, the owner should contact (Contact Person and Phone Number) within ten (10) business days of the date of this Notice. Said request for extension must be made in writing to the building official.

An affected owner or duly authorized agent has the right to appeal this action to the Construction Board of Adjustment and Appeals. An application of appeal should be filed in writing and hearing costs paid by the affected owner or duly authorized agent, at the Palm Beach County Building Division Main Office, within thirty (30) calendar days of the date of this Notice. The fee to cover hearing costs shall be established by ordinance.

**116.1.1.3** Evidence that an attempt has been made to hand deliver or mail the Notice, as provided herein, together with a copy of the recorded "Notice of Intent to Demolish or Substantially Repair and Inspect" at the Clerk of the Court Office, and proof of publication, shall be sufficient to show that the notice requirements of this section have been met, without regard to whether or not the owner actually received said notice.

**116.1.2** If necessary, the notice shall also require the building, structure, electrical, gas, mechanical, plumbing equipment or systems or portion thereof to be vacated and/or disconnected, and not reoccupied and/or reconnected until the specified repairs and improvements are completed, inspected and approved by the building official. The building official shall post at each entrance to the building a placard stating: THIS BUILDING IS UNSAFE AND ITS USE OR OCCUPANCY HAS BEEN PROHIBITED BY THE BUILDING OFFICIAL. This placard shall remain posted until the required repairs are made or demolition is completed. It shall be unlawful for any person, firm or corporation or its officers, agents, or other servants, to remove the posting without written permission of the building official, or for any person to enter the building, or use the building, structure, equipment or system except for the purpose of making the required repairs or of demolishing same.

**116.1.3** If such owner, agent, or person in control shall fail, neglect, or refuse to comply with notice to repair, rehabilitate, or to demolish, and remove said building, structure, electrical, gas, mechanical or plumbing equipment or system or portion thereof, within thirty (30) calendar days of delivery of notification by the County building official and pursuant to the procedures stated in this section, the County is authorized and empowered, and the building official shall take action to



achieve enforcement of the code and/or abatement of the unsafe condition by substantial repair, demolition, or removal of the building, structure, electrical, gas, mechanical or plumbing equipment or system or portion thereof, or in a manner as dictated by the degree of threat posed by the unsafe condition.

**116.1.3.1** The cost of vacating, substantially repairing, demolishing, removing, and/or otherwise abating the unsafe condition incurred by the County, including the actual work of vacating, substantially repairing, demolishing, removing, and/or otherwise abating the unsafe condition, title work costs and expenses, all administrative and legal expenses, publication costs, postal expenses, and other identifiable costs incurred by the County, shall be assessed against the property.

**116.1.3.1.1** All assessments shall be paid in full to the County no less than the close of County business on the twentieth (20) business day after the Notice of Assessment is delivered to the property owner. If the property owner fails to pay the assessment within this time period, the building official or designee shall file with the Clerk of the Circuit Court a lien to be recorded in the County's Official Record Book showing the nature of such lien, the amount thereof and an accurate legal description of the property, including the street address, which lien shall be effective from the date of filing and recite the names of all persons notified and interested persons.

**116.1.3.1.2** Thereafter, the unpaid amount of the assessment will accrue interest at the rate of 12% per annum or at the maximum rate allowed by law.

**116.1.3.1.3** If the assessment is not paid by the following September 1, the County will declare the assessment delinquent and place the assessment on the tax roll as a non-ad valorem assessment.

**116.1.3.1.4** If the non-ad valorem assessment is not paid as part of the tax bill on the property, the property may be subject to the sale of a tax certificate, bearing interest by law at a rate as high as 18% per annum.

**116.1.3.1.5** If the tax certificate is not redeemed by payment of the non-ad valorem assessment in full, plus interest, as required by Florida law, the property may be sold and conveyed by tax deed.

**116.1.3.1.6** Nothing in this section shall prevent the County from imposing fines or liens, seeking injunctive relief, pursuing foreclosure or exercising other enforcement powers as permitted by law.

**116.1.4** The thirty (30) day time period contained in Section 116.1.1 of this code may be enlarged by the building official, in a decision which is rendered in writing, upon receipt of the owner's written request for an enlargement of time. In the written request, the owner must show cause as to why the enlargement of time should be granted. In the event that the building official denies the owner's request for an enlargement of time, said decision shall be rendered in writing, and delivered to the owner by certified mail, return receipt requested.

**116.1.5 Determinations.** Decisions of the building official required by this section shall be in writing. The date of the determination shall be the date it is reduced to writing and signed by the building official.

**116.1.6 Relief from the Notice of Intent to Demolish or Substantially Repair and Inspect.** An affected owner or duly authorized agent has the right to appeal the notice to the Construction Board of Adjustment and Appeals. An application of appeal shall be filed in writing and hearing costs paid by the affected owner or duly authorized agent, at the Palm Beach County Building Division Main Office, within thirty (30) business days of the date of delivery of the notice, as required in this section. If notice is not successfully delivered to the record owner, the application of appeal should be filed in writing and hearing costs paid by the affected owner within thirty (30) business days following the second consecutive week of publication of notice in a newspaper of local circulation. No action shall be taken by the County in connection with a building, structure, electrical, gas, mechanical or plumbing equipment or system or portion thereof which is the subject of any appeals procedure relating to demolition, except in cases of emergencies as described in Section 116.2.2 of this code. Every decision of the Construction Board of Adjustment and Appeals shall be final; subject however to such remedy as any aggrieved party might have at law. Such judicial relief shall be sought by the affected party or authorized agent by filing the appropriate petition in the court of jurisdiction within thirty (30) business days of the execution of the board order to be appealed. Such an appeal shall not be

a hearing de novo but shall be limited to appellate review of the record created before the Construction Board of Adjustment and Appeals.

**116.1.7 An affected owner or duly authorized agent has the right to appeal** a decision of the building official to deny an extension of time, to the Construction Board of Adjustment and Appeals. An application of appeal should be filed in writing and hearing costs paid by the affected owner or duly authorized agent, at the Palm Beach County Building Division Main Office, within ten (10) business days of the date that decision is reduced to writing. The fee to cover hearing costs shall be established by ordinance.

**116.1.8 Notice of Assessment.** Upon completion of the actions undertaken by the County, the building official shall notify in writing the owner that a special assessment has been imposed on the property. The notice shall be delivered by certified mail, return receipt requested. The notice of assessment shall set forth the following:

- (a) A description of the unsafe structure, a description of the actions taken by the County to substantially repair or demolish the building, structure, electrical, gas, mechanical or plumbing equipment or system or portion thereof, and the fact that the property has been assessed for the costs incurred by the County to substantially repair or demolish the building, structure, electrical, gas, mechanical or plumbing equipment or system or portion thereof.
- (b) The aggregate amount of such costs, and an itemized list of such costs.
- (c) The intent of the County to record the assessment as a lien against the property, if not paid within twenty (20) business days of delivery.
- (d) The intent of the County to charge interest at the rate of 12% per annum or at the maximum rate allowed by law if the assessment is not paid within twenty (20) business days.
- (e) The intent of the County to declare the assessment delinquent and to place the assessment on the tax roll as a non-ad valorem assessment if not paid by the following September 1.
- (f) The potential for the property to be subject to the sale of a tax certificate, bearing interest by law at a rate as high as 18% per annum, if the non-ad valorem assessment is not paid as part of the tax bill on the property.
- (g) The potential for the property to be sold and conveyed by tax deed if the tax certificate is not redeemed by payment of the non-ad valorem assessment in full, plus interest, as required by Florida law.

**116.1.9 The decision of the building official shall be final** in cases of emergency, which, in the opinion of the building official, involve imminent danger to human life or health, or the property of others. The building official shall promptly cause such building, structure, electrical, gas, mechanical or plumbing equipment or system or portion thereof to be made safe, secured, or cause its removal. For this purpose the building official may at once enter such structure or land on which it stands, or abutting land or structures, with such assistance and at such cost as the building official may deem necessary. The building official may order the vacating of adjacent structures and may require the protection of the public by appropriate fence or such other means as may be necessary, and for this purpose may close a public or private way. Taking such action does not create a continuing obligation on the part of the building official to continue with maintaining such building, structure, equipment or system; or create liability for any damage to the property.

**116.2 Restoration.** Where the structure or equipment determined to be unsafe by the building official is restored to a safe condition, to the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions and change of occupancy shall comply with the requirements of Section 105.2.2 and the Florida Building Code, Existing Building.

## SECTION 117

### VARIANCES IN FLOOD HAZARD AREAS

**117.1 Flood hazard areas.** Pursuant to Section 553.73(5), Florida Statutes, the variance procedures adopted in Article 18 of the ULDC shall apply to requests submitted to the building official for variances to the provisions of Section 1612 of the Florida Building Code, Building or, as applicable, the provisions of R322 of the Florida Building Code, Residential. This section shall not apply to Section 3109 of the Florida Building Code, Building.

## SECTION 118

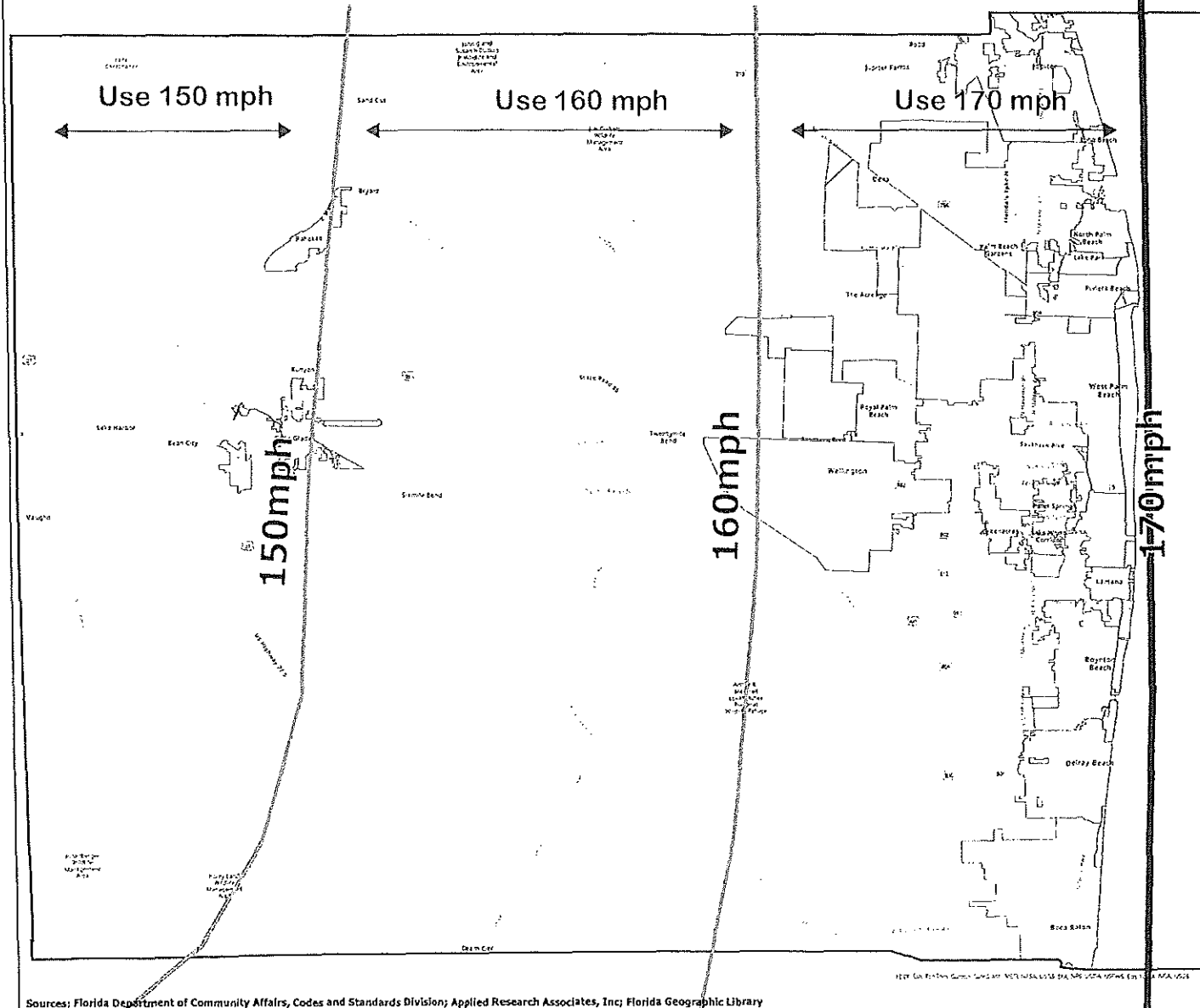
(RESERVED)

## SECTION 119

### SEVERABILITY

If any section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code

**Palm Beach County - Figure 1609.3(1)  
Ultimate Design Wind Speeds - Risk Category II Buildings**



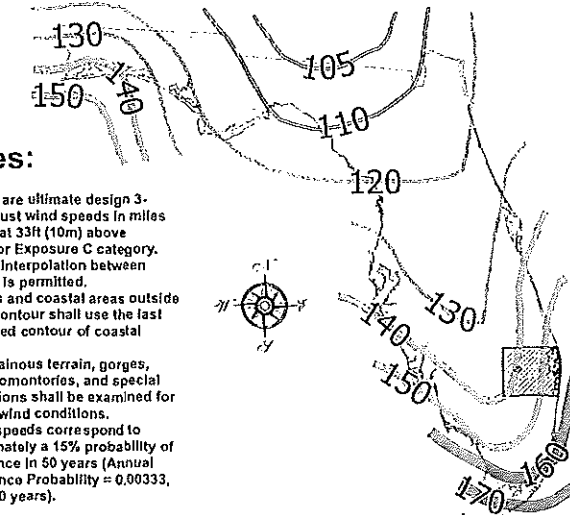
Sources: Florida Department of Community Affairs, Codes and Standards Division; Applied Research Associates, Inc; Florida Geographic Library

The ultimate design wind speed,  $V_{ult}$ , in mph, for the determination of the wind loads shall be determined by Figures 1609.3(1), 1609.3(2), 1609.3(3), and 1609.3(4). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category II buildings and structures shall be obtained from Figure 1609.3(1). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category III buildings and structures shall be obtained from Figure 1609.3(2). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category IV buildings and structures shall be obtained from Figure 1609.3(3). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category I buildings and structures shall be obtained from Figure 1609.3(4). The ultimate design wind speed,  $V_{ult}$ , for the special wind regions indicated near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements. The ultimate design wind speeds,  $V_{ult}$ , determined by the local jurisdiction shall be in accordance with Chapter 26 of ASCE 7. The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores wherever possible. To determine the applicable wind speed of a particular parcel, Palm Beach County has developed separate Geographic Information Systems (GIS) tools for each of the Risk Categories, available on the Building Division website at <https://discover.pbcgov.org/pzb/Maps/WindSpeeds.aspx>

**WIND BORNE DEBRIS REGION.** Areas within hurricane-prone regions located:  
 1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed,  $V_{ult}$ , is 130 mph (58 m/s) or greater; or  
 2. In areas where the ultimate design wind speed is 140 mph (63.6 m/s) or greater. Linear Interpolation between contours may not be utilized in the determination of the Wind-Borne Debris Region. All of Unincorporated Palm Beach County is within the Wind-Borne Debris Region.

For Risk Category II buildings and other structures and Risk Category III buildings and other structures, except health care facilities, the wind-borne debris region shall be based on Figure 1609.3(1). For Risk Category III health care facilities, the wind-borne debris region shall be based on Figure 1609.3(2). For Risk Category IV buildings and other structures, the wind-borne debris region shall be based upon Figure 1609.3(3).

**Figure 1609.3(1) Ultimate Design Wind Speeds, for Risk Category II Buildings and Other Structures**



**Notes:**

1. Values are ultimate design 3-second gust wind speeds in miles per hour at 33ft (10m) above ground for Exposure C category.
2. Linear interpolation between contours is permitted.
3. Islands and coastal areas outside the last contour shall use the last wind speed contour of coastal area.
4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
5. Wind speeds correspond to approximately a 15% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00333, MRI = 300 years).

**PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE - BUILDING, 8th EDITION (2023)**

Exposure categories to be utilized for design shall be in accordance with Section 1609.4 of the Florida Building Code, Building.

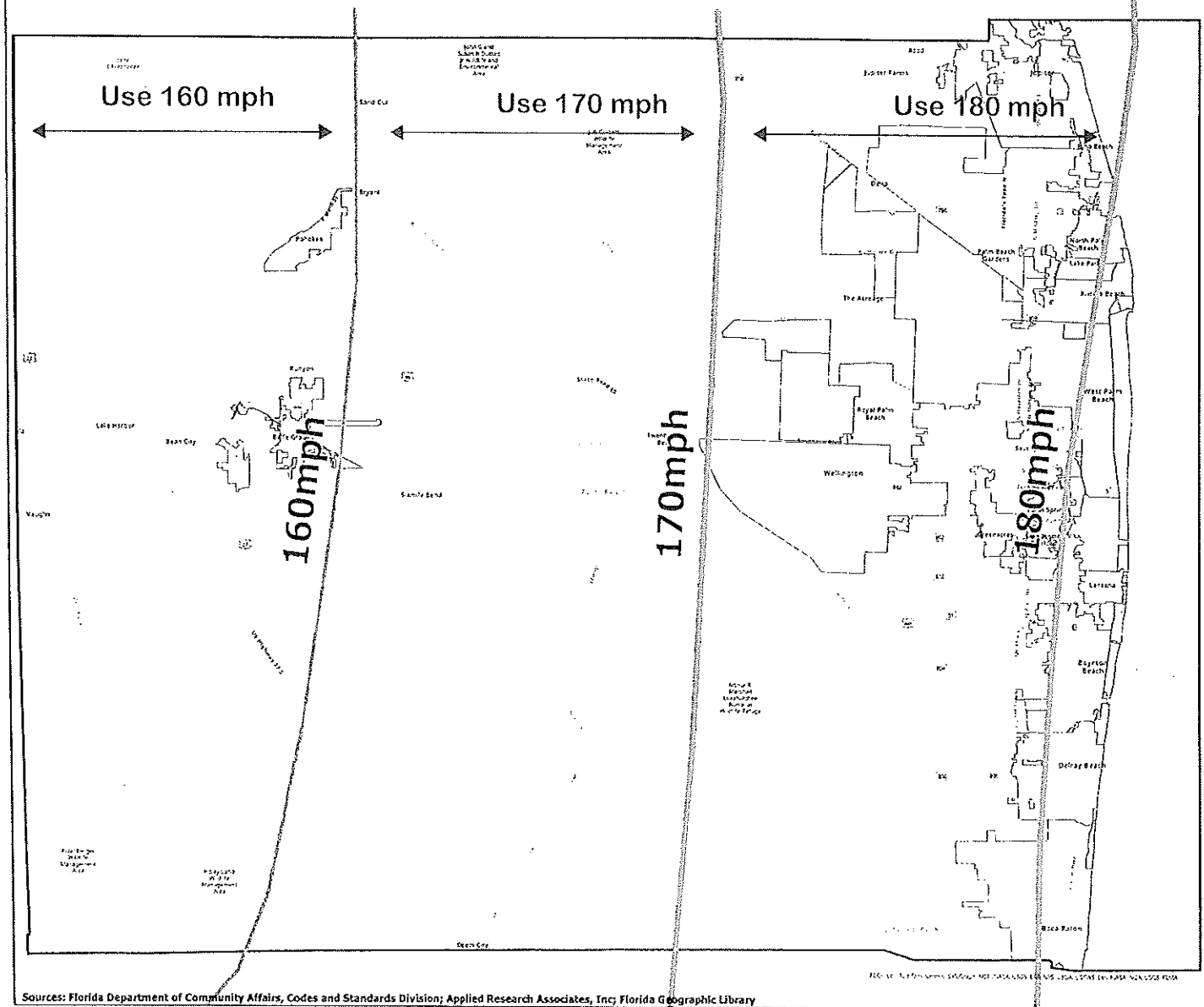


**Planning, Zoning and Building Department - GIS**

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Exhibit B

**Palm Beach County - Figure 1609.3(2)  
Ultimate Design Wind Speeds - Risk Category III Buildings**

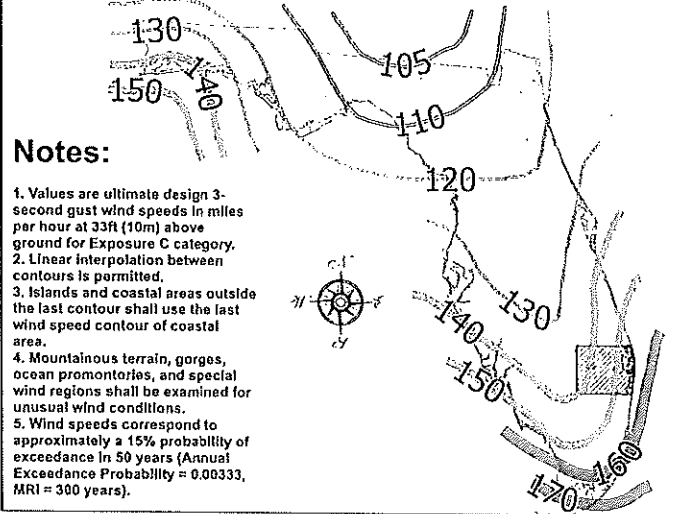


The ultimate design wind speed,  $V_{ult}$ , in mph, for the determination of the wind loads shall be determined by Figures 1609.3(1), 1609.3(2), 1609.3(3), and 1609.3(4). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category II buildings and structures shall be obtained from Figure 1609.3(1). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category III buildings and structures shall be obtained from Figure 1609.3(2). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category IV buildings and structures shall be obtained from Figure 1609.3(3). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category I buildings and structures shall be obtained from Figure 1609.3(4). The ultimate design wind speed,  $V_{ult}$ , for the special wind regions indicated near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements. The ultimate design wind speeds,  $V_{ult}$ , determined by the local jurisdiction shall be in accordance with Chapter 26 of ASCE 7. The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores wherever possible. To determine the applicable wind speed of a particular parcel, Palm Beach County has developed separate Geographic Information Systems (GIS) tools for each of the Risk Categories, available on the Building Division website at <https://discover.pbcgov.org/pzb/Maps/WindSpeeds.aspx>

**WIND BORNE DEBRIS REGION.** Areas within hurricane-prone regions located:  
 1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed,  $V_{ult}$ , is 130 mph (58 m/s) or greater; or  
 2. In areas where the ultimate design wind speed is 140 mph (63.6 m/s) or greater. Linear interpolation between contours may not be utilized in the determination of the Wind-Borne Debris Region. All of Unincorporated Palm Beach County is within the Wind-Borne Debris Region.

For Risk Category II buildings and other structures and Risk Category III buildings and other structures, except health care facilities, the wind-borne debris region shall be based on Figure 1609.3(1). For Risk Category III health care facilities, the wind-borne debris region shall be based on Figure 1609.3(2). For Risk Category IV buildings and other structures, the wind-borne debris region shall be based upon Figure 1609.3(3).

**Figure 1609.3(2) Ultimate Design Wind Speeds, for Risk Category III Buildings and Other Structures**



**Notes:**

1. Values are ultimate design 3-second gust wind speeds in miles per hour at 33ft (10m) above ground for Exposure C category.
2. Linear interpolation between contours is permitted.
3. Islands and coastal areas outside the last contour shall use the last wind speed contour of coastal area.
4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
5. Wind speeds correspond to approximately a 15% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00333, MRI = 300 years).

Sources: Florida Department of Community Affairs, Codes and Standards Division; Applied Research Associates, Inc; Florida Geographic Library

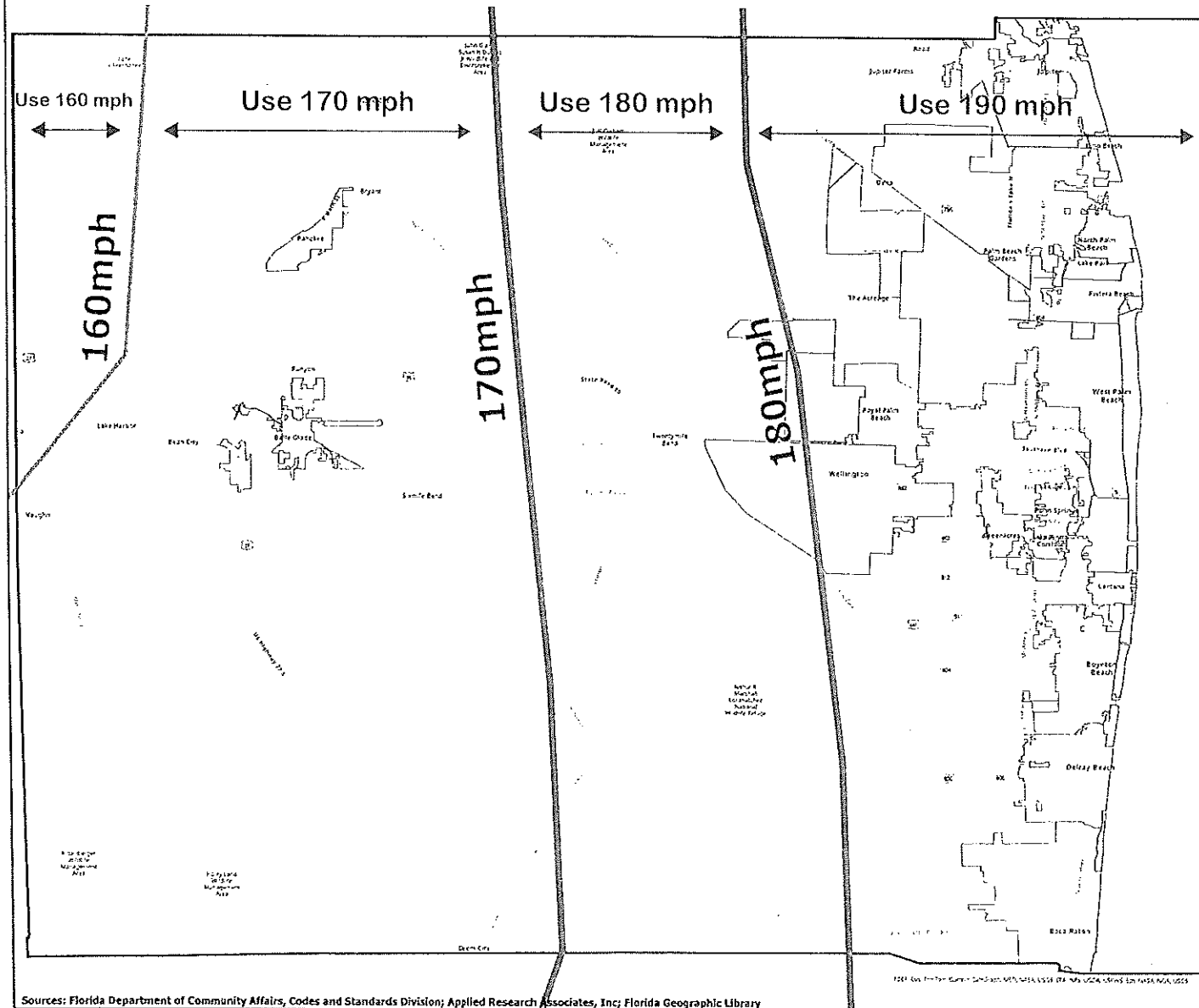
**PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE - BUILDING, 8th EDITION (2023)**  
 Exposure categories to be utilized for design shall be in accordance with Section 1609.4 of the Florida Building Code, Building.



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**Palm Beach County - Figure 1609.3(3)  
Ultimate Design Wind Speeds - Risk Category IV Buildings**



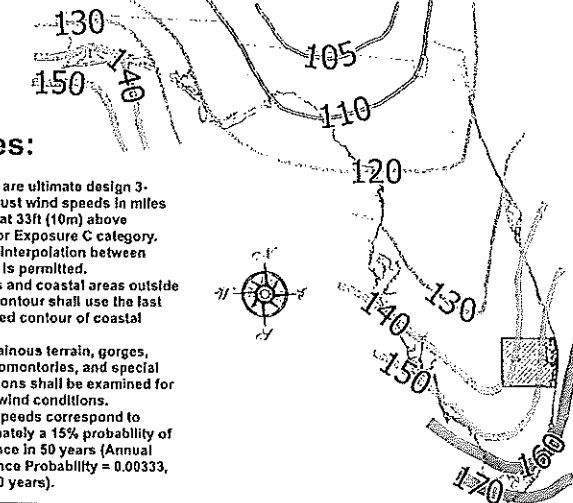
Sources: Florida Department of Community Affairs, Codes and Standards Division; Applied Research Associates, Inc; Florida Geographic Library

The ultimate design wind speed,  $V_{ult}$ , in mph, for the determination of the wind loads shall be determined by Figures 1609.3(1), 1609.3(2), 1609.3(3), and 1609.3(4). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category II buildings and structures shall be obtained from Figure 1609.3(1). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category III buildings and structures shall be obtained from Figure 1609.3(2). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category IV buildings and structures shall be obtained from Figure 1609.3(3). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category I buildings and structures shall be obtained from Figure 1609.3(4). The ultimate design wind speed,  $V_{ult}$ , for the special wind regions indicated near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements. The ultimate design wind speeds,  $V_{ult}$ , determined by the local jurisdiction shall be in accordance with Chapter 26 of ASCE 7. The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores wherever possible. To determine the applicable wind speed of a particular parcel, Palm Beach County has developed separate Geographic Information Systems (GIS) tools for each of the Risk Categories, available on the Building Division website at <https://discover.pbcgov.org/pzb/Maps/WindSpeeds.aspx>

**WIND BORNE DEBRIS REGION.** Areas within hurricane-prone regions located:  
 1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed,  $V_{ult}$ , is 130 mph (58 m/s) or greater; or  
 2. In areas where the ultimate design wind speed is 140 mph (63.6 m/s) or greater. Linear interpolation between contours may not be utilized in the determination of the Wind-Borne Debris Region. All of Unincorporated Palm Beach County is within the Wind-Borne Debris Region.

For Risk Category II buildings and other structures and Risk Category III buildings and other structures, except health care facilities, the wind-borne debris region shall be based on Figure 1609.3(1). For Risk Category III health care facilities, the wind-borne debris region shall be based on Figure 1609.3(2). For Risk Category IV buildings and other structures, the wind-borne debris region shall be based upon Figure 1609.3(3).

**Figure 1609.3(3) Ultimate Design Wind Speeds, for Risk Category III Buildings and Other Structures**

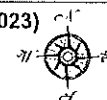


**Notes:**

1. Values are ultimate design 3-second gust wind speeds in miles per hour at 33ft (10m) above ground for Exposure C category.
2. Linear interpolation between contours is permitted.
3. Islands and coastal areas outside the last contour shall use the last wind speed contour of coastal area.
4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
5. Wind speeds correspond to approximately a 15% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00333, MRI = 300 years).

**PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE - BUILDING, 8th EDITION (2023)**

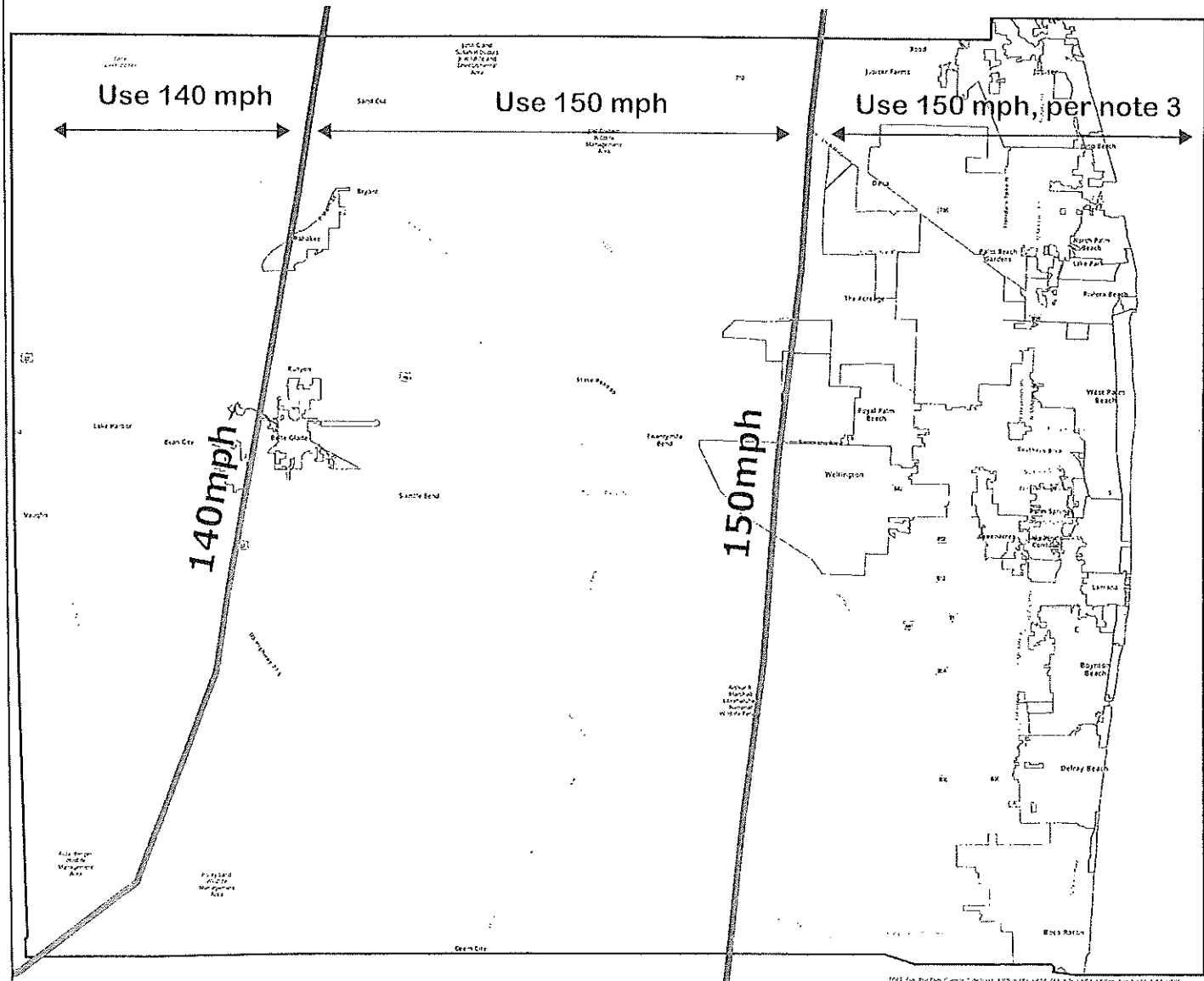
Exposure categories to be utilized for design shall be in accordance with Section 1609.4 of the Florida Building Code, Building.



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**Palm Beach County - Figure 1609.3(4)  
Ultimate Design Wind Speeds - Risk Category I Buildings**



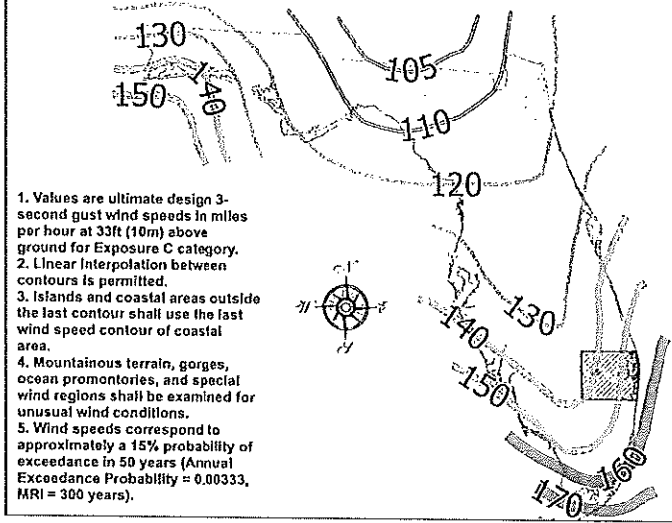
Source: Florida Department of Community Affairs, Codes and Standards Division; Applied Research Associates, Inc; Florida Geographic Library

The ultimate design wind speed,  $V_{ult}$ , in mph, for the determination of the wind loads shall be determined by Figures 1609.3(1), 1609.3(2), 1609.3(3), and 1609.3(4). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category II buildings and structures shall be obtained from Figure 1609.3(1). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category III buildings and structures shall be obtained from Figure 1609.3(2). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category IV buildings and structures shall be obtained from Figure 1609.3(3). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category I buildings and structures shall be obtained from Figure 1609.3(4). The ultimate design wind speed,  $V_{ult}$ , for the special wind regions indicated near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements. The ultimate design wind speeds,  $V_{ult}$ , determined by the local jurisdiction shall be in accordance with Chapter 26 of ASCE 7. The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores wherever possible. To determine the applicable wind speed of a particular parcel, Palm Beach County has developed separate Geographic Information Systems (GIS) tools for each of the Risk Categories, available on the Building Division website at <https://discover.pbcgov.org/pzb/Maps/WindSpeeds.aspx>

**WIND BORNE DEBRIS REGION.** Areas within hurricane-prone regions located:  
 1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed,  $V_{ult}$ , is 130 mph (58 m/s) or greater; or  
 2. In areas where the ultimate design wind speed is 140 mph (63.6 m/s) or greater. Linear interpolation between contours may not be utilized in the determination of the Wind-Borne Debris Region. All of Unincorporated Palm Beach County is within the Wind-Borne Debris Region.

For Risk Category II buildings and other structures and Risk Category III buildings and other structures, except health care facilities, the wind-borne debris region shall be based on Figure 1609.3(1). For Risk Category III health care facilities, the wind-borne debris region shall be based on Figure 1609.3(2). For Risk Category IV buildings and other structures, the wind-borne debris region shall be based upon Figure 1609.3(3).

**Figure 1609.3(4) Ultimate Design Wind Speeds, for Risk Category I Buildings and Other Structures**



1. Values are ultimate design 3-second gust wind speeds in miles per hour at 33ft (10m) above ground for Exposure C category.
2. Linear interpolation between contours is permitted.
3. Islands and coastal areas outside the last contour shall use the last wind speed contour of coastal area.
4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
5. Wind speeds correspond to approximately a 15% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00333, MRI = 300 years).

**PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE - BUILDING, 8th EDITION (2023)**

Exposure categories to be utilized for design shall be in accordance with Section 1609.4 of the Florida Building Code, Building.



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# APPENDIX Q TINY HOUSES

## TABLE OF CONTENTS

SECTION AQ101.....	2
SECTION AQ102.....	2
SECTION AQ103.....	2
SECTION AQ104.....	2
SECTION AQ105.....	4
SECTION AQ106.....	4



## SECTION AQ101 GENERAL

**AQ101.1 Scope.** This appendix shall be applicable to tiny houses used as single dwelling units. Tiny houses shall comply with this code except as otherwise stated in this appendix.

## SECTION AQ102 DEFINITIONS

**AQ102.1 General.** The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.

**EGRESS ROOF ACCESS WINDOW.** A skylight or roof window designed and installed to satisfy the emergency escape and rescue opening requirements of Section R310.2.

**LANDING PLATFORM.** A landing provided as the top step of a stairway accessing a loft.

**LOFT.** A floor level located more than 30 inches (762 mm) above the main floor, open to the main floor on one or more sides with a ceiling height of less than 6 feet 8 inches (2032 mm) and used as a living or sleeping space.

**TINY HOUSE.** A dwelling that is 400 square feet (37 m<sup>2</sup>) or less in floor area excluding lofts.

## SECTION AQ103 CEILING HEIGHT

**AQ103.1 Minimum ceiling height.** Habitable space and hallways in tiny houses shall have a ceiling height of not less than 6 feet 8 inches (2032 mm). Bathrooms, toilet rooms and kitchens shall have a ceiling height of not less than 6 feet 4 inches (1930 mm). Obstructions including, but not limited to, beams, girders, ducts and lighting shall not extend below these minimum ceiling heights.

**Exception:** Ceiling heights in lofts are permitted to be less than 6 feet 8 inches (2032 mm).

## SECTION AQ104 LOFTS

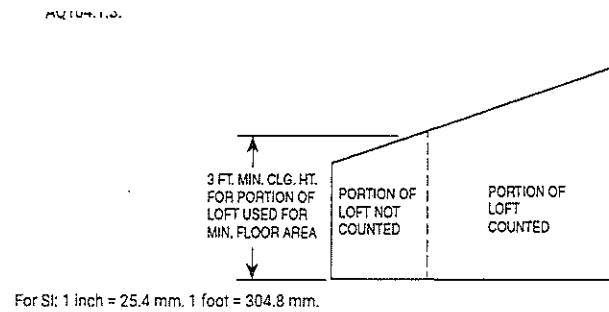
**AQ104.1 Minimum loft area and dimensions.** Lofts used as a sleeping or living space shall meet the minimum area and dimension requirements of Sections AQ104.1.1 through AQ104.1.3.

**AQ104.1.1 Minimum area.** Lofts shall have a floor area of not less than 35 square feet (3.25 m<sup>2</sup>).

**AQ104.1.2 Minimum horizontal dimensions.** Lofts shall be not less than 5 feet (1524 mm) in any horizontal dimension.

**AQ104.1.3 Height effect on loft area.** Portions of a loft with a sloped ceiling measuring less than 3 feet (914 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft. See Figure AQ104.1.3.

**Exception:** Under gable roofs with a minimum slope of 6 units vertical in 12 units horizontal (50-percent slope), portions of a loft with a sloped ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft. See Figure AQ104.1.3.  
FigAQ104.1.3.jpg



**FIGURE AQ104.1.3 LOFT CEILING HEIGHT**

**AQ104.2 Loft access and egress.** The access to and primary egress from lofts shall be of any type described in Sections AQ104.2.1 through AQ104.2.4. The loft access and egress element along its required minimum width shall meet the loft where its ceiling height is not less than 3 feet (914 mm).

**AQ104.2.1 Stairways.** Stairways accessing lofts shall comply with this code or with Sections AQ104.2.1.1 through AQ104.2.1.7.

**AQ104.2.1.1 Width.** Stairways accessing a loft shall be not less than 17 inches (432 mm) in clear width at or above the handrail. The width below the handrail shall be not less than 20 inches (508 mm).

**AQ104.2.1.2 Headroom.** The headroom above stairways accessing a loft shall be not less than 6 feet 2 inches (1880 mm), as measured vertically from a sloped line connecting the tread, landing or platform nosings in the center of their width, and vertically from the landing platform along the center of its width.

**AQ104.2.1.3 Treads and risers.** Risers for stairs accessing a loft shall be not less than 7 inches (178 mm) and not more than 12 inches (305 mm) in height. Tread depth and riser height shall be calculated in accordance with one of the following formulas:

1. The tread depth shall be 20 inches (508 mm) minus four-thirds of the riser height.
2. The riser height shall be 15 inches (381 mm) minus three-fourths of the tread depth.

**AQ104.2.1.4 Landings.** Intermediate landings and landings at the bottom of stairways shall comply with Section R311.7.6, except that the depth in the direction of travel shall be not less than 24 inches (610 mm).

**AQ104.2.1.5 Landing platforms.** The top tread and riser of stairways accessing lofts shall be constructed as a landing platform where the loft ceiling height is less than 6 feet 2 inches (1880 mm) where the stairway meets the loft. The landing platform shall be not less than 20 inches (508 mm) in width and depth measured horizontally from and perpendicular to the nosing of the landing platform. The landing platform riser height to the loft floor shall be not less than 16 inches (406 mm) and not greater than 18 inches (457 mm).

**AQ104.2.1.6 Handrails.** Handrails shall comply with Section R311.7.8.

**AQ104.2.1.7 Stairway guards.** Guards at open sides of stairways, landings and landing platforms shall comply with Section R312.1.

**AQ104.2.2 Ladders.** Ladders accessing lofts shall comply with Sections AQ104.2.1 and AQ104.2.2.

**AQ104.2.2.1 Size and capacity.** Ladders accessing lofts shall have a rung width of not less than 12 inches (305 mm), and 10-inch (254 mm) to 14-inch (356 mm) spacing between rungs. Ladders shall be capable of supporting a 300-pound (136 kg) load on any rung. Rung spacing shall be uniform within 3/8 inch (9.5 mm).

**AQ104.2.2.2 Incline.** Ladders shall be installed at 70 to 80 degrees from horizontal.

**AQ104.2.3 Alternating tread devices.** Alternating tread devices accessing lofts shall comply with Sections R311.7.11.1 and R311.7.11.2. The clear width at and below the handrails shall be not less than 20 inches (508 mm).

**AQ104.2.4 Ships ladders.** Ships ladders accessing lofts shall comply with Sections R311.7.12.1 and R311.7.12.2. The clear width at and below handrails shall be not less than 20 inches (508 mm).

**AQ104.2.5 Loft guards.** Loft guards shall be located along the open side(s) of lofts. Loft guards shall be not less than 36 inches (914 mm) in height or one-half of the clear height to the ceiling, whichever is less. Loft guards shall comply with Section R312.1.3 and Table R301.5 for their components.

## **SECTION AQ105 EMERGENCY ESCAPE AND RESCUE OPENINGS**

**AQ105.1 General.** Tiny houses shall meet the requirements of Section R310 for emergency escape and rescue openings.

**Exception:** Egress roof access windows in lofts used as sleeping rooms shall be deemed to meet the requirements of Section R310 where installed such that the bottom of the opening is not more than 44 inches (1118 mm) above the loft floor, provided the egress roof access window complies with the minimum opening area requirements of Section R310.2.1.

## **SECTION AQ106 ENERGY CONSERVATION**

**AQ106.1 Air leakage testing.** The air leakage rate for tiny houses shall not exceed 0.30 cubic feet per minute at 50 Pascals of pressure per square foot of the dwelling unit enclosure area. The air leakage testing shall be in accordance with the testing methods required in Section R402.4.1.2 of the Florida Building Code, Energy Conservation. The dwelling unit enclosure area shall be the sum of the areas of ceilings, floors and walls that separate the conditioned space of a dwelling unit from the exterior, its adjacent unconditioned spaces and adjacent dwelling units.

**AQ106.1.1 Whole-house mechanical ventilation.** Where the air leakage rate is in accordance with Section AQ106.1, the tiny house shall be provided with whole-house mechanical ventilation in accordance with Section M1507.3.

**AQ106.2 Alternative compliance.** Tiny houses shall be deemed to be in compliance with Chapter 11 of this code and Chapter R4 of the Florida Building Code, Energy Conservation, provided that the following conditions are met:

1. The insulation and fenestration meet the requirements of Table R402.1.2 of the Florida Building Code, Energy Conservation.

2. The thermal envelope meets the requirements of Section R402.4.1.1 and Table R402.4.1.1 of the Florida Building Code, Energy Conservation.

3. Solar, wind or other renewable energy source supplies not less than 90 percent of the energy use for the structure.
4. Solar, wind or other renewable energy source supplies not less than 90 percent of the energy for service water heating.
5. Permanently installed lighting is in accordance with Section R404 of the Florida Building Code, Energy Conservation.
6. Mechanical ventilation is provided in accordance with Section M1507 and operable fenestration is not used to meet ventilation requirements

APPENDIX F  
CONSTRUCTION BUILDING CODES FOR  
TURF AND LANDSCAPE IRRIGATION SYSTEMS

TABLE OF CONTENTS

PART I: General .....2  
PART II: DESIGN CRITERIA .....6  
PART III: STANDARDS .....9  
PART IV: MATERIALS .....10  
PART V: INSTALLATION .....12  
PART VI: TESTING & INSPECTIONS .....15

## PART I: GENERAL

### A. Description.

**1. Purpose.** To establish uniform minimum standards and requirements for the design and installation of safe, cost effective, reliable irrigation systems for turf and landscape areas which promote the efficient use and protection of water and other natural resources.

**2. Definition.** Turf and landscape irrigation systems apply water by means of permanent above-ground or subsurface sprinkler or microsprinkler equipment under pressure.

**3. Scope.** These construction codes shall apply to all irrigation systems used on residential and commercial landscape areas. They address the design requirements, water quality, materials, installation, inspection, and testing for such systems. These construction codes do not apply to irrigation systems for golf courses, nurseries, greenhouses, or agricultural production systems.

**4. Application.** All new irrigation systems and any new work to existing irrigation systems shall conform to the requirements of this code.

**5. Application to existing irrigation installations.** Nothing contained in this code shall be deemed to require any irrigation system or part thereof, which existed prior to the establishment of this code, to be changed, altered or modified to meet the standards of this code.

### B. Permits.

**1. Permits required.** It shall be unlawful to construct, enlarge, alter, modify, repair, or move any irrigation system or part thereof, or to install or alter any equipment for which provision is made or the installation of which is regulated by this code without first having filed application and obtained a permit therefore from the building official. A permit shall be deemed issued when signed by the building official and impressed with the seal of the governmental agency issuing said permit.

**2. Exceptions.** All work where exempt from permit shall still be required to comply with the code. No permit shall be required for general maintenance or repairs which do not change the structure or alter the system and the value of which does not exceed \$600.00 in labor and material based on invoice value.

### C. Preconstruction submittals.

#### 1. Plans or drawings.

**a. Single-family residence.** Provide design drawings or shop drawings, where required, for the installation prior to start of construction. Design drawings shall be clearly readable, to reasonable scale, show the entire site to be irrigated, and include all improvements. Drawings can be prepared by a properly licensed qualified contractor.

**b. Commercial, industrial, municipal and multiple-family.** Provide professionally designed drawings prior to start of construction. Design drawings shall be clearly readable, to reasonable scale, show the entire site to be irrigated, including all improvements, and shall include but not be limited to: date, scale, revisions, legend, specifications which list all aspects of equipment and assembly there of, water source, water meter and/or point of connection, backflow prevention devices, pump station size, pump station location, design operating pressure and flow rate per zone, precipitation rate per zone, locations of pipe, controllers, valves, sprinklers, sleeves, gate valves, etc. The plans and specifications shall be prepared in accordance with Section 107 of the Florida Building Code, Building.

#### D. Definitions.

**ABS Pipe.** Acrylonitrile-butadiene-styrene black, semi-rigid, plastic pipe extruded to IPS. ABS pipe is in limited use in present day irrigation systems. Solvent weld fittings are used with this pipe (see ASTM D1788).

**Air Release Valve.** A valve which will automatically release to the atmosphere accumulated small pockets of air from a pressurized pipeline. A small orifice is used to release air at low flow rates. Air release valves are normally required at all summits of mainline and submain pipelines in an irrigation system.

**Anti-Siphon Device.** A safety device used to prevent back-flow of irrigation water to the water source by back-siphonage.

**Application Rate.** The average rate at which water is applied by an irrigation system, sometimes also called precipitation rate. Units are typically inches/hr or mm/hr.

**Application Uniformity.** Irrigation application uniformity (also known as distribution uniformity) describes how evenly water is distributed within an irrigation zone.

**Arc.** The angle of coverage of a sprinkler in degrees from one side of throw to the other. A 90-degree arc would be a quarter-circle sprinkler.

**Atmospheric Vacuum Breaker.** An anti-siphon device which uses a floating seat to direct water flow. Water draining back from irrigation lines is directed to the atmosphere to protect the potable water supply.

**Automatic Control Valve.** A valve in a sprinkler system which is activated by an automatic controller by way of hydraulic or electrical control lines and controls a single device or multiple devices.

**Automatic System.** An irrigation system which operates following a preset program entered into an automatic controller.

**Backflow Prevention Device.** An approved safety device used to prevent pollution or contamination of the irrigation water supply due to backflow from the irrigation system.

**Belled (Pipe).** Pipe which is enlarged at one end so that the spigot end of another length of pipe can be inserted into it during the assembly of a pipeline.

**Block (of sprinklers).** A group of sprinklers controlled by one valve. Also called zones or subunits.

**Block System.** An irrigation system in which several groups of sprinklers are controlled by one valve for each group.

**Bubbler Irrigation.** The application of water to the soil surface or a container as a small stream or fountain. Bubbler emitter discharge rates are greater than the 0.5 to 2 gph characteristic of drip emitters, but generally less than 60 gph.

**Check Valve.** A valve which permits water to flow in one direction only.

**Chemical Water Treatment.** The addition of chemicals to water to make it acceptable for use in irrigation systems

**Chemigation.** The application of water soluble chemicals by mixing or injecting with the water applied through an irrigation system.

**Contractor.** Any person who engages in the fabrication and installation of any type of irrigation system on a contractual basis in accordance with all stipulations receiving his compensation.

**Control Lines.** Hydraulic or electrical lines which carry signals (to open and close the valves) from the controller to the automatic valves.

**Controller.** The timing mechanism and its mounting box. The controller signals the automatic valves to open and close on a pre-set program or based on sensor readings.

**Coverage.** Refers to the way water is applied to an area.

**Cycle.** Refers to one complete run of a controller through all programmed controller stations.

**Demand (or irrigation demand).** Refers to the irrigation requirements of the irrigated area. Demand primarily depends on the type of crop, stage of growth, and climatic factors.

**Design Area.** The specific land area to which water is to be applied by an irrigation system.

**Design Emission Uniformity.** An estimate of the uniformity of water application with an irrigation system.

**Design Pressure.** The pressure at which the irrigation system or certain components are designed to operate. The irrigation system design pressure is that measured at the pump discharge or entrance to the system if there is no pump, and a zone design pressure is the average operating pressure of all emitters within that zone.

**Direct Burial Wire.** Plastic-coated single-strand copper wire for use as control line for electric valves.

**Discharge Rate.** The instantaneous flow rate of an individual sprinkler, emitter, or other water emitting device, or a unit length of line-source microirrigation tubing. Also, the flow rate from a pumping system.

**Double Check Valve.** An approved assembly of two single, independently-acting check valves with test ports to permit independent testing of each check valve.

**Drain Valve.** A valve used to drain water from a line. The valve may be manually or automatically operated.

**Drip Irrigation.** The precise low-rate application of water to or beneath the soil surface near or directly into the plant root zone. Applications normally occur as small streams, discrete or continuous drops, in the range of 0.5 to 2.0 gph.

**Effluent water.** Also referred to as reclaimed or gray water is wastewater which has been treated per Florida Statute, §403.086 and is suitable for use as a water supply for irrigation systems.

**Emitters.** Devices which are used to control the discharge of irrigation water from lateral pipes. This term is primarily used to refer to the low flow rate devices used in microirrigation systems.

**Fertigation.** The application of soluble fertilizers with the water applied through an irrigation system.

**Filtration System.** The assembly of physical components used to remove suspended solids from irrigation water. These include both pressure and gravity type devices, such as settling basins, screens, media filters, and centrifugal force units (vortex sand separators).

**Flexible Swing Joint.** A flexible connection between the lateral pipe and the sprinkler which allows the sprinkler to move when force is applied to it.

**Flow Meters.** Devices used to measure the volume of flow of water (typically in gallons), or flow rates (typically in gpm), and to provide data on system usage.

**Gauge (Wire).** Standard specification for wire size. The larger the gauge number, the smaller the wire diameter.

**Head.** A sprinkler head. Sometimes used interchangeably with and in conjunction with "Sprinkler."

**Infiltration Rate.** The rate of water flow across the surface of the soil and into the soil profile. Units are usually inches/hr.



**Irrigation.** Application of water by artificial means, that is, means other than natural precipitation. Irrigation is practiced to supply crop water requirements, leach salts, apply chemicals, and for environmental control including crop cooling and freeze protection.

**Irrigation Water Requirement or Irrigation Requirement.** The quantity of water that is required for crop production, exclusive of effective rainfall.

**Landscape.** Refers to any and all areas which are ornamentally planted, including but not limited to turf, ground covers, flowers, shrubs, trees, and similar plant materials as opposed to agricultural crops grown and harvested for monetary return.

**Lateral.** The water delivery pipeline that supplies water to the emitters or sprinklers from a manifold or header pipeline downstream of the control valve.

**Line-Source Emitters.** Lateral pipelines which are porous or contain closely-spaced perforations so that water is discharged as a continuous band or in overlapping patterns rather than discrete widely-spaced points along the pipeline length.

**Looped System.** A piping system which allows more than one path for water to flow from the supply to the emitters or sprinklers.

**Low Volume Sprinklers.** Sprinkler heads that emit less than 0.5 gallons per minute.

**Mainline.** A pipeline which carries water from the control station to submains or to manifolds or header pipelines of the water distribution system.

**Manifold.** The water delivery pipeline that conveys water from the main or submain pipelines to the laterals. Also sometimes called a header pipeline.

**Manual System.** A system in which control valves are manually operated rather than operated by automatic controls.

**Matched Precipitation.** An equal distribution of water over a given area or zone.

**Meter Box.** A concrete or plastic box buried flush to grade which houses flow (water) meters or other components.

**Microirrigation.** The frequent application of small quantities of water directly on or below the soil surface, usually as discrete drops, tiny streams, or miniature sprays through emitters placed along the water delivery pipes (laterals). Microirrigation encompasses a number of methods or concepts, including drip, subsurface, bubbler, and spray irrigation. Previously known as trickle irrigation.

**Overlap.** The amount one sprinkler pattern overlaps another one when installed in a pattern. Expressed as a percentage of the diameter of coverage.

**PE Pipe.** Flexible polyethylene pipe for use in irrigation systems, normally manufactured with carbon black for resistance to degradation by ultraviolet radiation.

**Potable Water.** Water which is suitable in quality for human consumption and meets the requirements of the Health Authority having jurisdiction.

**Pressure Relief Valve.** A valve which will open and discharge to atmosphere when the pressure in a pipeline or pressure vessel exceeds a pre-set point to relieve the high-pressure condition.

**Pressure Vacuum Breaker.** A backflow prevention device which includes a spring-loaded check valve and a spring-loaded vacuum breaker to prevent the backflow of irrigation system water to the water source.

**Pumping Station.** The pump or pumps that provide water to an irrigation system, together with all of the necessary accessories such as bases or foundations, sumps, screens, valves, motor controls, safety devices, shelters and fences.

**PVC Pipe.** Polyvinyl chloride plastic pipe made in standard thermoplastic pipe dimension ratios and pressure rated for water. Manufactured in accordance with AWWA C-900 or ASTM D2241.

**Rain Shut off Device.** A calibrated device that is designed to detect rainfall and override the irrigation cycle of the sprinkler system when a predetermined amount of rain fall has occurred.

**Riser.** A threaded pipe to which sprinklers or other emitters are attached for above-ground placement.

**Sleeve.** A pipe used to enclose other pipes, wire, or tubing; usually under pavement, sidewalks, or planters.

**Spacing.** The distance between sprinklers or other emitters.

**Spray Irrigation.** The microirrigation application of water to the soil or plant surface by low flow rate sprays or mists.

**Sprinkler.** The sprinkler head. Sometimes called "Head."

**Supply (Water Source).** The origin of the water used in the irrigation system.

**Swing Joint.** A ridged connection between the lateral pipe and the sprinkler, utilizing multiple ells and nipples, which allows the sprinkler to move when force is applied to it.

**Tubing.** Generally used to refer to flexible plastic hydraulic control lines which are usually constructed of PE or PVC.

## PART II: DESIGN CRITERIA

**A.Design defined.** Within the scope of this code, irrigation system design is defined as the science and art of properly selecting and applying all components within the system. The irrigation system shall be designed and installed to achieve the highest possible efficiency by providing operating pressures, sprinkler placement and nozzle selection that are within the manufacturer's recommendations, and maintained to keep the system at or within those ranges.

### **B. Water supply.**

1. The water source shall be adequate from the stand-point of volume, flow rate, pressure, and quality to meet the irrigation requirements of the area to be irrigated, as well as other demands, if any, both at the time the system is designed and for the expected life of the system. The irrigation system shall use the lowest quality water source available on site.
2. If the water source is effluent, it shall meet the advanced waste treatment standard as set forth in Florida Statute §403.086(4) as well as any other standard as set forth by the controlling governmental agency.

### **C. Application uniformity.**

- 1.Sprinkler irrigation systems should be designed with the appropriate uniformity for the type of plants being grown and the type of soil found in that area. The general watering of different types of plants as one group without regard to their individual water requirements is to be avoided.
- 2.Use sprinkler head spacing, type and nozzle selection to achieve the highest application uniformity.
- 3.Use application rates which avoid runoff and permit uniform water infiltration into the soil. Land slope, soil hydraulic properties, vegetative ground cover, and prevailing winds and sun exposure will be considered when application rates are specified. Different types of sprinklers with different application rates, i.e., spray heads vs. rotor heads, bubbler heads vs. rotor heads, shall not be combined on the same zone or circuit.

**D. System zoning.** The irrigation system should be divided into zones based on consideration of the following hydrozoning practices.

- 1.Available flow rate.

- 2.Cultural use of the area.
- 3.Type of vegetation irrigated, i.e., turf, shrubs, native plants, etc.
- 4.Type of sprinkler, i.e., sprinklers with matching precipitation rates.
- 5.Soil characteristics and slope.
- 6.Sun exposure.

**E.Sprinkler/emitter spacing and selection.**

- 1.Sprinkler/Emitter spacing will be determined considering the irrigation requirements, hydraulic characteristics of the soil and device, and water quality with its effect on plant growth, sidewalks, buildings, and public access areas.
- 2.All pop-up spray head bodies in turf areas shall be no less than 6 inches in height for St. Augustine, Zoysia and Bahia and no less than 4 inches in height for Bermuda, Centapede and Seashore Paspalum.
- 3.Sprinklers should be located in all corners and on the perimeter of each irrigated zone area for a matched precipitation rate objective.
- 4.Single row head spacing should only occur when an additional row will cause saturated soils at the toe of a slope or other inefficiencies.
- 5.All heads shall not exceed 50 percent of manufacturer's specified diameters of coverage.
- 6.Water conservation will be emphasized by minimizing irrigation of nonvegetated areas.
- 7.Microirrigation systems should be designed using the Emission Uniformity concept. Space microirrigation emitters to wet 100 percent of the root zone in turf areas and 50 percent of the root zone for shrubs and trees.
- 8.Microirrigation or low volume heads shall be required in all areas less than 4 feet in either direction.
- 9.All microirrigation zones shall have adequate filtration installed at the zone valve or at the point where the drip tubing is attached to PVC pipe to protect the emission devices from contamination from a PD main or lateral break.
- 10.Each plant shall have an adequate number and size (gph) of microirrigation devices, properly placed, to meet the plant water requirements for no rainfall.

**F. Pipelines.** Pipelines will be sized to limit pressure variations so that the working pressure at all points in the irrigation system will be in the range required for uniform water application. Velocities will be kept to 5 feet (1524 mm) per second.

**G. Wells.**

- 1.Well diameters and depths are to be sized to correspond to the irrigation system demand. Refer to SCS Code FL-642 and local water management district regulations.
- 2.Well location and depth shall be in compliance with applicable state, water management district and local codes.

**H. Pumps.**

- 1.Pump and motor combinations shall be capable of satisfying the total system demand without invading the service factor of the motor except during start-up and between zones.
- 2.Pumps shall be positioned with respect to the water surface in order to ensure that the net positive suction head required (NPSHr) for proper pump operation is achieved.

3.The pumping system shall be protected against the effects of the interruption of water flow.

**I. Control valves.**

1.Control valve size shall be based on the flow rate through the valve. Friction loss through the valve, an approved air gap separation, or a reduced pressure should not exceed 10 percent of the static mainline head.

2.Control systems using hydraulic communication between controller and valve(s) shall comply with the manufacturer's recommendations for maximum distance between controller and valve, both horizontally and vertically (elevation change).

3.The size of the electrical control wire shall be in accordance with the valve manufacturer's specifications; based on the solenoid in-rush amperage and the circuit length, considering the number of solenoids operating on the circuit. Minimum of #14 AWG single strand control wire shall be used on all systems, except individual, single lot residential systems.

4.Locate manually operated control valves so that they can be operated without wetting the operator.

5.Locate in-ground valves away from large tree and palm root zones.

6. A manual shut-off valve shall be required to be installed close to the point of connection but downstream from any backflow device to minimize water loss when the system is shut off for repairs or emergencies.

7.An automatic shut-off valve (normally closed) is required on all systems with a constantly pressurized mainline to confine the water loss from minor main line leaks, weeping valves, or stuck on valves to just the time the system is operating automatically.

**J. Automatic irrigation controller.** Automatic irrigation controllers must be UL approved and have an adequate number of stations and power output per station to accommodate the irrigation system design. The controller shall be capable of incorporating a rain shut-off device or other sensors to override the irrigation cycle when adequate rainfall has occurred as required by Florida Statutes, Section 373.62.

**K. Chemical injection.**

1.Chemical injection systems for the injection of fertilizer, pesticides, rust inhibitors, or any other injected substance will be located and sized according to the manufacturers' recommendations.

2.Injection systems will be located downstream of the applicable backflow prevention devices as required by Florida Statutes, Sections 487.021 and 487.055; the Environmental Protection Agency (EPA); Pesticide Regulation Notice 87-1; or other applicable codes.

3.If an irrigation water supply is also used for human consumption, an air gap separation or an approved reduced pressure principal backflow prevention device is required.

**L. Backflow prevention methods.** Provide backflow prevention assemblies at all cross connections with all water supplies in accordance with county, municipal or other applicable codes to determine acceptable backflow prevention assembly types and installation procedures for a given application. In the event of conflicting regulation provide the assembly type which gives the highest degree of protection.

1.Irrigation systems into which chemicals are injected shall conform to Florida state law (Florida Statutes 487.021 and 487.055) and Environmental Protection Agency Pesticide Regulation Notice 87-1, which requires backflow prevention regulations to be printed on the chemical label.

2.For municipal water supplies, chemical injection equipment must be separated from the water supply by an approved air gap separation or a reduced pressure principle assembly that is approved by the Foundation for CCC and the Hydraulic Research Institute. The equipment must also comply with ASSE 1013 to protect the water supply from back-siphonage and back-pressure.

3. For other water supplies, Florida State law, EPA regulations, or other applicable local codes must be followed. In the absence of legal guidelines at least a PVB should be used.

## **PART III: STANDARDS**

### **1. American Society of Agricultural Engineers (ASAE) Standards:**

**ASAE S330.1:** Procedure for sprinkler distribution testing for research purposes.

**ASAE S376.1:** Design, installation, and performance of underground thermoplastic irrigation pipelines.

**ASAE S397.1:** Electrical service and equipment for irrigation.

**ASAE S435:** Drip/Trickle Polyethylene Pipe used for irrigation laterals.

**ASAE S398.1:** Procedure for sprinkler testing and performance reporting.

**ASAE S339:** Uniform classification for water hardness.

**ASAE S394:** Specifications for irrigation hose and couplings used with self-propelled, hose-drag agricultural irrigation system.

**ASAE EP400.1:** Designing and constructing irrigation wells.

**ASAE EP405:** Design, installation, and performance of trickle irrigation systems.

**ASAE EP409:** Safety devices for applying liquid chemicals through irrigation systems.

### **2. ASTM International Standards:**

**ASTM D2241:** Poly (Vinyl Chloride) (PVC) Plastic pipe (SDR-PR).

**ASTM D2239:** Specification for polyethylene (PE) plastic pipe (SDR-PR).

**ASTM D2466:** Specification for socket-type poly (vinyl chloride) (PVC) and chlorinated poly (vinyl chloride) (CPVC) plastic pipe fittings, Schedule 40.

**ASTM D2855:** Standard recommended practice for making solvent cemented joints with polyvinyl chloride pipe and fittings.

**ASTM D3139:** Specification for joints for plastic pressure pipes using flexible elastomeric seals.

**ASTM F477:** Specification for elastomeric seals (gaskets for joining plastic pipe).

### **3. American Water Works Association (AWWA) standards:**

**AWWA C-900:** PVC pipe standards and specifications.

### **4. American Society of Sanitary Engineers (ASSE) Standards:**

**ASSE 1001:** Pipe applied atmospheric type vacuum breakers.

**ASSE 1013:** Reduced pressure principle backflow preventers.

**ASSE 1015:** Double check valve-type back pressure backflow preventers.

**ASSE 1020:** Vacuum breakers, anti-siphon, pressure type.

**ASSE 1024:** Dual check valve-type backflow preventers.

**5. Hydraulic Institute Standards, 14th Edition.**

**6. Standards and Specifications For Turf and Landscape Irrigation Systems Florida Irrigation Society (FIS) Standards.**

**7. Soil Conservation Service (SCS) Field Office Technical Guide, Section IV-A — Cropland Codes:**

**SCS Code 430-DD:** Irrigation water conveyance, underground, plastic pipeline.

**SCS Code 430-EE:** Irrigation water conveyance. Low pressure, underground, plastic pipeline.

**SCS Code 430-FF:** Irrigation water conveyance, steel pipeline.

**SOS Code 441-1:** Irrigation system, trickle.

**SCS Code 442:** Irrigation system sprinkler.

**SCS Code 449:** Irrigation water management.

**SCS Code 533:** Pumping plant for water control.

**SCS Code 642:** Well.

## **PART IV: MATERIALS**

### **A. PVC pipe and fittings.**

1.PVC pipe should comply with one of the following standards: ASTM D1785, ASTM D2241, AWWA C-900, or AWWA C-905. SDR-PR pipe shall have a minimum wall thickness as required by SDR-26. All pipe used with effluent water systems shall be designated for nonpotable use by either label or by the industry standard color purple.

2.All solvent-weld PVC fittings shall, at a minimum, meet the requirements of Schedule 40 as set forth in ASTM D2466.

3.Threaded PVC pipe fittings shall meet the requirements of Schedule 40 as set forth in ASTM D2464.

4.PVC gasketed fittings shall conform to ASTM D3139. Gaskets shall conform to ASTM F477.

5.PVC flexible pipe should be pressure rated as described in ASTM D2740 with standard outside diameters compatible with PVC IPS solvent-weld fittings.

6.PVC cement should meet ASTM D2564. PVC cleaner-type should meet ASTM F656.

### **B. Ductile iron pipe and fittings.**

1.Gasket fittings for iron pipe should be of materials and type compatible with the piping material being used.

### **C. Steel pipe and fittings.**

1.All steel pipe shall be rated Schedule 40 or greater and be hot-dipped galvanized or black in accordance with ASTM A53/A53M.

2.Threaded fittings for steel pipe should be Schedule 40 Malleable Iron.

### **D. Polyethylene pipe.**

1. Flexible swing joints shall be thick-walled with a minimum pressure rating of 75 psi (517 kPa) in accordance with ASTM D2239.
2. Low pressure polyethylene pipe for microirrigation systems shall conform with ASAE S-435.
3. Use fittings manufactured specifically for the type and dimensions of polyethylene pipe used.

#### **E. Sprinklers, spray heads, and emitters.**

1. Select units and nozzles in accordance with the size of the area and the type of plant material being irrigated. Sprinklers must fit the area they are intended to water without excessive overspray onto anything but the lot individual landscaped surface. Intentional direct spray onto walkways, buildings, roadways, and drives is prohibited. All sprinklers used with effluent water systems shall be designated for non-potable use by either label or by the industry standard color purple.
2. Use equipment that is protected from contamination and damage by use of seals, screens, and springs where site conditions present a potential for damage.
3. Support riser-mounted sprinklers to minimize movement of the riser resulting from the action of the sprinkler.
4. Swing joints, either flexible or rigid, shall be constructed to provide a leak-free connection between the sprinkler and lateral pipeline to allow movement in any direction and to prevent equipment damage.
5. Check valves shall be installed on any sprinkler where low point drainage occurs.
6. All tubing shall be installed under ground cover using staples at close enough intervals (24 to 36 inches) to secure the tubing and prevent it from moving through the mulch bed.

#### **F. Valves.**

1. Valves must have a maximum working pressure rating equal to or greater than the maximum pressure of the system, but not less than 125 psi (861 kPa). This requirement may be waived for low mainline pressure systems [30 psi (207 kPa) or less]. All valves used with effluent water systems shall be designated for nonpotable use by either label or by the industry standard color purple.
2. Only valves that are constructed of materials designed for use with the water and soil conditions of the installation shall be used. Valves that are constructed from materials that will not be deteriorated by chemicals injected into the system shall be used on all chemical injection systems.

#### **G. Valve boxes.**

1. Valve boxes are to be constructed to withstand traffic loads common to the area in which they are installed. They should be sized to allow manual operation of the enclosed valves without excavation.
2. Each valve box should be permanently labeled to identify its contents. All valve boxes used with effluent water systems shall be designated for nonpotable use by either label or by the industry standard color purple.

#### **H. Low voltage wiring.**

1. All low voltage wire which is directly buried must be labeled for direct burial wire. Wire not labeled for direct burial must be installed in watertight conduits, and be UL listed TWN or THHN type wire as described in the NEC. All wire traveling under any hardscape or roadway must be installed within a pipe and sleeve.
2. The size of the electrical control wire shall be in accordance with the valve manufacturer's specifications, based on the solenoid in-rush amperage and the circuit length, considering the number of solenoids operating, on the circuit. Minimum of #14 AWG single strand control wire shall be used on all systems, except single lot individual residential systems.

3. Connections are to be made using UL approved devices specifically designed for direct burial. All splices shall be enclosed within a valve box.

**I. Irrigation controllers.**

1. All irrigation controllers shall be UL listed, conform to the provisions of the National Electric Code (NEC), and be properly grounded in accordance with manufacturer's recommendations. Equip solid state controls with surge suppressors on the primary and secondary wiring, except single lot residential systems.

2. The controller housing or enclosure shall protect the controller from the hazards of the environment in which it is installed.

3. The rain switch shall be placed on a stationary structure minimum of 5-foot (1524 mm) clearance from other outdoor equipment, free and clear of any tree canopy or other overhead obstructions, and above the height of the sprinkler coverage. Soil moisture sensors and ET sensors shall be installed and monitored per manufacturer's guidelines per Florida Statutes, Section 373.62 requirements.

**J. Pumps and wells.**

1. Irrigation pump electrical control systems must conform to NEC and local building codes.

2. The pumping system shall be protected from the hazards of the environment in which it is installed.

3. Use electric motors with a nominal horsepower rating greater than the maximum horsepower requirement of the pump during normal operation. Motor shall have a service factor of at least 1.15.

4. Casings for drilled wells may be steel, reinforced plastic mortar, plastic, or fiberglass pipe. Only steel pipe casings shall be used in driven wells. Steel pipe must have a wall thickness equal to or greater than Schedule 40. See SCS code FL-642. Steel casings shall be equal to or exceed requirements of ASTM A589.

**K. Chemical injection equipment.**

1. Chemical injection equipment must be constructed of materials capable of withstanding the potential corrosive effects of the chemicals being used. Equipment shall be used only for those chemicals for which it was intended as stated by the injection equipment manufacturer.

**L. Filters and strainers.**

1. Filtration equipment and strainers constructed of materials resistant to the potential corrosive and erosive effects of the water shall be used. They shall be sized to prevent the passage of foreign material that would obstruct the sprinkler/emitter outlets in accordance with the manufacturer's recommendations.

**PART V: INSTALLATION**

**A. Pipe installation.**

1. Pipe shall be installed at sufficient depth below ground to protect it from hazards such as vehicular traffic or routine occurrences which occur in the normal use and maintenance of a property. Depths of cover shall meet or exceed SCS Code 430-DD, Water Conveyance, as follows:

**a. Vehicle traffic areas.**

Pipe Size (inches)	Depth of Cover (inches)
1/2 - 2 1/2	18
3 - 5	24
6 and larger	30

**b. All areas except vehicle traffic:**



Pipe Size (inches)	Depth of Cover (inches)
1/2 - 1 1/2	6
2 - 3	12
4 - 6	18
more than 6	24

2. Make all pipe joints and connections according to manufacturer's recommendations. Perform all solvent-weld connections in accordance with ASTM D2855.

3. Minimum clearances shall be maintained between irrigation lines and other utilities. In no case shall one irrigation pipe rest upon another. Comingling or mixing of different types of pipe assemblies shall be prohibited.

4. Thrust blocks must be used on all gasketed PVC systems. They must be formed against a solid, hand-excavated trench wall undamaged by mechanical equipment. They shall be constructed of concrete, and the space between the pipe and trench shall be filled to the height of the outside diameter of the pipe. Size thrust blocks in accordance with ASAE S-376.1.

5. The trench bottom must be uniform, free of debris, and of sufficient width to properly place pipe and support it over its entire length. Native excavated material may be used to backfill the pipe trench. However, the initial backfill material shall be free from rocks or stones larger than 1-inch in diameter. At the time of placement, the moisture content of the material shall be such that the required degree of compaction can be obtained with the backfill method to be used. Blocking or mounding shall not be used to bring the pipe to final grade.

6. Pipe sleeves must be used to protect pipes or wires installed under pavement or roadways. Use pipe sleeves two pipe sizes larger than the carrier pipe or twice the diameter of the wire bundle to be placed under the paving or roadway and extending a minimum of 3 feet beyond the paved area or as required by the Florida Department of Transportation (FDOT). Use sleeve pipe with wall thickness at least equal to the thickness of Schedule 40 or PR 160 pipe, whichever is thicker. Proper backfill and compaction procedures should be followed.

#### **B. Control valve installation.**

1. Valve installation shall allow enough clearance for proper operation and maintenance. Where valves are installed underground, they shall be provided with a valve box with cover extending from grade to the body of the valve. The top of the valve body should have a minimum of 6 inches (152 mm) of cover in nontraffic and noncultivated areas and 18 inches (457 mm) of cover in traffic areas. The valve box shall be installed so as to minimize the effect of soil intrusion within the valve box with the use of filter fabric, pea gravel, or other acceptable material. If an automatic valve is installed under each sprinkler, then the valve box may be omitted.

2. Install valve boxes so that they do not rest on the pipe, the box cover does not conflict with the valve stem or interfere with valve operation, they are flush with the ground surface and do not present a tripping hazard or interfere with routine maintenance of the landscape.

3. Install quick coupling valves on swing joints or flexible pipe with the top of the valve at ground level.

4. Any above-ground manually-operated valves on nonpotable water systems will be adequately identified with distinctive purple colored paint. Do not provide hose connections on irrigation systems that utilize nonpotable water supplies.

#### **C. Sprinkler installation.**

1. On flat landscaped areas, install sprinklers plumb. In areas where they are installed on slopes, sprinklers may be tilted as required to prevent erosion.

2. Sprinklers should be adjusted to avoid unnecessary discharge on pavements and structures.

a. Adjust sprinklers so they do not water on roads.

b. Provide a minimum separation of 4 inches (102 mm) between sprinklers and pavement.

c. Provide a minimum separation of 12 inches (305 mm) between sprinklers and buildings and other vertical structures.

d. Polyethylene (PE) nipples shall not be used in maintenance equipment traffic areas or alongside roadways and driveways.

3. Piping must be thoroughly flushed before installation of sprinkler nozzles.

4. Surface mounted and pop-up heads shall be installed on swing joints or flexible pipe.

5. Above-ground (riser mounted) sprinklers shall be mounted on Schedule 40 PVC or steel pipe and be effectively stabilized.

6. The pop-up height for sprays and rotator nozzles shall be adequate to prevent being obstructed by the turf grass blades: 6-inch height for St. Augustine, Zoysia and Bahia, 4-inch height for Bermuda, Centapede and Seashore Paspalum.

7. All microirrigation zones shall have adequate filtration installed at the zone valve or at the point where the drip tubing is attached to PVC pipe to protect the emission devices from contamination from a PVC main or lateral break.

8. All microirrigation zones shall have adequate pressure regulation installed at the zone valve or at the point where the drip tubing is attached to the PVC to ensure that all emission devices meet the manufacturer's performance standards.

9. Each plant shall have a adequate number and size (gph) of microirrigation devices, properly placed to meet the plant water requirements for no rainfall.

10. All tubing shall be installed under ground cover using staples at close enough intervals (24 to 36 inches) to secure the tubing and prevent it from moving through the mulch bed.

#### **D. Pump installation.**

1. Install pumps as per the manufacturer's recommendations. Set pumps plumb and secure to a firm concrete base. There should be no strain or distortion on the pipe and fittings. Pipe and fittings should be supported to avoid placing undue strain on the pump. Steel pipe should be used on pumps 5 horsepower (hp) or larger whenever practical.

2. Pumps must be installed in a manner to avoid loss of prime. Install suction line to prevent the accumulation of air pockets. All connections and reductions in suction pipe sizes should be designed to avoid causing air pockets and cavitation.

3. Pumps must be located to facilitate service and ease of removal. Appropriate fittings should be provided to allow the pump to readily be primed, serviced, and disconnected. Provide an enclosure of adequate size and strength, with proper ventilation, to protect the pump from the elements (except residential systems).

#### **E. Low voltage wire installation.**

1. Install low voltage wire (less than 98 volts) with a minimum depth of cover of 12 inches (305 mm) where not installed directly under the mainline.

2. Provide a sufficient length of wire at each connection to allow for thermal expansion/shrinkage.

3. As a minimum, provide a 12-inch (305 mm) diameter loop at all splices and connections.

4. Terminations at valves will have 24-inches (610 mm) minimum free wire.

5. Install all above-ground wire runs and wire entries into buildings in electrical conduit.

**Exception:** No conduit is required when wiring above ground manifolds from the valve to the ground immediately beneath it.

6. Provide common wires with a different color than the power wires (white shall be used for common wires).

7. Connections are to be made using UL approved devices specifically designed for direct burial.

8. All splices shall be enclosed within a valve box.

#### **F. Hydraulic control tubing.**

1. For hydraulic control systems, use a water supply that is filtered and free of deleterious materials, as defined by the hydraulic control system manufacturer. Install a backflow prevention device where the hydraulic control system is connected to potable water supplies.

2. Install tubing in trenches freely and spaced so that it will not rub against pipe, fittings, or other objects that could score the tubing, and with a minimum 12-inch (305 mm) diameter loop at all turns and connections. Provide a minimum depth of cover of 12 inches (305 mm).

3. Connect tubing with couplings and collars recommended by the tubing manufacturer. All splices shall be made in valve boxes. Prefill tubing with water, expelling entrapped air and testing for leaks prior to installation.

Install exposed tubing in a protective conduit manufactured from Schedule 40 UV protected PVC or electrical conduit.

## **PART VI: TESTING & INSPECTIONS**

**A. Purpose.** All materials and installations covered by the Irrigation Code shall be inspected by the governing agency to verify compliance with the Irrigation Code.

**B. Rough inspections.** Rough inspections will be performed throughout the duration of the installation. These inspections will be made by the governing agency to ensure that the installation is in compliance with the design intent, specifications, and the Irrigation Codes. Inspections will be made on the following items at the discretion of the governing agency:

1. Sprinkler layout and spacing: This inspection will verify that the irrigation system design is accurately installed in the field. It will also provide for alteration or modification of the system to meet field conditions. To pass this inspection, sprinkler/emitter spacing should be within  $\pm 5$  percent of the design spacing.

2. Pipe installation depth: All pipes in the system shall be installed to depths as previously described in this code.

3. Test all mainlines upstream of the zone valves as follows:

a. Fill the completely installed pipeline slowly with water to expel air. Allow the pipe to sit full of water for 24 hours to dissolve remaining trapped air.

b. Using a metering pump, elevate the water pressure to the maximum static supply pressure expected and hold there for a period of 2 hours, solvent-weld pipe connections shall have no leakage.

c. For gasketed pipe main lines add water as needed to maintain the pressure. Record the amount of water added to the system over the 2-hour period.

d. Use the following formulas to determine the maximum allowable leakage limit of gasketed pipe.

DUCTILE IRON:

$$L = \frac{SDP}{133,200}$$

PVC, GASKETED JOINT:

$$L = \frac{NDP}{7.400}$$

Where:

L = allowable leakage (gph),

N = number of joints,

D = nominal diameter of pipe (inches),

P = average test pressure (psi), and

S = length of pipe (ft).

e. When testing a system which contains metal-seated valves, an additional leakage per closed valve of 0.078 gph/inch of nominal valve size is allowed.

**C. Final inspection.** When the work is complete the contractor shall request a final inspection.

**1. Cross connection control and backflow prevention.**

a. Public or domestic water systems: Check that an approved backflow prevention assembly is properly installed and functioning correctly. Review the location of the assembly to check that it is not creating a hazard to pedestrians or vehicular traffic.

b. Water systems other than public or domestic water systems: Check that the proper backflow prevention assemblies are provided.

c. All assemblies that can be, will be tested by a technician certified for backflow testing by a State recognized certifying board prior to being placed into service.

**2. Sprinkler coverage testing.**

a. All sprinklers must be adjusted to minimize overspray onto buildings and paved areas. Minor tolerances shall be made to allow for prevailing winds.

b. All sprinkler controls must be adjusted to minimize runoff of irrigated water. Water application rates shall not exceed the absorption rate of the soil.

c. All sprinklers must operate at their design radius of throw. Nozzle sizes and types called for in the system design must have been used. All nozzles within the same zone shall have matched precipitation rates unless otherwise directed in order to increase efficiency by adjusting the nozzle selection to match site conditions.

d. Spray patterns must overlap as designed (a.k.a. head to head coverage) or placed to achieve the highest possible distribution uniformity using the manufacturer's specifications.

e. Sprinklers must be connected, as designed, to the appropriate zone.

f. Sprinkler heads must operate within 20 percent of the optimum operating pressure but not more than the maximum nor less than the minimum guidelines as specified by the manufacturer. If the dynamic water pressure at the site's water source(s) is too low to achieve this pressure range at the sprinklers, a booster pump or alternate source shall be required. If the dynamic water pressure at the site's water source(s) is too high to achieve this pressure range at the sprinklers, a pressure regulating device shall be required at either the source, the zone valve, or the sprinklers, or any combination thereof.

**D. Site restoration.**

1. All existing landscaping, pavement, and grade of areas affected by work must be restored to original condition or to the satisfaction of the governing authority.

Verify that the pipeline trenches have been properly compacted to the densities required by the plans and specifications.

#### **E. Record drawings.**

1. A record drawing shall be required of all irrigation systems installed on commercial and residential developments and shall contain the following information:

a. Location, type pressure and maximum flow available of all water sources.

Include limitations like days of week watering requirements.

b. Location type and size of all components including sprinklers, microirrigation, main and lateral piping, master valves, valves, moisture sensors, rain sensors, controllers, pump start relays, backflow devices, pumps, wells, etc.

c. The flow rate, application rate (inches per hour), and the operating pressure for the sprinklers and microirrigation within each zone.

d. An irrigation schedule for each zone, for each season (monthly is preferred), indicating the frequency and duration each zone should operate to meet the plant water requirements without rainfall and stay within the hydraulic capacities of the sprinkler system installed.

e. The name, address, phone, email, professional license or certification number of the installation contractor.

f. Date of installation.

g. Irrigation system maintenance schedule that shall include, but is not limited to the following:

1. routine visual inspections (at least 4 per year);

2. adjustments to components to keep sprinklers straight, at the right height;

3. aligned and unobstructed nozzles and screens cleaned;

4. filters cleaned and sensors monitored,; and

5. pressures and flows at the source and sprinklers are correct for original design.

#### **F. Irrigation system maintenance.**

a. Repairs to all irrigation components shall be done with originally installed components, equivalent components or those with greater efficiency.

b. The operation of the irrigation system outside of the normal watering window shall be allowed for evaluating, maintaining or repairing the system or its components.

#### **G. Irrigation system management.**

a. The frequency (times per week/month) and duration (minutes/hours) of the operation of each zone shall be adjusted and operate in order to meet the water needs of the plants within each zone as a supplement to rainfall. Adjustments shall be made a minimum 4 times per year to match the seasonal changes of the plants and the operational restrictions.

b. It is recommended that the schedule be adjusted monthly or controllers be properly installed and programmed to automatically adjust to maximize water savings.