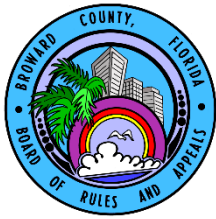


ELECTRICAL
Local Technical Amendments
to the
2020 7th Edition Florida Building Code

JURISDICTION	DOCUMENT with TECHNICAL AMENDMENT	TEXT OF TECHNICAL AMENDMENT	TAC REVIEW
Broward County	FBC – Building Ch 4 Sec 454.1.4.1 And Sec 454.2.16	<p>FBC 7th Edition, Building, Public Swimming Pools 454.1.4.1 Electrical. Electrical equipment wiring and installation, including the bonding and grounding of pool components, shall comply with Chapter 27 of the Florida Building Code, Building. Outlets supplying pool pump motors connected to single-phase 120-volt through 240- volt branch circuits, whether by receptacle or by direct connection, and outlets supplying other electrical equipment and underwater luminaires operating at voltages greater than the low voltage contact limit, connected to single-phase, 120 volt through 240 volt branch circuits, rated 15 or 20 amperes, whether by receptacle or by direct connection, shall be provided with ground-fault circuit interrupter protection for personnel. 454.1.4.1.1 Maximum voltage. The maximum voltage for each luminaire in any private swimming or bathing pools shall not exceed the Low Voltage Contact Limit, which is defined as a voltage not exceeding the following values: (1) 15 volts (RMS) for sinusoidal alternating current (2) 21.2 volts peak for nonsinusoidal alternating current (3) 30 volts continuous direct current (4) 12.4 volts peak for direct current that is interrupted at a rate of 10 to 200 Hertz The maximum incandescent lamp size shall be 300 watts.</p> <p style="text-align: center;"><u>Broward County Ch 4-Sec454.1.4.1 and Sec 454.2.16 -- 2020 FBC</u></p> <p style="text-align: center;">(Hold control button and click hyperlink to open-file too large to insert)</p>	Electrical
County of Miami-Dade	FBC-Building Sec 454 Sec 454.1.4.1,	<p><u>Miami-Dade-Local Amend Pool Lighting - Sec 454 and Sec 4206 -2020 FBC</u></p> <p style="text-align: center;">(Hold control button and click hyperlink to open-file too large to insert)</p>	Electrical

	Sec 454.1.10.4.1 Sec 454.2.16		
Pinellas County Construction Industry Licensing Board (PCCLB)	FBC – Building/ Sec 2701.1	PCCLB - Local Amends to Ch 27 - 2020 FBC (Hold control button and click hyperlink to open-file too large to insert)	Electrical
City of Winter Park	FBC Buildng Sec 2703	City of Winter Park - Sec 2703 - FBC 2020 (Hold control button and click hyperlink to open-file too large to insert)	Electrical
County of Broward	FBC Residential Sec 4501.16	Broward County-Local Amend Ch4501.16 - Max Volt-FBC 2020 (Hold control button and click hyperlink to open-file too large to insert)	Electrical



BROWARD COUNTY BOARD OF RULES AND APPEALS

ONE NORTH UNIVERSITY DRIVE
SUITE 3500-B
PLANTATION, FLORIDA 33324

PHONE: 954-765-4500

FAX: 954-765-4504

www.broward.org/codeappeal

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Chair

Mr. Daniel Lavrich,
P.E., S.I., SECB, F.ASCE, F.SEI
Structural Engineer

Vice-Chair

Mr. Stephen E. Bailey, P.E.
Electrical Engineer
Mr. John Famularo,
Roofing Contractor
Mrs. Shalanda Giles Nelson,
General Contractor
Mr. Daniel Rourke
Master Plumber
Mr. Gregg D'Attila,
Mechanical Contractor
Mr. Ron Burr
Swimming Pool Contractor
Mr. John Sims,
Master Electrician
Mr. Dennis A. Ulmer
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Mr. Abbas H. Zackria, CSI
Architect
Mr. Robert A. Kamm, P.E.
Mechanical Engineer

Vacant

Representative Disabled Community
Mr. Sergio Pellecer
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Mr. Steven Feller, P.E.
Mechanical Engineer
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General Contractor
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Mr. David Rice, P.E.
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Mr. James Terry,
Master Plumber
Mr. David Tringo,
Master Electrician
Mr. William Flett,
Roofing Contractor

Board Attorney

Charles M. Kramer, Esq.

Board Administrative Director

James DiPietro

October 13, 2020

RE: Florida Building Code – 7th Edition (2020) Building – Section 454.1.4.1 Electrical
Florida Building Code – 7th Edition (2020) Building – Section 454.2.16 Electrical

To whom it may concern:

The following amendments to the Florida Building Code – 7th Edition (2020) Building – Section 454.1.4.1 Electrical and Florida Building Code – 7th Edition (2020) Building – Section 454.2.16.1 Electrical were passed by vote of the Broward County Board of Rules and Appeals on its regular session of October 8, 2020, the effective date is December 31, 2020.

The amendments consist as follows:

- Florida Building Code – 7th Edition (2020) Building – Section 454.1.4.1 Electrical
- Florida Building Code – 7th Edition (2020) Building – Section 454.1.4.1.1
- Florida Building Code – 7th Edition (2020) Building – Section 454.2.16 Electrical
- Florida Building Code – 7th Edition (2020) Building – Section 454.2.16.1
- **Total of Paragraphs Changed: 12**

A full amended document is to be posted on the www.floridabuiding.org. If needed please feel free to contact our office 954-765-4500 – or email us at rulesboard@broward.org at any time.

Thank You,

A handwritten signature in blue ink, appearing to read "Ruth Boselli".

Ruth Boselli Administrative Coordinator
Attachments

454.1.4.1 Electrical.

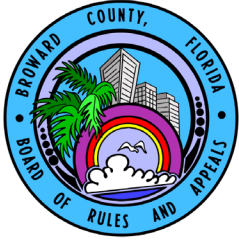
Electrical equipment wiring and installation, including the bonding and grounding of pool components, shall comply with Chapter 27 of the Florida Building Code, Building. Outlets supplying pool pump motors connected to single-phase 120-volt through 240-volt branch circuits, whether by receptacle or by direct connection, and outlets supplying other electrical equipment ~~and underwater luminaires operating at voltages greater than the low voltage contact limit~~, connected to single-phase, 120 volt through 240 volt branch circuits, rated 15 or 20 amperes, whether by receptacle or by direct connection, shall be provided with ground-fault circuit interrupter protection for personnel.

454.1.4.1.1 Maximum voltage. The maximum voltage for each luminaire in any private swimming or bathing pools shall not exceed the Low Voltage Contact Limit, which is defined as a voltage not exceeding the following values:

- (1) 15 volts (RMS) for sinusoidal alternating current
- (2) 21.2 volts peak for nonsinusoidal alternating current
- (3) 30 volts continuous direct current
- (4) 12.4 volts peak for direct current that is interrupted at a rate of 10 to 200 Hertz The maximum incandescent lamp size shall be 300 watts.

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Broward County

Board of Rules and Appeals

One N. University Drive, Suite 3500-B, Plantation, Florida 33324

TL 954.765.4500 ✦ FX 954.765.4504

<http://www.broward.org/codeappeals>

BROWARD COUNTY LOCAL AMENDMENT Proposed Modification to the Florida Building Code

Per Section 553.73, Fla Stat

Name: Broward County, Board of Rules and Appeals, ATTN: J. DiPietro _____

Address: 1 North University Dr. Suite 3500B Plantation, FL 33324 _____

E-mail: jdipietro@broward.org _____

Phone: 954-765-4500 _____

Fax: 954-765-4504 _____

Code: Florida Building Code, Building, 7th Edition (2020). Section 454.1.4.1

Text of Modification (additions underlined; deletion ~~stricken~~):

Please see attachment.

Respond to the following questions:

1. How is the local amendment more stringent than the minimum standards described in the FBC?

This amendment exceeds the minimum standards by requiring all swimming pool lighting fixtures to be low voltage (15 Volts or less) RMS for sinusoidal alternating current.

2. Demonstrate or provide evidence or data that the geographical jurisdiction governed by the local governing body exhibits a local need to strengthen the FBC beyond the needs or regional variation addressed by the FBC.

South Florida has more swimming pools than other jurisdictions, also South Florida salty environment may cause loose or broken connections on electrical equipment.

3. Explain how the local need is addressed by the proposed local amendment.

This modification will require all swimming pool lighting to be 15 volts or less RMS for sinusoidal alternating current, thereby reducing the probability of electrocution hazard of high voltage lighting in residential swimming pools.

4. Explain how the local amendment is no more stringent than necessary to address the local need.

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This modification will require all swimming pool lighting to be 15 volts or less RMS for sinusoidal alternating current, thereby reducing the probability of electrocution hazard of high voltage lighting in residential swimming pools.

5. Are the additional requirements discriminatory against materials, products, or construction techniques of demonstrated capabilities?

No.

6. Indicate whether or not additional requirements introduce a new subject not already addressed in the FBC.

The Florida Building Code currently allows the use of high voltage and low voltage types of light fixtures. Thus, by only allowing low voltage pool light fixtures to be used for pool lighting would strengthen the code.

7. Include a fiscal impact statement which documents the costs and benefits of the proposed amendment. Criteria for the fiscal impact statement shall include a, b, and c:
- a) Impact to local government, relative to enforcement.

None

- b) Impact to property and building owners relative to cost of compliance.

Less than \$50.00 per swimming pool

- c) Impact to industry relative to the cost of compliance

Less than \$50.00 per swimming pool

Broward County Board of Rules and Appeals Public hearing and vote on October 8, 2020, respectively.

Amendment Effective date: December 31, 2020.

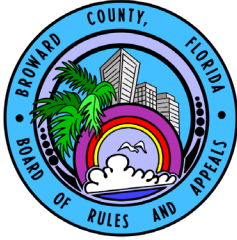
454.2.16 Electrical.

Electrical equipment wiring and installation, including the bonding and grounding of pool components, shall comply with Chapter 27 of the Florida Building Code, Building. Outlets supplying pool pump motors connected to single-phase 120-volt through 240-volt branch circuits, whether by receptacle or by direct connection, and outlets supplying other electrical equipment ~~and underwater luminaires operating at voltages greater than the low voltage contact limit~~, connected to single-phase, 120 volt through 240 volt branch circuits, rated 15 or 20 amperes, whether by receptacle or by direct connection, shall be provided with ground-fault circuit interrupter protection for personnel.

454.2.16.1 Maximum voltage. The maximum voltage for each luminaire in any private swimming or bathing pools shall not exceed the Low Voltage Contact Limit, which is defined as a voltage not exceeding the following values:

- (1) 15 volts (RMS) for sinusoidal alternating current
- (2) 21.2 volts peak for nonsinusoidal alternating current
- (3) 30 volts continuous direct current
- (4) 12.4 volts peak for direct current that is interrupted at a rate of 10 to 200 Hertz The maximum incandescent lamp size shall be 300 watts.

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Broward County

Board of Rules and Appeals

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<http://www.broward.org/codeappeals>

BROWARD COUNTY LOCAL AMENDMENT Proposed Modification to the Florida Building Code

Per Section 553.73, Fla Stat

Name: Broward County, Board of Rules and Appeals, ATTN: J. DiPietro _____

Address: 1 North University Dr. Suite 3500B Plantation, FL 33324 _____

E-mail: jdipietro@broward.org _____

Phone: 954-765-4500 _____

Fax: 954-765-4504 _____

Code: Florida Building Code, Building, 7th Edition (2020). Section 454.2.16

Text of Modification (additions underlined; deletion ~~stricken~~):

Please see attachment.

Respond to the following questions:

1. How is the local amendment more stringent than the minimum standards described in the FBC?

This amendment exceeds the minimum standards by requiring all swimming pool lighting fixtures to be low voltage (15 Volts or less) RMS for sinusoidal alternating current.

2. Demonstrate or provide evidence or data that the geographical jurisdiction governed by the local governing body exhibits a local need to strengthen the FBC beyond the needs or regional variation addressed by the FBC.

South Florida has more swimming pools than other jurisdictions, also South Florida salty environment may cause loose or broken connections on electrical equipment.

3. Explain how the local need is addressed by the proposed local amendment.

This modification will require all swimming pool lighting to be 15 volts or less RMS for sinusoidal alternating current, thereby reducing the probability of electrocution hazard of high voltage lighting in residential swimming pools.

4. Explain how the local amendment is no more stringent than necessary to address the local need.

This modification will require all swimming pool lighting to be 15 volts or less RMS for sinusoidal alternating current, thereby reducing the probability of electrocution hazard of high voltage lighting in residential swimming pools.

5. Are the additional requirements discriminatory against materials, products, or construction techniques of demonstrated capabilities?

No.

6. Indicate whether or not additional requirements introduce a new subject not already addressed in the FBC.

The Florida Building Code currently allows the use of high voltage and low voltage types of light fixtures. Thus, by only allowing low voltage pool light fixtures to be used for pool lighting would strengthen the code.

7. Include a fiscal impact statement which documents the costs and benefits of the proposed amendment. Criteria for the fiscal impact statement shall include a, b, and c:
- a) Impact to local government, relative to enforcement.

None

- b) Impact to property and building owners relative to cost of compliance.

Less than \$50.00 per swimming pool

- c) Impact to industry relative to the cost of compliance

Less than \$50.00 per swimming pool

Broward County Board of Rules and Appeals Public hearing and vote on October 8, 2020, respectively.

Amendment Effective date: December 31, 2020.

MEMORANDUM

Agenda Item No. 7(B)

TO: Honorable Chairman Jose “Pepe” Diaz
and Members, Board of County Commissioners

DATE: (Second Reading: 3-2-21)
December 15, 2020

FROM: Geri Bonzon-Keenan
County Attorney

SUBJECT: Ordinance relating to underwater
pool lighting; amending section
8-31 of the Code; enacting
local technical amendments
to the 2020 Florida Building
Code; re-enacting maximum
voltage limitations for
underwater pool lighting for
private and public swimming
pools and bathing places

Ordinance No. 21-18

The accompanying ordinance was prepared and placed on the agenda at the request of Prime Sponsor Commissioner Sally A. Heyman and Co-Sponsor Chairman Jose “Pepe” Diaz.



Geri Bonzon-Keenan
County Attorney

GBK/smm

Memorandum



Date: March 2, 2021

To: Honorable Chairman Jose "Pepe" Diaz
and Members, Board of County Commissioners

From: Daniella Levine Cava
Mayor

A handwritten signature in blue ink that reads "Daniella Levine Cava". The signature is written in a cursive style with a large, looped "D" at the beginning.

Subject: Fiscal Impact Statement for Ordinance Relating to Underwater Pool Lighting

The implementation of this ordinance will not have a fiscal impact to Miami-Dade County. Approval of this item is not anticipated to create a fiscal impact to the County, as the proposed changes will not require additional staffing resources nor generate additional operational expenses.

A handwritten signature in black ink that reads "Jimmy Morales". The signature is written in a cursive style with a large, looped "J" at the beginning.

Jimmy Morales
Chief Operations Officer

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FIS01521 202430

Memorandum



Date: March 2, 2021

To: Honorable Chairman Jose "Pepe" Diaz
and Members, Board of County Commissioners


From: Daniella Levine Cava 
Mayor

Subject: Social Equity Statement for Ordinance Relating to Underwater Pool Lighting for Private and Public Swimming Pools and Bathing Places

The proposed ordinance relating to Private and Public Swimming Pools and Bathing Places amends Section 8-31 of the Code of Miami-Dade County (Code) enacting Local Technical Amendments to the Florida Building Code 7th Edition (2020) pertaining to maximum voltage limitations for underwater pool lighting in both the incorporated and unincorporated areas of Miami-Dade County.

In order to lessen the potential for electrocution, the proposed ordinance provides a local technical amendment to the Florida Building Code to require low voltage underwater lighting in newly built public and private pools, and for permitted construction work in existing public and private pools.

This proposed ordinance will make a valuable contribution in maximizing the health and safety of all County residents and visitors by minimizing the potential for serious electrical shocks and electrocution in both public and private recreational swimming pools.



Jimmy Morales
Chief Operations Officer

202430

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MEMORANDUM
(Revised)

TO: Honorable Chairman Jose "Pepe" Diaz
and Members, Board of County Commissioners

DATE: March 2, 2021

FROM: 
Gen Bonzon-Keenan
County Attorney

SUBJECT: Agenda Item No. 7(B)

Please note any items checked.

- "3-Day Rule" for committees applicable if raised
- 6 weeks required between first reading and public hearing
- 4 weeks notification to municipal officials required prior to public hearing
- Decreases revenues or increases expenditures without balancing budget
- Budget required
- Statement of fiscal impact required
- Statement of social equity required
- Ordinance creating a new board requires detailed County Mayor's report for public hearing
- No committee review
- Applicable legislation requires more than a majority vote (i.e., 2/3's present ____, 2/3 membership ____, 3/5's ____, unanimous ____, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) ____, CDMP 2/3 vote requirement per 2-116.1(3)(h) or (4)(c) ____, or CDMP 9 vote requirement per 2-116.1(4)(c)(2) ____) to approve
- Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required

Approved *Danielle Levine Carr* Mayor
Veto _____
Override _____

Agenda Item No. 7(B)
3-2-21

ORDINANCE NO. 21-18

ORDINANCE RELATING TO UNDERWATER POOL LIGHTING; AMENDING SECTION 8-31 OF THE CODE OF MIAMI-DADE COUNTY, FLORIDA; ENACTING LOCAL TECHNICAL AMENDMENTS TO THE 2020 FLORIDA BUILDING CODE; RE-ENACTING MAXIMUM VOLTAGE LIMITATIONS FOR UNDERWATER POOL LIGHTING FOR PRIVATE AND PUBLIC SWIMMING POOLS AND BATHING PLACES; PROVIDING SEVERABILITY, INCLUSION IN THE CODE, AND AN EFFECTIVE DATE

WHEREAS, this Board desires to maximize the health and safety of County residents and visitors, and to minimize the potential for electrocution in swimming pools both public and private; and

WHEREAS, the 2010 Florida Building Code did not require low voltage lighting in private swimming pools; and

WHEREAS, the 2010 Florida Building Code was still in effect in 2014, and that year there were three serious injuries and one fatality in Miami-Dade County as a result of electrical shock and electrocution caused by underwater swimming pool lighting, as reported by local news media; and

WHEREAS, to lessen the potential for lethal electrocution and electrical shock injuries, this Board adopted Ordinance No. 14-95 on October 7, 2014, which enacted local technical amendments to the 2010 Florida Building Code, to require low voltage lighting (1) in newly built private swimming or recreational bathing pools that have underwater lighting installed, and (2) in existing private pools with underwater lighting when permitted construction work is done after the initial pool construction; and

WHEREAS, chapter 553, Florida Statutes, provides that all local technical amendments to the building code expire with each new edition of the Florida Building Code, unless readopted; and

WHEREAS, the Florida Building Code is revised, amended, and updated with new editions every three to four years; and

WHEREAS, a new Florida Building Code was adopted in 2014, and like the 2010 edition, the 2014 Florida Building Code did not require low voltage lighting in private swimming pools; and

WHEREAS, to continue to protect the public from serious injuries and deaths from electrocutions and electrical shocks in private swimming pools, this Board re-enacted local technical amendments to the 2014 Florida Building Code by adopting Ordinance No. 15-27 on May 5, 2015 reimposing the underwater pool lighting voltage limitations; and

WHEREAS, the 2017 Florida Building Code eliminated the requirement for low voltage underwater lights in public pools, thereby removing provisions which mitigated the potential for lethal electrocution and electric shock in public settings; and

WHEREAS, on October 2, 2018, this Board adopted Ordinance No. 18-121 which extended the County's local technical amendments from private swimming pools to both public and private swimming pools to continue to mitigate the potential for lethal electrocution and electric shock in private and public swimming pools; and

WHEREAS, the recently published 2020 Florida Building Code does not contain the low voltage limitations imposed by this Board's prior local technical amendments adopted in Ordinance No. 18-121; and

WHEREAS, the absence of the low voltage limitations in the 2020 Florida Building Code now necessitates enactment of a new ordinance to maintain the local technical amendments to mitigate the potential for lethal electrocution and electric shock; and

WHEREAS, the absence of any lethal electrocution and electric shock in swimming pools in Miami-Dade County since 2014, when this Board first enacted its local technical amendments imposing low voltage limitations for pool lighting, demonstrates the effectiveness of this Board's local technical amendments to the Florida Building Code; and

WHEREAS, this Board wishes to maintain the heightened public safety resulting from the local technical amendments that impose low voltage limitations for underwater lighting systems in both private and public pools,

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA:

Section 1. Incorporates and adopts the foregoing recitals as fully set forth herein.

Section 2. Section 8-31 of the Code of Miami-Dade County, Florida, is hereby amended to read as follows:¹

Sec. 8-31. - Local technical amendments to Florida Building Code.

(A) The County hereby adopts the following local technical amendments to Chapter 6 (Plumbing) of the Florida Building Code.

* * *

(C) ~~[[The County hereby adopts the following local technical amendment to Chapter 42 (Residential) of the Florida Building Code.]]~~

¹ Words stricken through and/or [[double bracketed]] shall be deleted. Words underscored and/or >>double arrowed<< constitute the amendment proposed. Remaining provisions are now in effect and remain unchanged.

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~~[[E4206.4 Underwater luminaires. The design of an underwater luminaire supplied from a branch circuit by way of a transformer or power supply meeting the requirements of Section E4206.1, shall be such that, where the fixture is properly installed without a ground fault circuit interrupter, there is no shock hazard with any likely combination of fault conditions during normal use (not relamping). The installation of the ground fault circuit interrupter shall be such that there is no shock hazard with any likely fault-condition combination that involves a person in a conductive path from any ungrounded part of the branch circuit or the luminaire to ground. Compliance with this requirement shall be obtained by the use of a listed underwater luminaire and by installation of a listed transformer or power supply for luminaires operating at not more than the low voltage contact limit. Luminaires that depend on submersion for safe operation shall be inherently protected against the hazards of overheating when not submerged. [680.23(A)(1), (A)(3), (A)(7) and (A)(8)]]]~~

~~[[E4206.4.1 Maximum voltage. The maximum voltage for each luminaire in any private swimming or recreational bathing pools shall not exceed the Low Voltage Contact Limit, which is defined as a voltage not exceeding the following values:~~

- ~~(1) — 15 volts (RMS) for sinusoidal alternating current~~
 - ~~(2) — 21.2 volts peak for nonsinusoidal alternating current~~
 - ~~(3) — 30 volts continuous direct current~~
 - ~~(4) — 12.4 volts peak for direct current that is interrupted at a rate of 10 to 200 Hertz~~
- ~~The maximum incandescent lamp size shall be 300 watts.]]]~~

~~[[~~(D)~~]] The County hereby adopts the following local technical amendment to Chapter 4 (Building) of the Florida Building Code.~~

~~[[454.1.4.1 Electrical equipment and wiring. Electrical equipment wiring and installation, including the bonding and grounding of pool components shall comply with Chapter 27 of the Florida Building Code, Building. Outlets supplying pool pump motors connected to single phase 120 volt through 240 volt branch circuits, whether by receptacle or by direct connection shall be provided with ground fault circuit interrupter protection for personnel.~~

The maximum voltage for each underwater luminaire shall not exceed the Low Voltage Contact Limit, which is defined as a voltage not exceeding the following values:

- (1) 15 volts (RMS) for sinusoidal alternating current
- (2) 21.2 volts peak for nonsinusoidal alternating current
- (3) 30 volts continuous direct current
- (4) 12.4 volts peak for direct current that is interrupted at a rate of 10 to 200 Hertz

The maximum incandescent lamp size shall be 300 watts.]]

>>454.1.10.4.1 Ground-fault circuit interrupter protection for personnel.

Outlets supplying repaired, replaced, altered, or relocated pool pump motors connected to single-phase, 120-volt through 240-volt branch circuits, whether by receptacle or by direct connection, and outlets supplying all other repaired, replaced, altered, or relocated electrical equipment connected to single-phase, 120-volt through 240-volt branch circuits, rated 15- and 20-amperes, whether by receptacle or by direct connection, shall be provided with ground-fault circuit interrupter protection for personnel.

The maximum voltage for each underwater luminaire shall not exceed the Low Voltage Contact Limit, which is defined as a voltage not exceeding the following values:

- (1) 15 volts (RMS) for sinusoidal alternating current;
- (2) 21.2 volts peak for nonsinusoidal alternating current;
- (3) 30 volts continuous direct current;
- (4) 12.4 volts peak for direct current that is interrupted at a rate of 10 to 200 Hertz.

The maximum incandescent lamp size shall be 300 watts.<<

454.2.16 Electrical.

Electrical equipment wiring and installation, including the bonding and grounding of pool components, shall comply with Chapter 27 of the Florida Building Code, Building. Outlets supplying pool pump motors connected to single-phase 120-volt through 240-volt branch circuits, whether by receptacle or by direct connection, and outlets supplying other electrical equipment >>connected to single-phase, 120 volt through 240 volt branch circuits, rated 15 or 20

amperes, whether by receptacle or by direct connection, << shall be provided with ground-fault circuit interrupter protection for personnel.

>>The maximum voltage for each underwater luminaire shall not exceed the Low Voltage Contact Limit, which is defined as a voltage not exceeding the following values:

- (1) 15 volts (RMS) for sinusoidal alternating current;
- (2) 21.2 volts peak for nonsinusoidal alternating current;
- (3) 30 volts continuous direct current;
- (4) 12.4 volts peak for direct current that is interrupted at a rate of 10 to 200 Hertz.

The maximum incandescent lamp size shall be 300 watts.<<

Section 3. If any section, subsection, sentence, clause or provision of this ordinance is held invalid, the remainder of this ordinance shall not be affected by such invalidity.

Section 4. It is the intention of the Board of County Commissioners, and it is hereby ordained that the provisions of this ordinance, including any sunset provision, shall become and be made a part of the Code of Miami-Dade County, Florida. The sections of this ordinance may be renumbered or relettered to accomplish such intention, and the word "ordinance" may be changed to "section," "article," or other appropriate word.

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Section 5. This ordinance shall become effective ten (10) days after the date of enactment unless vetoed by the Mayor, and if vetoed, shall become effective only upon an override by this Board.

PASSED AND ADOPTED: March 2, 2021

Approved by County Attorney as
to form and legal sufficiency:

Prepared by:

Eduardo W. Gonzalez

Prime Sponsor: Commissioner Sally A. Heyman
Co-Sponsor: Chairman Jose "Pepe" Diaz

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th EDITION (2020) - RESIDENTIAL

AMEND EXISTING SECTION

P2906.9.1.4 PVC plastic pipe. A purple primer that conforms to ASTM F656 shall be applied to PVC solvent-cemented joints. Solvent cement for PVC plastic pipe conforming to ASTM D 2564 shall be applied to all joint surfaces.

Exception: Clear Primer conforming to ASTM F656 may be used on any exposed PVC pipe or fittings on trim/finish work.

Local Conditions and Need: This amendment permits the use of clear primer instead of purple primer when used on exposed PVC pipe or fittings on trim/finish work.

Fiscal Impact Statement: There is no cost impact associated with this amendment.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board
FLORIDA BUILDING CODE 7th EDITION (2020) - RESIDENTIAL

AMEND EXISTING SECTION

Add:

P2903.2.1 Size of water service. The minimum size water service pipe shall be ¾" (19 mm). The size of water service mains, branch mains and risers shall be as required per Table P2903.2.1.

TABLE P2903.2.1 MINIMUM WATER SERVICE SIZE^a

TABLE P2903.2.1
MINIMUM WATER SERVICE SIZE^a

<u>NO. OF FIXTURE UNITS FLUSH TANK WC^b</u>	<u>DIAMETER OF WATER PIPE^c</u>	<u>RECOMMENDED METER SIZE (inches)^d</u>	<u>APPROX. PRESSURE LOSS METER + 100' PIPE (psi)^e</u>	<u>NO. OF FIXTURE UNITS FLUSH VALVE WC^b</u>
<u>18</u>	<u>¾</u>	<u>5/8</u>	<u>30</u>	<u>=</u>
<u>19-55</u>	<u>1</u>	<u>1</u>	<u>30</u>	<u>=</u>
<u>=</u>	<u>1</u>	<u>1</u>	<u>30</u>	<u>9</u>
<u>56-85</u>	<u>1 ¼</u>	<u>1</u>	<u>30</u>	<u>=</u>
<u>=</u>	<u>1 ¼</u>	<u>1</u>	<u>30</u>	<u>10-20</u>
<u>8-225</u>	<u>1 ½</u>	<u>1 ½</u>	<u>30</u>	<u>=</u>
<u>=</u>	<u>1 ½</u>	<u>1 ½</u>	<u>30</u>	<u>21-77</u>
<u>226-350</u>	<u>2</u>	<u>1 ½</u>	<u>30</u>	<u>=</u>
<u>=</u>	<u>2</u>	<u>1 ½</u>	<u>30</u>	<u>78-175</u>
<u>351-550</u>	<u>2</u>	<u>2</u>	<u>30</u>	<u>=</u>
<u>=</u>	<u>2</u>	<u>2</u>	<u>30</u>	<u>176-315</u>
<u>551-640</u>	<u>2 ½</u>	<u>2</u>	<u>30</u>	<u>=</u>
<u>=</u>	<u>2 ½</u>	<u>2</u>	<u>30</u>	<u>316-392</u>
<u>641-1340</u>	<u>3</u>	<u>3</u>	<u>22</u>	<u>=</u>
<u>=</u>	<u>3</u>	<u>3</u>	<u>22</u>	<u>393-940</u>

ADD TABLE FOOTNOTES:

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board
FLORIDA BUILDING CODE 7th EDITION (2020) - RESIDENTIAL

- a. Table is applicable for both copper and plastic water piping.
- b. See Table P3004.1 for fixture unit values.
- c. Minimum water service shall be ¾" to control valve.
- d. All secondary submeters and backflow assemblies shall be at least the same size as the line in which they are installed.
- e. Table based on minimum water main pressure of 50 psi.
- f. Minimum sizes for fixture supply pipe from the main or from the riser shall be from the Florida Building Code 7th Edition (2020) - Plumbing Section 604.5.
- g. Four (4) fixtures maximum (hot or cold) may connect to a one-half inch fixture water supply or as required by manufacturers' installation instructions.
- h. Where the water main pressure falls below 50 psi the next larger pipe size shall be used.
- i. Buildings above three (3) stories in height shall use the next larger pipe size.

Local Conditions and Need: Adds more limitations to control pipe sizing.

Fiscal Impact Statement: Cost per installation will be controlled due to added limitations.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th Edition (2020) – RESIDENTIAL

AMEND EXISTING SECTION

P2903.1 Water supply system design criteria. The water service and water distribution systems shall be designed and pipe sizes shall be selected such that under conditions of peak demand, the capacities at the point of outlet discharge shall not be less than shown in Table P2903.1.

EXCEPTION: For one-family, two-family, or three-family residential dwellings, when the building owner approves in writing, one bathroom group may be added to the existing hot and cold water distribution system, not to exceed a maximum of eight drainage fixture units for any fixtures added. In no case shall the additional fixtures be connected to existing hot and/or cold piping that is less than ¾" in diameter.

P2903.1.1 Applicable Sizes. The requirements of P2903.1 in the following sizes shall apply when connected to an existing approved potable system.

1. All Building Department permitted and approved onsite potable drinking water piping two-inch (2") diameter and greater than one hundred fifty (150) lineal feet in length.
2. All Building Department permitted and approved onsite potable drinking water piping of greater than two-inch (2") diameter and greater than fifty (50) lineal feet in length.
3. All Building Department permitted and approved onsite potable drinking water piping in size(s) and length(s) adequate to contain twenty (20) gallons or more. (Volume = .0408 x diameter² x length in feet).
4. Any size or length water pipe that has been subjected to contamination will require disinfection.

Local Conditions and Need: This amendment will provide building owners flexibility when adding one bathroom group to an existing hot and/or cold water distribution system. It also strengthens this section by clarifying that disinfection is not required every time work is performed on a plumbing system. This makes the section more stringent because it clarifies what was a wide range of interpretations. Materials in the code and installation procedures will not change.

Fiscal Impact Statement: Implementation of this amendment will result in a cost reduction by recognizing that a plumbing system test may not be required every time work is done on a potable plumbing line.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th EDITION (2020) - RESIDENTIAL

AMEND EXISTING SECTION

P2705.1 General. The installation of fixtures shall conform to the following:

1. Floor-outlet or floor-mounted fixtures shall be secured to the drainage connection and to the floor, where so designed, by screws, bolts, washers, nuts and similar fasteners of copper, copper alloy or other corrosion-resistant material.
2. Wall-hung fixtures shall be rigidly supported so that strain is not transmitted to the plumbing system.
3. Where fixtures come in contact with walls and floors, the contact area shall be water tight.
4. Plumbing fixtures shall be usable and functionally accessible.
5. Water closets, lavatories and bidets. A water closet, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition or vanity or closer than 30 inches (762 mm) center-to-center between adjacent fixtures. There shall be a clearance of not less than 21-inch (533 mm) in front of a water closet, lavatory or bidet to any wall, fixture or door in accordance with the fixture spacing requirements of Section R307.1.
6. The location of piping, fixtures or equipment shall not interfere with the operation of windows or doors.
7. In flood hazard areas as established by Table R301.2(1), plumbing fixtures shall be located or installed in accordance with Section R322.1.6.
8. Integral fixture-fitting mounting surfaces on manufactured plumbing fixtures or plumbing fixtures constructed on site, shall meet the design requirements of ASME A112.19.2/CSA B45.1 or ASME A112.19.3/CSA B45.4.

Local Conditions and Need: This amendment brings awareness to the plumbing fixture spacing requirements located in both sections of the code.

Fiscal Impact Statement: There is no cost impact associated with this amendment.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th EDITION (2020) - RESIDENTIAL

AMEND EXISTING SECTION

M1411.3 Condensate disposal. Condensate from cooling coils and evaporators shall be conveyed from the drain pan outlet to an *approved* place of disposal. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than 1/8 unit vertical in 12 units horizontal (1-percent slope). Condensate shall not discharge into a street, alley or other areas where it would cause a nuisance. All primary condensate drain lines installed within unconditioned areas shall be insulated with insulation having a thermal resistivity of not less than R-3.

Local Conditions and Need: This amendment requires all horizontal primary condensate drain within unconditioned areas shall be insulated.

Fiscal Impact Statement: The cost impact associated with this amendment is minimal.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th Edition (2020) – RESIDENTIAL

AMEND EXISTING SECTION

G2415.15 Outlet closures. Gas *outlets* that do not connect to *appliances* shall be capped gas tight and shall be labeled with a weatherproof label stating “Connection of a gas appliance to this outlet in the future will require a permit and inspection.” Appliance shutoff valves required by G2420.5 [409.5] shall be installed only at the time of appliance connection to gas outlets.

Exception: *Listed* and *labeled* flush-mounted-type quick-disconnect devices and *listed* and *labeled* gas convenience outlets shall be installed in accordance with the manufacturer’s instructions.

Local Conditions and Need: Adds limitations to control future connections to gas outlets.

Fiscal Impact Statement: Cost increase to provide label is insignificant.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th EDITION (2020) - PLUMBING

AMEND EXISTING SECTION

705.10.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F656 shall be applied. Clear Primer conforming to ASTM F656 may be used on any exposed PVC pipe or fittings on trim/finish work. Solvent cement not purple in color and conforming to ASTM D2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent-cement joints shall be permitted above or below ground.

Exception: A primer is not required where both of the following conditions apply:

1. The solvent cement used is third-party certified as conforming to ASTM D2564.
2. The solvent cement is used only for joining PVC drain, waste and vent pipe and fittings in non-pressure applications in sizes up to and including 4 inches (102 mm) in diameter.

Local Conditions and Need: This amendment permits the use of clear primer instead of purple primer when used on exposed PVC pipe or fittings on trim/finish work.

Fiscal Impact Statement: There is no cost impact associated with this amendment.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th EDITION (2020) - PLUMBING

AMEND EXISTING SECTION

SECTION 610 DISINFECTION OF POTABLE WATER SYSTEM

610.2 Applicable Sizes. The requirements of 610.1 in the following sizes shall apply when connected to an existing approved potable system.

1. All Building Department permitted and approved onsite potable drinking water piping two-inch (2") diameter and greater than one hundred fifty (150) lineal feet in length.
2. All Building Department permitted and approved onsite potable drinking water piping of greater than two-inch (2") diameter and greater than fifty (50) lineal feet in length.
3. All Building Department permitted and approved onsite potable drinking water piping in size(s) and length(s) adequate to contain twenty (20) gallons or more. (Volume = .0408 x diameter² x length in feet).
4. Any size or length water pipe that has been subjected to contamination will require disinfection.

Local Conditions and Need: This amendment strengthens this section by clarifying that disinfection is not required every time work is performed on a plumbing system. This makes the section more stringent because it clarifies what was a wide range of interpretations. Materials in the code and installation procedures will not change.

Fiscal Impact Statement: Implementation of this amendment will result in a cost reduction by recognizing that a plumbing system test may not be required every time work is done on a potable plumbing line.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th EDITION (2020) - PLUMBING

AMEND EXISTING SECTION

605.21.3 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F656 shall be applied. Solvent cement not purple in color and conforming to ASTM D2564 or CSA B137.3 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent-cement joints shall be permitted above or below ground.

Exception: Clear Primer conforming to ASTM F656 may be used on any exposed PVC pipe or fittings on trim/finish work.

Local Conditions and Need: This amendment permits the use of clear primer instead of purple primer when used on exposed PVC pipe or fittings on trim/finish work.

Fiscal Impact Statement: There is no cost impact associated with this amendment.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th Edition (2020) – FUEL GAS

AMEND EXISTING SECTION

404.15 Outlet closures. Gas *outlets* that do not connect to *appliances* shall be capped gas tight and shall be labeled with a weatherproof label stating “Connection of a gas appliance to this outlet in the future will require a permit and inspection.” Appliance shutoff valves required by G2420.5 [409.5] shall be installed only at the time of appliance connection to gas outlets.

Exception: *Listed* and *labeled* flush-mounted-type quick-disconnect devices and *listed* and *labeled* gas convenience outlets shall be installed in accordance with the manufacturer’s instructions.

Local Conditions and Need: Adds limitations to control future connections to gas outlets.

Fiscal Impact Statement: Cost increase to provide label is insignificant.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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**FLORIDA BUILDING CODE 7th Edition (2020) - BUILDING
AMEND EXISTING SECTION**

1510.10 Mechanical Units.

Roof mounted mechanical units shall be mounted on curbs raised a minimum of 8 inches (203 mm) above the roof surface, or where roofing materials extend beneath the unit, on raised equipment supports providing a minimum clearance height in accordance with Table 1510.10.

Exception: In buildings where the existing rooftop equipment, in the opinion of the building official, provides sufficient clearance to repair, recover, replace and/or maintain the roofing system or any of its components, such existing equipment need not comply with Table 1510.10.

TABLE 1510.10	
CLEARANCE BELOW RAISED ROOF	
MOUNTED MECHANICAL UNITS	
WIDTH OF MECHANICAL UNIT (inches)	MINIMUM CLEARANCE ABOVE SURFACES (inches)
< 24	14
24 < 36	18 -14
36 < 48	24 -14
48 < 60	30 -14
> 60	48

For SI: 1 inch = 25.4 mm.

Exception: When removing or replacing roof mounted mechanical units for individual units and/or spaces within multi-unit buildings the individual units may be reinstalled utilizing the existing system of attachment. At such time of reroofing of the building all mechanical units must be brought into compliance with this code section.

Local Conditions and Need: This amendment strengthens this code section when dealing with replacement of individual mechanical units by requiring that all roof mounted mechanical units comply with the code section upon reroofing the building.

Fiscal Impact Statement: By providing the exemption, costs to individual unit Owners/Leaseholders would be reduced by waiving the requirements to provide attachment/wind load engineering, material and equipment to elevate the mechanical units to comply with Table 1510.10 and Building Department plan review.

By requiring all mechanical units to comply upon reroofing, engineering, material and Building Department plan review costs limited to a single instance thereby reducing the overall cost to comply with this code section and conform the intent of reducing future reroofing costs.

LOCAL TECHNICAL AMENDMENT

FLORIDA BUILDING CODE 7th Edition (2020) - BUILDING

As currently written the code section does not take into account that in the event that a building requiring reroofing prior to all mechanical units having been brought into compliance effectively has experienced no net gain or ease of reroofing by having performed compliance by piecemeal/incomplete methods.

Effective Date: Upon Board Approval and posting on the Commission Website.
This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th EDITION (2020) – BUILDING

NFPA 70 NATIONAL ELECTRICAL CODE

2701.1 Scope. The provisions of this chapter and NFPA 70 shall govern the design, construction, erection and installation of the electrical components, appliances, equipment and systems used in buildings and structures covered by this code. The Florida Fire Prevention Code and NFPA 70 shall govern the use and maintenance of electrical components, appliances, equipment and systems. The Florida Building Code, Existing Building and NFPA 70 shall govern the alteration, repair, relocation, replacement and addition of electrical components, appliances, equipment and systems.

AMEND EXISTING NEC SECTION

Article 250.96 Bonding Other Enclosures.

(A) **General.** Metal raceways, cable trays, cable armor, cable sheath, enclosures, frames, fittings, and other metal non-current-carrying parts that are to serve as equipment grounding conductors, with or without the use of supplementary equipment grounding conductors, shall be bonded where necessary to ensure electrical continuity and the capacity to conduct safely any fault current likely to be imposed on them. Any nonconductive paint, enamel, or similar coating shall be removed at threads, contact points, and contact surfaces or be connected by means of fittings designed so as to make such removal unnecessary. All raceways shall contain an equipment-grounding conductor sized in accordance with Table 250.122.

Local Conditions and Need: This amendment assures a positive return path for faults.

Fiscal Impact Statement: Minimal cost impact associated with this amendment since this requirement has been in effect in Pinellas County since 1987.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

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LOCAL TECHNICAL AMENDMENT
Pinellas County Construction Licensing Board (PCCLB)
FLORIDA BUILDING CODE 7th EDITION (2020) - BUILDING

AMEND EXISTING SECTION

1609.3 Ultimate design wind speed. 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 1609.4. 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 speeds are approved and adopted as follows: All incorporated and unincorporated Pinellas County, Risk Category I – 135 MPH with interpolation permitted as allowed in the Code and ASCE 7-16; Risk Category II – 145 MPH with interpolation permitted as allowed in the Code and ASCE 7-16; Risk Category III – 155 MPH with interpolation permitted as allowed in the Code and ASCE 7-16; Risk Category IV – 157 MPH with interpolation permitted as allowed in the Code and ASCE 7-16 ~~lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores wherever possible.~~

Local Conditions and Need: This amendment defines Pinellas County's basic wind speed designations.

Fiscal Impact Statement: This amendment adopts Pinellas County's minimum basic wind speeds. There is no cost impact associated with this amendment.

Effective Date: Upon Board Approval and posting on the Commission Website.

Effect of Implementation: This amendment if implemented would not discriminate against materials, products, or construction techniques of demonstrated capabilities.

ORDINANCE 3204-21

AN ORDINANCE OF THE CITY OF WINTER PARK, FLORIDA, RELATING TO BUILDINGS; AMENDING CHAPTER 22 TO INCORPORATE TECHNICAL AMENDMENTS TO THE FLORIDA BUILDING CODE REQUIRING ELECTRIC VEHICLE CHARGING PROVISIONS TO THE WINTER PARK BUILDING CODE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Florida Building Code Act of 1998 directed the Florida Building Commission to establish a statewide uniform building code known as the Florida Building Code; and

WHEREAS, the Seventh Edition of the Florida Building Code shall be in effect throughout the State of Florida as of December 31, 2020; and

WHEREAS, the enforcement of the Florida Building Code is the responsibility of local governments; and

WHEREAS, the City of Winter Park actively participates in the enforcement of building construction regulation for the benefit of the public health, safety and welfare of its citizens; and

WHEREAS, the City of Winter Park desires to facilitate the enforcement of the Florida Building Code by enacting technical amendments which meet the needs of its citizens; and

WHEREAS, according to the U.S. Department of Energy, the benefits of electric vehicles include improved air quality, reduction of carbon emissions, quieter and more livable streets, and decreased dependency on fossil fuels;

WHEREAS, the City of Winter Park is located within an urban area which is subject to ever increasing levels of carbon emissions generated by fossil fuel powered engines which over time will result in mandatory vehicle emissions testing and potential loss of Federal transportation dollars due to inability to meet healthy air quality levels (See attached document entitled "Orange County FACT SHEET, Transportation-Critical Air Quality Considerations, November, 2019). The City of Winter Park houses within its boundaries one of only two air quality monitoring stations within Orange County that capture samples for measurement needed for local compliance with Federal regulations.

WHEREAS, a significant number of industry stakeholders are urging electric utilities to support the buildout of electric vehicle infrastructure to aid the development of the electric vehicle usage which in turn will decarbonize the transportation sector, promote energy independence, and increase electric retail sales resulting in a net benefit to all stakeholders;

WHEREAS, Florida ranks within the top five states nationally for sales of electric vehicles; and Winter Park has seen a substantial increase of electric vehicles among residents and visitors to the City;

WHEREAS, the City should continue its support of plug-in electric vehicles and its efforts in constructing electric vehicle and plug-in hybrid electric vehicle charging infrastructure as this further supports the City's Sustainability Action Plan;

WHEREAS, the proposed amendment is consistent with the City's Vision of Winter Park as the city of arts and culture, cherishing its traditional scale and charm while building a healthy and sustainable future for all generations;

WHEREAS, the Construction Board of Adjustments & Appeals, has considered the proposed amendments to Building Code, more specifically described herein, and submitted its recommendation to the City Commission;

WHEREAS, the City Commission, after notice and public hearing, has considered the proposed amendments to Building Code, the recommendations of the Construction Board of Adjustments & Appeals and all public comments;

WHEREAS, the City Commission hereby makes findings that certain technical amendments for the provision of electric vehicle infrastructure and stations are needed for the health, safety and public welfare of its citizens; and

WHEREAS, the City finds that such local technical amendments to the Florida Building Code adopted pursuant to this Ordinance meet the requirements for local amendments pursuant to section 553.73(4)(b), Florida Statutes; and

WHEREAS, the City finds that such local technical amendments adopted pursuant to this Ordinance are no more stringent than necessary to address the local needs for same, the additional requirements are not discriminatory against materials, products, or construction techniques of demonstrated capabilities, and the additional requirements do not introduce a new subject not addressed in the Florida Building Code; and

WHEREAS, the City has determined that all technical amendments enacted hereby are based upon a review of local conditions, which review demonstrates by evidence or data that the City exhibits a local need to strengthen the Florida Building Code beyond the needs or regional variation addressed by the Florida Building Code; and

WHEREAS, the City has and shall make readily available, in usable format, all technical amendments adopted as referenced herein, and the City has considered and shall include

in its transmittal to the Florida Building Commission a fiscal impact statement which documents the costs and benefits of the proposed technical amendment. Such fiscal impact state includes the impact to local government relative to enforcement, the impact to property and building owners, as well as to industry, relative to the cost of compliance; and

NOW, THEREFORE, BE IT ENACTED by the people of the City of Winter Park, Florida, as follows:

Section 1. All of the "WHEREAS" clauses mentioned above are fully incorporated herein.

Section 2. Article II, "Building Code," Chapter 22 of the Code of Ordinances of the City of Winter Park is hereby amended within Section 22-28, Sub-section 2703 to read as follows:

Technical amendments to the Florida Building Code:

Florida Building Code, Building Volume

Section 2703 shall be added as follows:

2703 Electric Vehicle Charging Station Infrastructure and Electric Vehicle Parking Space Requirements.

Section 2703.1 Intent and purpose. The intent of this section is to facilitate and encourage the use of electric vehicles and to expedite the establishment of a convenient, cost-effective electric vehicle infrastructure that will also accommodate future technology advancements.

Section 2703.2 Electric Vehicle Charging Station Infrastructure, Readiness requirements and technical criteria for buildings is hereby adopted as referenced herein and in Section 58-86 (5) of the Land Development Code.

- a) Intent and purpose. The intent of this section is to facilitate and encourage the use of electric vehicles and to expedite the establishment of a convenient, cost-effective electric vehicle infrastructure that will also accommodate future technology advancements.
- b) Definitions. For the purposes of this section, the following definitions shall apply:
 1. Electric vehicle means any motor vehicle registered to operate on public roadways that operates either partially or exclusively on electric energy. Electric vehicles include: (a) Battery-powered electric vehicles; (b) Plug-in hybrid electric vehicles; (c) electric motorcycles; and (d) Fuel cell vehicles.

2. Electric vehicle charging level means the standardized indicators of electrical force, or voltage, amps and kilowatts by which an electric vehicle's batteries are recharged. EV recharging equipment is commonly known as Electric Vehicle Service Equipment (EVSE) and can output either Alternating Current (AC) or Direct Current (DC). EVSE are technically not chargers, they are power supply units, the charger is on board the vehicle. The onboard charger helps manage the charging session and converts an AC input to DC to charge the vehicle's batteries; if a DC input is supplied the charger passes the power directly to the batteries. The terms Level1 (L1), Level2 (L2), and Level3 (L3) are the most common charging levels; L3 is also referred to DCFC or DC Fast Charging, and include the following specifications:
 - a) Level-1 is considered slow charging. Voltage including the range from 0 through 120volts.
 - b) Level-2 is considered medium charging. Voltage is greater than 120 volts, up to 240 volts.
 - c) Level-3 is considered fast or rapid charging, is also referred to DCFC or DC Fast Charging. Voltage is greater than 240 volts.
 3. Electric vehicle charging station means battery charging station equipment that has as its primary purpose the transfer of electric energy (by conductive or inductive means) to a battery or other energy storage device in an electric vehicle.
 4. Electric vehicle charging station infrastructure means conduit/wiring, structures, machinery, and equipment necessary and integral to support an electric vehicle, including battery charging stations and rapid charging stations.
 5. Electric vehicle parking space means any off-street parking space that is equipped with an electric vehicle charging station that is exclusively for use by electric vehicles.
 6. Multi-family project means occupancy classifications listed as Residential Groups R-1, R-2 and R-4 as defined in Section 310 of the Florida Building Code and the parking lot(s) serving those occupancies.
 7. Non-residential project means occupancy classifications listed in Sections 303-309 and 311 and 312 of the Florida Building Code and the parking lot(s) serving those occupancies.
- c) Readiness requirements –multi-family and non-residential projects. In order to proactively plan for and accommodate the anticipated future growth in market demand for electric vehicles, all new development shall provide electric vehicle charging station infrastructure per this section. The infrastructure shall be installed

per the requirements of the Florida Building Code, Chapter 27, Section 2701 in accordance with NFPA 70 (National Electric Code) for the installation.

1. Readiness requirements for new multi-family residential projects that require a Conditional Use, shall be determined as part of the Conditional Use approval process as referenced in the Land Development Code, Article III, "Zoning Regulations" Section 58-86 (5)(c).
 2. Non-residential properties with surface parking or parking structures, shall provide the electrical capacity and buried raceway necessary to accommodate the future hardwire installation, at the minimum, a Level-2 vehicle charging station, for a minimum ratio of 10% of the total required parking spaces. Electric vehicle parking spaces provided in excess of the required electric vehicle parking spaces shall be counted toward meeting the readiness requirement. Required electric vehicle parking spaces shall not count toward meeting the readiness requirement also referenced in the Land Development Code, Article III, "Zoning Regulations" Section 58-86 (5)(c).
- d) Electric vehicle parking space requirement for multi-family residential and non-residential properties. Electrical vehicle parking requirements for new multi-family residential projects that require a Conditional Use, shall be determined as part of the Conditional Use approval process. All non-residential properties (commercial, office, institutional or industrial uses, or any combination thereof) are required to provide one electric vehicle parking space equipped with an electrical vehicle charging station per every 20 required off-street parking spaces (such spaces shall be counted toward meeting the overall parking requirement and any EV parking spaces in excess of the required electric vehicle parking spaces shall count toward meeting the readiness requirement; required electric vehicle parking spaces shall not count toward meeting the readiness requirement) in accordance with the following standards:
1. Minimum standards. Electric vehicle parking spaces shall, at a minimum, be equipped with an electric vehicle charging station rated at electric vehicle charging Level 2.
 2. Exclusive use. Electric vehicle parking spaces shall be reserved for the exclusive use of electric vehicles, actively engaged in a recharging session.
 3. Fees. Nothing herein shall prohibit the charging of a fee for the use of an electric vehicle charging station by a resident, guest, invitee or employee.
 4. ADA Accessible Spaces. A minimum of one (1) electric vehicle parking space must be located adjacent to a required accessible parking space such that the electric vehicle charging station can be shared between an accessible parking space and electric vehicle parking space. A minimum five (5) feet

wide accessway must be provided by the accessible electric vehicle parking space if the accessway is not already provided as part of the planned accessible parking space.

5. Lighting. Site lighting shall be provided where an electric vehicle charging station is installed.
 6. Equipment Standards and Protection. Battery charging station outlets and connector devices shall be no less than 36 inches and no higher than 48 inches from the surface where mounted. Equipment mounted on pedestals, lighting posts, bollards, or other devices shall be designed and located as to not impede pedestrian travel or create trip hazards on sidewalks. Adequate battery charging station protection, such as concrete-filled steel bollards, shall be used. Curbing may be used in lieu of bollards, if the battery charging station is setback a minimum of 24 inches from the face of the curb.
 7. Signage. (1) Information shall be posted identifying voltage and amperage levels and any time of use, fees, or safety information related to the electric vehicle charging station. (2) Each electric vehicle charging station space shall be posted with signage indicating the space is only for electric vehicle charging purposes. For purposes of this subsection, "charging" means that an electric vehicle is parked at an electric vehicle charging station and is connected to the battery charging station equipment and is actively charging. (3) Restrictions shall be included on the signage, if removal provisions are to be enforced by the property owner pursuant to state statutes.
 8. Maintenance. Electric vehicle charging stations shall be maintained in good condition in all respects, including the functioning of the equipment, by the property owner. Removal of any required EV charging stations is prohibited. A phone number or other contact information shall be provided on the equipment for reporting when the equipment is not functioning or other problems are encountered.
- e) Exceptions. Where the installation of one or more electric vehicle parking spaces, or the installation of electric vehicle charging station infrastructure to allow for the future installation of electric vehicle charging stations are required by this article, an exception may be granted by the Building Official through the site plan approval process only where it is demonstrated that the extension of the electrical power supply to the effected location is physically impractical. Financial impracticality is not a valid criterion for granting such an exception.

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Section 3. It is the intention of the city commission of the city that the provisions of this ordinance shall become and be made a part of the Code of Ordinances of the city; and that sections of this ordinance may be numbered or renumbered or lettered or relettered and the word "ordinance" may be changed to "chapter," "section," "article," or such other appropriate word or phrase in order to accomplish such intentions; and regardless of whether such inclusion in the code is accomplished, sections of this ordinance may be numbered or renumbered or lettered or relettered and typographical errors which do not affect the intent may be authorized by the city manager, without need of public hearing, by filing a corrected or recodified copy of same with the city clerk.

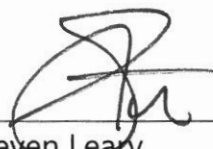
Section 4. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 5. If any section, subsection, sentence, clause, phrase of this ordinance, or the particular application thereof shall be held invalid by any court, administrative agency, or other body with appropriate jurisdiction, the remaining section, subsection, sentences, clauses or phrases under application shall not be affected thereby.

Section 6. This ordinance enacting amendments to the Florida Building Code shall be transmitted to the Florida Building Commission within 30 days.


Section 7. Effective Date. Once adopted, this Ordinance shall not become effective until July 15, 2021 and after this Ordinance has been received by and the amendments set forth in Section 2 of this Ordinance are published by the Florida Building Commission for 30 days.

ADOPTED at a regular meeting of the City Commission of the City of Winter Park, Florida, held at City Hall, Winter Park, Florida, on the 10th day of March, 2021.

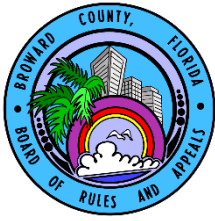


Mayor Steven Leary

Attest:



City Clerk Rene Cranis



BROWARD COUNTY BOARD OF RULES AND APPEALS

ONE NORTH UNIVERSITY DRIVE
SUITE 3500-B
PLANTATION, FLORIDA 33324

PHONE: 954-765-4500
FAX: 954-765-4504

www.broward.org/codeappeal

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Chair

Mr. Daniel Lavrich,
P.E., S.I., SECB, F.ASCE, F.SEI
Structural Engineer

Vice-Chair

Mr. Stephen E. Bailey, P.E.
Electrical Engineer
Mr. John Famularo,
Roofing Contractor
Mrs. Shalanda Giles Nelson,
General Contractor
Mr. Daniel Rourke
Master Plumber
Mr. Gregg D'Attila,
Mechanical Contractor
Mr. Ron Burr
Swimming Pool Contractor
Mr. John Sims,
Master Electrician
Mr. Dennis A. Ulmer
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Architect
Mr. Robert A. Kamm, P.E.
Mechanical Engineer
Mr. Sergio Pellecer
Fire Service Professional

Vacant

Representative Disabled Community

2020 Alternate Board Members

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Mr. Steven Feller, P.E.
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Mr. Alberto Fernandez,
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Fire Service
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Structural Engineer
Mr. David Rice, P.E.
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Mr. James Terry,
Master Plumber
Mr. David Tringo,
Master Electrician
Mr. William Flett,
Roofing Contractor

Board Attorney

Charles M. Kramer, Esq.

Board Administrative Director

James DiPietro

October 12, 2020

**RE: Florida Building Code - 7th Edition (2020) - Residential – R4501.16
Electrical.**

To whom it may concern:

The following amendment to the Florida Building Code - 7th Edition (2020) Residential – R4501.16 Electrical was passed by vote of the Broward County Board of Rules and Appeals on its regular session of October 8, 2020, the effective date is December 31, 2020.

The amendments consist as follows:

Section – Residential – R4501.16 Electrical.

Sub-Section R4501.16.1 Maximum voltage. (new)

- **Total of paragraphs changed : 6**

A full amended document is to be posted on the www.floridabuilding.org, if needed please feel free to contact our office 954-765-4500 - or email us at rulesboard@broward.org at any time.

Thank you,

A handwritten signature in blue ink, appearing to read "Ruth Boselli".

Ruth Boselli
Administrative Coordinator

Attachments

R4501.16 Electrical.

Electrical equipment wiring and installation, including the bonding and grounding of pool components, shall comply with Chapter 27 of the Florida Building Code, Building. Outlets supplying pool pump motors connected to single-phase 120-volt through 240-volt branch circuits, whether by receptacle or by direct connection, and outlets supplying other electrical equipment ~~and underwater luminaires operating at voltages greater than the low voltage contact limit~~, connected to single-phase, 120 volt through 240 volt branch circuits, rated 15 or 20 amperes, whether by receptacle or by direct connection, shall be provided with ground-fault circuit interrupter protection for personnel.

R4501.16.1 Maximum voltage. The maximum voltage for each luminaire in any private swimming or bathing pools shall not exceed the Low Voltage Contact Limit, which is defined as a voltage not exceeding the following values:

- (1) 15 volts (RMS) for sinusoidal alternating current
- (2) 21.2 volts peak for nonsinusoidal alternating current
- (3) 30 volts continuous direct current
- (4) 12.4 volts peak for direct current that is interrupted at a rate of 10 to 200 Hertz The maximum incandescent lamp size shall be 300 watts.

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BROWARD COUNTY LOCAL AMENDMENT
Proposed Modification to the Florida Building Code

Per Section 553.73, Fla Stat

Name: Broward County, Board of Rules and Appeals, ATTN: J. DiPietro _____
Address: 1 North University Dr. Suite 3500B Plantation, FL 33324 _____
E-mail: jdipietro@broward.org _____
Phone: 954-765-4500 _____
Fax: 954-765-4504 _____
Code: Florida Building Code, Building, 7th Edition (2020). Section R4501.16
Text of Modification (additions underlined; deletion ~~stricken~~):
Please see attachment.

Respond to the following questions:

1. How is the local amendment more stringent than the minimum standards described in the FBC?

This amendment exceeds the minimum standards by requiring all swimming pool lighting fixtures to be low voltage (15 Volts or less) RMS for sinusoidal alternating current.

2. Demonstrate or provide evidence or data that the geographical jurisdiction governed by the local governing body exhibits a local need to strengthen the FBC beyond the needs or regional variation addressed by the FBC.

South Florida has more swimming pools than other jurisdictions, also South Florida salty environment may cause loose or broken connections on electrical equipment.

3. Explain how the local need is addressed by the proposed local amendment.

This modification will require all swimming pool lighting to be 15 volts or less RMS for sinusoidal alternating current, thereby reducing the probability of electrocution hazard of high voltage lighting in residential swimming pools.

4. Explain how the local amendment is no more stringent than necessary to address the local need.

This modification will require all swimming pool lighting to be 15 volts or less RMS for sinusoidal alternating current, thereby reducing the probability of electrocution hazard of high voltage lighting in residential swimming pools.

5. Are the additional requirements discriminatory against materials, products, or construction techniques of demonstrated capabilities?

No.

6. Indicate whether or not additional requirements introduce a new subject not already addressed in the FBC.

The Florida Building Code currently allows the use of high voltage and low voltage types of light fixtures. Thus, by only allowing low voltage pool light fixtures to be used for pool lighting would strengthen the code.

7. Include a fiscal impact statement which documents the costs and benefits of the proposed amendment. Criteria for the fiscal impact statement shall include a, b, and c:
 - a) Impact to local government, relative to enforcement.

None

- b) Impact to property and building owners relative to cost of compliance.

Less than \$50.00 per swimming pool

- c) Impact to industry relative to the cost of compliance

Less than \$50.00 per swimming pool

Broward County Board of Rules and Appeals Public hearing and vote on October 8th, 2020.

Amendment Effective date: December 31, 2020.

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