



**SWIMMING POOL TAC
WITHOUT COMMENTS**

***This document created by the Florida Department of Business and
Professional Regulation -
850-487-1824***

TAC: Swimming Pool

Total Mods for **Swimming Pool** in **Approved as Modified: 4**

Total Mods for report: 42

Sub Code: Building

SW7174

1

Date Submitted	11/2/2018	Section	454.1.7.8	Proponent	Michael Weinbaum
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Modified				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

454.1.4.2, 454.1.9.8.4

Summary of Modification

Reduce lighting requirement in very shallow water, require low voltage underwater lights regardless of pool type

Rationale

There is no reason to require more light at an outdoor wading pool than at any other outdoor pool. Pools with very shallow water or no standing water are less dangerous and less light is acceptable.

The same low voltage requirements should apply to all bodies of water used by people.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

The local entity would have to learn the new rule and apply it if necessary.

Impact to building and property owners relative to cost of compliance with code

Pools with underwater lights in excess of 30 Volts will no longer be compliant

Impact to industry relative to the cost of compliance with code

This is standard practice at new pools. The required devices (transformers, DC power supplies, 12VAC LED lights) are already widely available.

Impact to small business relative to the cost of compliance with code

Pools with underwater lights in excess of 30 Volts will no longer be compliant. These lights are regularly replaced anyhow. A new transformer, sufficient for a smaller pool, costs less than \$100. More wading pools and IWFs would be open at night without conflicting with the overall site ambiance.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

The existing code is to prevent people from accidentally falling in the pool and potentially drowning if the fall makes them lose consciousness. The 15 V requirement for lights in IWFs is to prevent injury from electric shock.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

15V is stricter than NEC. Revision matches NEC. Applies NEC requirements evenly to all pools.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This eliminates a discrimination between 12V and 24V lights.

Does not degrade the effectiveness of the code

Lighting is still required for night time use, and more lighting is still required where the risk of drowning is higher. The low voltage requirement becomes the same for all features.

Mod 7174-A1

The following are edits of the submitted SW7174, and no other language is revised. bob v

454.1.7.8 Lighting.

Wading pools are exempt from underwater lighting requirements but shall have lighting installed for night use of 10 foot candles (100 lux) if indoors or 63 footcandles (6030 lux) for outdoor night use. Such illumination shall be provided over the pool water surface and the pool deck surface. If the maximum depth of the wading pool is two inches (51 mm) or less, the outdoor, night use lighting requirement is reduced to 1 footcandle (10 lux).

...

454.1.9.8.4

If night operation is proposed, 61 footcandles (6010 lux) 3 footcandles (30 lux) of light shall be provided on the pool deck and the water feature area. Lighting that may be exposed to the feature pool water shall not exceed 15 volts, shall be installed in accordance with manufacturer's specifications and be approved for such use by UL or NSF.

Mod 7174-A1

The following are edits of the submitted SW7174, and no other language is revised. bob v

454.1.7.8 Lighting.

Wading pools are exempt from underwater lighting requirements but shall have lighting installed for night use of 10 foot candles (100 lux) if indoors or ~~6~~ 3 footcandles (~~60~~ 30 lux) for outdoor night use. Such illumination shall be provided over the pool water surface and the pool deck surface. If the maximum depth of the wading pool is two inches (51 mm) or less, the outdoor, night use lighting requirement is reduced to 1 footcandle (10 lux).

...

454.1.9.8.4

If night operation is proposed, ~~6~~ 1 footcandles (~~60~~ 10 lux) 3 footcandles (30 lux) of light shall be provided on the pool deck and the water feature area. ~~Lighting that may be exposed to the feature pool water shall not exceed 15 volts, shall be installed in accordance with manufacturer's specifications and be approved for such use by UL or NSF.~~

7174-A1

1st Comment Period History					
Proponent	robert vincent	Submitted	2/18/2019	Attachments	Yes
Rationale					
Both MOD paragraphs 454.1.7.8 and 454.1.9.8.4 propose that in pool water depth of less than 2" the author requests lighting allowance of 1 footcandle (10 lux). This should be changed to no less than 3 footcandles (30 lux). Reducing lighting levels from 6 foot-candles to 1 foot- candle is an extreme change on Wading pools and Interactive Water Features. The author only focuses on water depth, but fails to consider that IWF can have climbable features and adequate overall lighting is needed for both the patrons to use the feature safely and for adults to adequately supervise their children at IWFs and Wade pools. An applicant always has the right to ask for a specific variance for a particular project in which reduced lighting is desired.					
Fiscal Impact Statement					
Impact to local entity relative to enforcement of code					
No enforcement impact on local authority..					
Impact to building and property owners relative to cost of compliance with code					
Slight increase in electricity from 1 foot-candle to 3 foot-candles; however will be a cost reduction from the current code mandate of 6 foot-candles					
Impact to industry relative to the cost of compliance with code					
Slight increase in cost from 1 foot-candle to 3 foot-candles; however will be a cost reduction from the current code mandate of 6 foot-candles					
Impact to Small Business relative to the cost of compliance with code					
Pools with underwater lights in excess of 30 Volts will no longer be compliant. These lights are regularly replaced anyhow. A new transformer, sufficient for a smaller pool, costs less than \$100. More wading pools and IWFs would be open at night without conflicting with the overall site ambiance.					
Requirements					
Has a reasonable and substantial connection with the health, safety, and welfare of the general public					
Pool patron safety is better served with night lighting luminosity that is adequate for all patrons, all water features, and all egress/ingress points.					
Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction					
Will strengthen code if the 3 foot-candle lower limit is implemented versus the proposed 1 foot-candle. Does not degrade the code.					
Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities					
No discrimination is expected					
Does not degrade the effectiveness of the code					
Does not degrade the code if 3 foot-candles is the lower code limit; and would degrade the code (for safety) if the 1 foot-candle is allowed.					
Is the proposed code modification part of a prior code version? No					

1st Comment Period History					
SW7174-G1	Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments No
	Comment: The Florida Swimming Pool Association SUPPORTS this code proposal.				

1st Comment Period History					
SW7174-G2	Proponent	robert vincent	Submitted	2/18/2019	Attachments No
	Comment: 454.1.4.2.5 lighting mod should be technical input by FBC Electrical TAC.				

Both MOD paragraphs 454.1.7.8 and 454.1.9.8.4 propose pool water depth of less than 2" request lighting allowance of 1 footcandle (10 lux). This should be changed to no less than 3 footcandles (30 lux).

454.1.4.2.5

Underwater lighting, or lighting that may be exposed nozzle-directed pool water, shall not exceed 30 volts DC or 15 volts AC. Such lights shall be installed in accordance with manufacturer's specifications, and be approved for such use by UL or NSF.

...

454.1.7.8 Lighting.

Wading pools are exempt from underwater lighting requirements but shall have lighting installed for night use of 10 foot candles (100 lux) if indoors or 6 3 footcandles (~~60 30 lux~~) for outdoor night use. Such illumination shall be provided over the pool water surface and the pool deck surface. If the maximum depth of the wading pool is two inches (51 mm) or less, the outdoor, night use lighting requirement is reduced to 1 footcandle (10 lux).

...

454.1.9.8.4

If night operation is proposed, ~~6 1~~ footcandles (~~60 10 lux~~) of light shall be provided on the pool deck and the water feature area. ~~Lighting that may be exposed to the feature pool water shall not exceed 15 volts, shall be installed in accordance with manufacturer's specifications and be approved for such use by UL or NSF.~~

Date Submitted	11/5/2018	Section	454.1.3.1.2	Proponent	Michael Weinbaum
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Modified				
Commission Action	Pending Review				

Comments**General Comments**

No

Alternate Language

No

Related Modifications**Summary of Modification**

Harmonize code for wet deck slope with ADA cross slope

Rationale

The current building code and current ADA standards leave our builders dealing with a 0.1% construction tolerance at ADA accessible areas.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

The acceptable construction tolerance goes up to 1%, creating less headaches

Impact to building and property owners relative to cost of compliance with code

Less risk of getting into a fight with either Florida DOH or Federal DOJ

Impact to industry relative to the cost of compliance with code

Costs decrease for industry

Impact to small business relative to the cost of compliance with code

Costs decrease for owners

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

The deck must slope away from the pool to minimize the potential for contamination of the pool. This revision still requires some slope in most cases, just less in the specific areas that the disabled population is directed towards.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

In some cases the state code is currently being ignored to minimize exposure to federal problems.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not.

Does not degrade the effectiveness of the code

Does not.

Text of Mod 7190-A1

Pool wet decks shall be uniformly sloped ~~at a minimum of 2 percent to a maximum of 4 percent~~ away from the pool or to deck drains to prevent standing water. The minimum slope for the wet deck is 2 percent, but in the portions of the deck intended to be accessible to disabled persons, it may be one percent less than the maximum allowable cross slope given by the most recent edition ADA Standards for Accessible Design. The maximum slope is 4 percent. Textured deck finishes that provide pitting and crevices of more than 3/16 inch (4.8 mm) deep that accumulate soil are prohibited. If settling or weathering occurs that would cause standing water, the original slopes shall be restored or corrective drains installed. When a curb is provided, the deck shall not be more than 10 inches (254 mm) below the top of the curb.

Mod 7190-A1

Pool wet decks shall be uniformly sloped ~~at a minimum of 2 percent to a maximum of 4 percent~~ away from the pool or to deck drains to prevent standing water. The minimum slope for the wet deck is 2 percent, but in the portions of the deck intended to be accessible to disabled persons, it may be one percent less than the maximum allowable cross slope given by the most recent edition ADA Standards for Accessible Design. The maximum slope is 4 percent. Textured deck finishes that provide pitting and crevices of more than 3/16 inch (4.8 mm) deep that accumulate soil are prohibited. If settling or weathering occurs that would cause standing water, the original slopes shall be restored or corrective drains installed. When a curb is provided, the deck shall not be more than 10 inches (254 mm) below the top of the curb.

1st Comment Period History						
7190-A1	Proponent	Michael Weinbaum	Submitted	1/3/2019	Attachments	Yes
	Rationale					
	Original submission 7190 doesn't read as clearly.					
	Fiscal Impact Statement					
	Impact to local entity relative to enforcement of code					
	same as original submission					
	Impact to building and property owners relative to cost of compliance with code					
	same as original submission					
	Impact to industry relative to the cost of compliance with code					
	same as original submission					
	Impact to Small Business relative to the cost of compliance with code					
	Costs decrease for owners					
	Requirements					
	Has a reasonable and substantial connection with the health, safety, and welfare of the general public					
	same as original submission					
	Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction					
	same as original submission					
	Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities					
	same as original submission					
	Does not degrade the effectiveness of the code					
	same as original submission					

1st Comment Period History						
SW7190-G1	Proponent	Kari Hebrank	Submitted	2/14/2019	Attachments	No
	Comment: The Florida Swimming Pool Association SUPPORTS this code modification.					

Pool wet decks shall be uniformly sloped ~~at a minimum of 2 percent to a maximum of 4 percent~~ away from the pool or to deck drains to prevent standing water. The minimum slope for the wet deck is 2 percent, but in the portions of the deck intended to be accessible to disabled persons, it may be one percent less than the maximum allowable cross slope given by the most recent edition ADA Standards for Accessible Design. The maximum slope is 4 percent. Textured deck finishes that provide pitting and crevices of more than 3/16 inch (4.8 mm) deep that accumulate soil are prohibited. If settling or weathering occurs that would cause standing water, the original slopes shall be restored or corrective drains installed. When a curb is provided, the deck shall not be more than 10 inches (254 mm) below the top of the curb.

Pool wet decks shall be uniformly sloped at a minimum of 2 percent to a maximum of 4 percent away from the pool or to deck drains to prevent standing water. The minimum slope for the wet deck shall be one percent less than the maximum allowable cross slope given by the most recent edition ADA Standards for Accessible Design, in the portions of the deck intended to be accessible to disabled persons. Textured deck finishes that provide pitting and crevices of more than 3/16 inch (4.8 mm) deep that accumulate soil are prohibited. If settling or weathering occurs that would cause standing water, the original slopes shall be restored or corrective drains installed. When a curb is provided, the deck shall not be more than 10 inches (254 mm) below the top of the curb.

Date Submitted	12/3/2018	Section	454.1.6.5.12	Proponent	Kari Hebrank
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Modified				
Commission Action	Pending Review				

Comments**General Comments** No**Alternate Language** No**Related Modifications****Summary of Modification**

This proposed modification addresses gravity suction on vacuum lines and is intended to prevent injuries (typically to children) by removing the direct suction line out of the pool. There have been more than 1400 citations in the last year by Dept. of Health for safety violations with covers.

Rationale

1.Rationale: There have been numerous accidents resulting in serious injuries where people (mostly children) have gotten limbs and other appendages stuck in the vacuum port. Sometimes this has led to the pool wall being cut out in order to free the person. The locking cover that is supposed to protect the vacuum port is poorly designed and requires an adapter in order to insert the vacuum hose. The adapter is frequently lost and if the cover is removed, the vacuum hose fits. This leads service personnel to loosen the cover for ease of removal which then frequently gets lost. It is responsible for many safety violations cited each year by the Dept. of Health.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

None for new construction and is a safer approach

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Yes, provides a safer approach and will reduce the number of injuries and safety violations

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes, it removes the source of the danger from the pool and reduces safety violations. During the last year, the Florida Dept. of Health has issued more than 1400 violations for vacuum-related issues at public pools.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

The proposed amendment does not discriminate against materials, products, methods or systems of construction of demonstrated capabilities.

Does not degrade the effectiveness of the code

The amendment does not degrade the effectiveness of the code.

Text of Mod 7656 including A2**454.1.6.5.12 Cleaning system.**

A portable, robotic, or plumbed in vacuum cleaning system shall be provided. All vacuum pumps shall be equipped with hair and lint strainers. When the system is plumbed in, the vacuum fittings shall be located to allow cleaning the pool with a 50-foot (15 240 mm) maximum length of hose. Vacuum fittings shall be ~~mounted no more than 15 inches (381 mm) below the water level, flush with the pool walls, and shall be provided with a spring-loaded safety cover which shall be in place at all times when the pool is not being vacuumed~~ located remotely in the pool deck. Remote vacuum assemblies shall be installed with an equalizer valve and an equalizer line when the vacuum ~~pipng system is connected directly to pump suction and the suction line shall be protected with a threaded plug when not in use. The equalizer valve shall be a spring-loaded vertical check valve which will not allow direct suction on the equalizer line. Float valves are prohibited. The equalizer line inlet shall be installed at least 1 foot (305 mm) below the normal pool water level and the equalizer line inlet shall be protected by an ANSI/APSP-16 compliant cover/grate. The equalizer line shall be sized to handle the expected flow with a 2-inch (51 mm) minimum line size. The provision of a filtered, chemically-treated water supply to the equalizer piping shall be provided to assist in preventing algae from forming within the equalizer piping arrangement.~~ Bag-type cleaners, which operate as ejectors on potable water supply pressure, shall be protected by a vacuum breaker. Cleaning devices shall not be used while the pool is open to bathers.

Revise Chapter 35, Reference Standards, to add ANSI/APSP-16 2017 to reference the standard year. See Code Modification 7681.

Text of Mod 7656 including A2

454.1.6.5.12 Cleaning system.

A portable, robotic, or plumbed in vacuum cleaning system shall be provided. All vacuum pumps shall be equipped with hair and lint strainers. When the system is plumbed in, the vacuum fittings shall be located to allow cleaning the pool with a 50-foot (15 240 mm) maximum length of hose. Vacuum fittings shall be ~~mounted no more than 15 inches (381 mm) below the water level, flush with the pool walls, and shall be provided with a spring-loaded safety cover which shall be in place at all times when the pool is not being vacuumed~~ located remotely in the pool deck. Remote vacuum assemblies shall be installed with an equalizer valve and an equalizer line when the vacuum piping system is connected directly to pump suction and the suction line shall be protected with a threaded plug when not in use. The equalizer valve shall be a spring-loaded vertical check valve which will not allow direct suction on the equalizer line. Float valves are prohibited. The equalizer line inlet shall be installed at least 1 foot (305 mm) below the normal pool water level and the equalizer line inlet shall be protected by an ANSI/APSP-16 compliant cover/grate. The equalizer line shall be sized to handle the expected flow with a 2-inch (51 mm) minimum line size. The provision of a filtered, chemically-treated water supply to the equalizer piping shall be provided to assist in preventing algae from forming within the equalizer piping arrangement. Bag-type cleaners, which operate as ejectors on potable water supply pressure, shall be protected by a vacuum breaker. Cleaning devices shall not be used while the pool is open to bathers.

Revise Chapter 35, Reference Standards, to add ANSI/APSP-16 2017 to reference the standard year. See Code Modification 7681.

7656-A2

1st Comment Period History					
Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	Yes
Rationale					
The latest ANSI/APSP-16 version is 2017, not 2011.					
Fiscal Impact Statement					
Impact to local entity relative to enforcement of code					
This code modification provides clarity for the local building officials for code enforcement.					
Impact to building and property owners relative to cost of compliance with code					
There is no negative cost impact to the building and property owners.					
Impact to industry relative to the cost of compliance with code					
This code change makes sure the industry utilizes the latest referenced standard in compliance with the building code.					
Impact to Small Business relative to the cost of compliance with code					
None					
Requirements					
Has a reasonable and substantial connection with the health, safety, and welfare of the general public					
This code change makes sure the health, safety and welfare of the general public is protected by referring to the latest industry referenced standard.					
Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction					
This change improves the code by keeping it current with the latest standard.					
Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities					
This code proposal does not discriminate against products, methods or systems of construction of demonstrated capabilities.					
Does not degrade the effectiveness of the code					
This code change does not degrade the effectiveness of the building code.					
1st Comment Period History					
Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No

Also, revise Chapter 35, Reference Standards, to add ANSI/APSP-16 -2017 to reference the standard year. See Code Modification 7681.

454.1.6.5.12 Cleaning system.

A portable, robotic, or plumbed in vacuum cleaning system shall be provided. All vacuum pumps shall be equipped with hair and lint strainers. When the system is plumbed in, the vacuum fittings shall be located to allow cleaning the pool with a 50-foot (15 240 mm) maximum length of hose. Vacuum fittings shall be ~~mounted no more than 15 inches (381 mm) below the water level, flush with the pool walls, and shall be provided with a spring-loaded safety cover which shall be in place at all times when the pool is not being vacuumed~~ located remotely in the pool deck. Remote vacuum assemblies shall be installed with an equalizer valve and an equalizer line when the vacuum piping system is connected directly to pump suction and the suction line shall be protected with a threaded plug when not in use. The equalizer valve shall be a spring-loaded vertical check valve which will not allow direct suction on the equalizer line. Float valves are prohibited. The equalizer line inlet shall be installed at least 1 foot (305 mm) below the normal pool water level and the equalizer line inlet shall be protected by an ANSI/APSP-16 compliant cover/grate. The equalizer line shall be sized to handle the expected flow with a 2-inch (51 mm) minimum line size. The provision of a filtered, chemically-treated water supply to the equalizer piping shall be provided to assist in preventing algae from forming within the equalizer piping arrangement. Bag-type cleaners, which operate as ejectors on potable water supply pressure, shall be protected by a vacuum breaker. Cleaning devices shall not be used while the pool is open to bathers.

Also, revise Chapter 35, Reference Standards, to add ANSI/APSP-16 2011 to reference the standard year. See Code Modification 7681.

Date Submitted	12/4/2018	Section	454.1.6.5.12	Proponent	Kari Hebrank
Chapter	35	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Modified				
Commission Action	Pending Review				

Comments**General Comments**

No

Alternate Language

No

Related Modifications**Summary of Modification**

Adds the year to the reference standard for ANSI/APSP 16—11 American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs

Rationale

To include the year--2011-- of the referenced standard for ANSI/APSP 16—11 American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

Assist with finding referenced standard by including in Chapter 35

Impact to building and property owners relative to cost of compliance with code

Provides referenced standard

Impact to industry relative to the cost of compliance with code

Provides ease of finding referenced standard

Impact to small business relative to the cost of compliance with code

Provides ease of finding referenced standard

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

None

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Provides ease of finding referenced standard

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not discriminate against materials, products, methods or systems of construction of demonstrated capabilities

Does not degrade the effectiveness of the code

No, does not degrade the effectiveness of the code

Text of Mod 7681-A1

ANSI/APSP 16—17 American National Standard for Suction Fittings for Use
in Swimming Pools, Wading Pools, Spas, and Hot
Tubs 454.1.6.5.12

Mod 7190-A1

ANSI/APSP 16—17 American National Standard for Suction Fittings for Use in
Swimming Pools, Wading Pools, Spas, and Hot Tubs

7681-A1

1st Comment Period History					
Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	Yes
Rationale					
To provide the latest referenced standard for ANSI/APSP 16 by including the latest reference date 2017.					
Fiscal Impact Statement					
Impact to local entity relative to enforcement of code					
Provides the latest reference standard for ease of code enforcement.					
Impact to building and property owners relative to cost of compliance with code					
Allows cost-effective compliance with the building code by including the most current reference standard.					
Impact to industry relative to the cost of compliance with code					
Allows cost-effective compliance with the building code by providing the latest referenced standard.					
Impact to Small Business relative to the cost of compliance with code					
Provides ease of finding referenced standard					
Requirements					
Has a reasonable and substantial connection with the health, safety, and welfare of the general public					
Protects the health, safety and welfare of the general public by including the latest referenced standard.					
Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction					
Improves the code by providing the latest referenced standard for ANSI/APSP 16.					
Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities					
Does not discriminate against materials, products, methods or systems of construction of demonstrated capabilities.					
Does not degrade the effectiveness of the code					
Does not degrade the effectiveness of the code.					

1st Comment Period History					
SW7681-G1	Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments No
	Comment: The Florida Swimming Pool Association (FSPA) SUPPORTS this code modification which adds the reference standard American National Standard for Suction Fittings for Use in Swimming Pools, Wading pools, Spas and Hot tubs ANSI/APSP 16-11 to the code.				

To include the year--2017-- of the referenced standard for ANSI/APSP 16—11
American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs

- ANSI/APSP 16—11

American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs

454.1.6.5.12

TAC: Swimming Pool

Total Mods for **Swimming Pool** in **Approved as Submitted**: 29

Total Mods for report: 42

Sub Code: Building

SW7173

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Date Submitted	11/2/2018	Section	454.1.9.2.3	Proponent	Michael Weinbaum
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

454.1.9.2.1

Summary of Modification

The pump reservoir has a specific volume requirement. This requirement is cumbersome when applied to slides with plunge pools. A provision is added to the plunge pool section to make sure there is sufficient volume in that type of system.

Rationale

A pump reservoir is defined as carrying 3 minutes of water by itself. There is no need for most plunge pools to include such a large tank when they already include a large amount of water.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

This increases the complexity of the code, and adds a check for plunge pools.

Impact to building and property owners relative to cost of compliance with code

Owners have been required to construct large tanks for plunge pools without any justification in hydraulics. Instead the design engineer will do an additional calculation, and some of the overflow/skimmer system in the design may need to be re-configured.

Impact to industry relative to the cost of compliance with code

No new technology is required.

Impact to small business relative to the cost of compliance with code

Less tanks may be required, but more gutter or skimmer fittings may also be required.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

This code provision ensures that the owner will be able to run the slides at the design flow rate. If there is not enough water in the system, the owner will be tempted to run the slide at a lower flow rate, potentially causing riders to get stuck or other unsafe outcomes.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

This provision ensures that floating scum is filtered out when slides are off and when they are on.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No products or materials are mentioned. The methods and systems mentioned are more specific to the intended use of each.

Does not degrade the effectiveness of the code

A volume requirement remains in all cases.

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal.

SW7173-G1

454.1.9.2.3 Pump reservoirs.

Pump reservoirs are only required for slides with run out lanes. Pump reservoirs shall be made of concrete or other impervious material with a smooth slip-resistant finish. Pump reservoirs shall be for the slide pump intakes, but where properly sized may also be used as a collector tank for the filter system. Pump reservoir designs shall meet the criteria of Sections 454.1.9.2.3.1 through 454.1.9.2.3.5.

...

454.1.9.2.1.7 Plunge Pool Volume

The total volume of a plunge pool and its collector tank or tanks shall be equal or greater than 3 minutes of the combined flow rate in gallons per minute of all filter and slide pumps. The design engineer must account for the water level in the pool both when the slide pumps are on and when they are off. If skimmers are used, skimmers must be placed at both levels if the variance is greater than 3 inches (76 mm). If perimeter overflow is used, half of the gutter outlets must be functional at each water level.

Date Submitted	11/2/2018	Section	454.1.4.2	Proponent	Michael Weinbaum
Chapter	4	Affects HVHZ	No	Attachments	Yes
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Add reference to lumens in code based on lumen output of common halogen bulbs

Rationale

Most lights installed today are LED lights, giving substantial energy and replacement cost savings. The manufacturers often publish the "watt equivalent" of these LED bulbs, but not always, and the building official may not trust these numbers, or may be confused when they see the actual watts consumed by these fixtures, which is much less. Soon manufacturers may stop publishing the "watt equivalent" as it refers to an older, obsolete technology.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

This change uses vocabulary that the manufacturers are more likely to use.

Impact to building and property owners relative to cost of compliance with code

The same lights are still allowed before and after

Impact to industry relative to the cost of compliance with code

No new technology is required, distributors can expect fewer questions if either equivalent watts or lumens are mentioned

Impact to small business relative to the cost of compliance with code

The same lights are still allowed before and after

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

The code makes sure people see the water and the people in the water, and that doesn't change.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

This explains the amount of light that is expected in clearer terms, and creates an option to ignore the "watt equivalent" term that may be obsolete soon.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This eliminates a possible discrimination.

Does not degrade the effectiveness of the code

The same lights are still allowed before and after

454.1.4.2.1 Outdoor pool lighting.

Lighting shall provide a minimum of 3 footcandles (30 lux) of illumination at the pool water surface and the pool wet deck surface. Underwater lighting shall be a minimum of $\frac{1}{2}$ watt incandescent equivalent, or 10 lumens, per square foot of pool water surface area.

454.1.4.2.2 Indoor pool lighting.

Lighting shall provide a minimum of 10 foot candles (100 lux) of illumination at the pool water surface and the pool wet deck surface. Underwater lighting shall be a minimum of $\frac{8}{10}$ watt incandescent equivalent, or 15 lumens, per square foot of pool surface area.



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Lumens Range

[5000 - 9999](#) ✕

Brand

[Eiko](#) (3)[Sylvania](#) (1)[Bulbrite](#) (1)[Ushio](#) (1)[Philips Lighting](#) (1)

Price Range

[Under \\$10](#) (5)[\\$10 - \\$50](#) (2)

Base

[Recessed Single Contact](#) (5)[GY9.5](#) (1)[Medium Bi-Pin](#) (1)

Shape

[T-3](#) (5)[T-8](#) (1)[T-7](#) (1)

Length (in)

[3.5](#) (1)[4.1](#) (1)[4.7](#) (5)Sort By: [Most Popular](#)

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**Capsules****Double Ended**☐ Select to compare**Philips 300W
120V T3 Clear
Halogen Double
Ended Bulb**SKU: 392829 |
Ordering Code:
300T3Q/CL (120V) |
UPC: 46677392826

4.8

(5 reviews)

Recessed Single Cont
Base
5200 Lumens
Soft White Bulb Color
3000K Color Tempera
0.4" Diameter
300W Energy Used
4.7" Length
T-3 Shape
120 Volts[More details](#)**\$5.99** per bulb

1 ▾ Bulb

ADD TO CART

Diameter (in) _____

[0.4](#) (5)

[0.7](#) (1)

[0.8](#) (1)

Lumens Range _____

[5000 - 5999](#) (3)

[6000 - 6999](#) (2)

[7000 - 7999](#) (1)

[8000 - 8999](#) (1)

Color Temperature (Kelvin) —

[2800-3200](#) (7)

[3200-3600](#) (1)

Voltage Range _____

[20V - 119V](#) (1)

[120V - 129V](#) (4)

[130V - 199V](#) (1)

[200V+](#) (1)

Average Rated Life _____

[Under 2,000 hrs](#) (2)

[2,000 - 5,999 hrs](#) (5)



☐ [Select to compare](#)

**Eiko 300W 220V
T3 Clear Halogen
Bulb**

SKU:
W-Q300T3/CL/220V |
Ordering Code:
Q300T3/CL/220V |
UPC: 31293151681

\$1.49 per bulb

1 Bulb

[ADD TO CART](#)

Recessed Single Conl
Base
5000 Lumens
Soft White Bulb Color
2900K Color Tempera
0.4" Diameter
300W Energy Used
4.7" Length
T-3 Shape
220 Volts

[More details](#)



☐ [Select to compare](#)

**Eiko 300W 120V
T3 Clear Halogen
Bulb**

SKU:
W-Q300T3/CL/120V |
Ordering Code:
Q300T3/CL/120V |
UPC: 31293151643

\$1.49 per bulb

1 Bulb

[ADD TO CART](#)

5.0
(3 reviews)
Recessed Single Conl
Base
6000 Lumens
Soft White Bulb Color
2850K Color Tempera
0.4" Diameter
300W Energy Used
4.7" Length
T-3 Shape
120 Volts

[More details](#)



**Bulbrite 300W
120V T3 Clear
Halogen Bulb**

SKU: 600301 |
Ordering Code:
Q300T3CL (120V) |
UPC: 739698600307

5.0

(1 review)

☐ **Select to compare**

Recessed Single Conl
Base
5000 Lumens
Soft White Bulb Color
3000K Color Tempera
0.4" Diameter
300W Energy Used
4.7" Length
T-3 Shape
120 Volts

[More details](#)

\$1.99 per bulb

1 Bulb

ADD TO CART



**Eiko 300W 130V
T3 Clear Halogen
Bulb**

SKU:
W-Q300T3/CL/130V |
Ordering Code:
Q300T3/CL/130V |
UPC: 31293151667

☐ **Select to compare**



Recessed Single Conl
Base
6000 Lumens
Soft White Bulb Color
2900K Color Tempera
0.4" Diameter
300W Energy Used
4.7" Length
T-3 Shape
130 Volts

[More details](#)

\$1.49 per bulb

1 Bulb

ADD TO CART

**Sylvania 375W
Heat Sink Base
Medium Bipin
Base**

SKU: 54649 |
Ordering Code:
HPL375/115/X |
UPC: 046135546495

\$18.99 per bulb

1 Bulb

ADD TO CART

☐ Select to compare

Medium Bi-Pin Base
8000 Lumens
Warm White Bulb Color
2950K Color Tempera
100 CRI
0.7" Diameter
375W Energy Used
4.1" Length
T-8 Shape
115 Volts

☐ Select to compare

Ushio 300W 120V Halogen FKW Bulb

SKU: 1000540 |
Ordering Code: FKW,
JCS120V-300WC/UA |
UPC: 48777135280

\$16.99 per bulb

1

Bulb

ADD TO CART



CLEARANCE

GY9.5 Base
7800 Lumens
Soft White Bulb Color
3200K Color Tempera
0.8" Diameter
300W Energy Used
3.5" Length
T-7 Shape
120 Volts

[More details](#)

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Date Submitted	11/2/2018	Section	454.1.2.3.5	Proponent	Michael Weinbaum
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments**

No

Alternate Language

No

Related Modifications**Summary of Modification**

Maximum pool depth added to pool rules sign

Rationale

Pool users sometimes survey all depth markers to decide if the pool is safe for them or their children. They might not notice the one depth marker signifying the deep point of the pool, and putting this info on the rules sign simplifies the search for information

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

Checking for this language should become part of their routine for resurfacing inspections after adoption so as many pools as possible make the change before the deadline

Impact to building and property owners relative to cost of compliance with code

Signs fade out over time anyhow, new text on the sign is not a significant cost.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

Placing the deadline two years in the future should allow all owners to roll this change into their ordinary maintenance.

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

All of the rules are for health, safety, and welfare.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

This rule was specifically suggested in sworn testimony from a mother after her child's drowning death in a commercial pool.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No materials, products, methods, or systems are mentioned

Does not degrade the effectiveness of the code

This change does not allow anything that is restricted today.

7180-A1

1st Comment Period History					
Proponent	Michael Weinbaum	Submitted	1/18/2019	Attachments	Yes
Rationale					
Owners commonly ask for chaise lounge chairs to be placed in the pool, and this does not create health risk.					
Fiscal Impact Statement					
Impact to local entity relative to enforcement of code					
The code becomes simpler.					
Impact to building and property owners relative to cost of compliance with code					
Property owners who desire this arrangement can have it. The code takes something away from them today.					
Impact to industry relative to the cost of compliance with code					
Nil					
Impact to Small Business relative to the cost of compliance with code					
Placing the deadline two years in the future should allow all owners to roll this change into their ordinary maintenance.					
Requirements					
Has a reasonable and substantial connection with the health, safety, and welfare of the general public					
Removable furniture does not create any new nuisance to health, safety, or welfare					
Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction					
The code becomes simpler.					
Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities					
Discrimination is removed					
Does not degrade the effectiveness of the code					
All the other portions of the rules sign are still required. Rules signs themselves don't go away.					

1st Comment Period History					
SW7180-G1	Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments No
	Comment: The Florida Swimming Pool Association SUPPORTS this code modification.				

454.1.2.3.5 Rules and regulations signage.

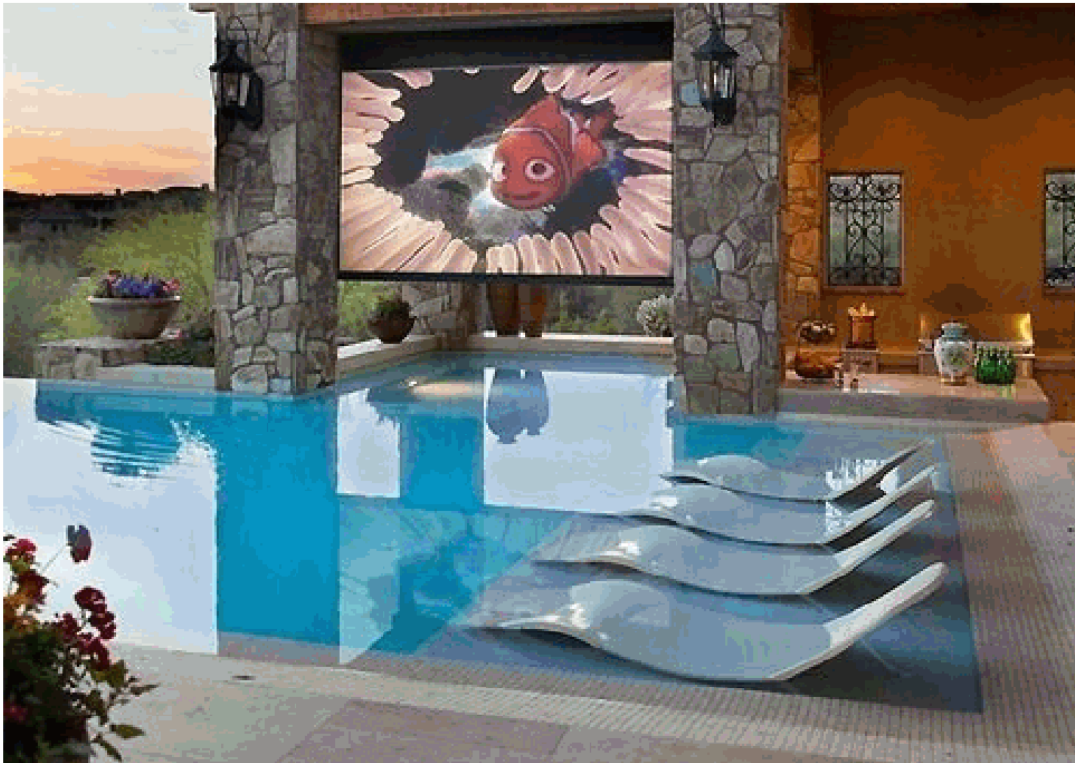
Rules and regulations for bathers shall be installed in minimum 1-inch (25.4 mm) letters which must be legible from the pool deck, and shall contain the following:

1. No food or ~~beverages~~ in pool or on pool wet deck.
2. No glass or animals in the fenced pool area (or 50 feet (15 240 mm) from unfenced pool).
3. Bathing load: ____ persons.
4. Pool hours: ____ a.m. to ____ p.m.
5. Shower before entering.
6. Pools of 200 square feet (18.58 m²) in area or greater without an approved diving well configuration shall have “NO DIVING”, in 4 inch (102 mm) letters included with the above listed pool rules.
7. Do not swallow the pool water. This statement shall be added to signs at pools that conduct alterations as that term is defined.
8. If the pool includes a sun shelf, “WARNING: DROP OFF AT SUN SHELF EDGE IS _×_ FEET DEEP” in 4-inch (102 mm) letters.
9. ~~If the pool includes a sun shelf, “DO NOT PLACE FURNITURE IN POOL.”~~

454.1.2.3.5 Rules and regulations signage.

Rules and regulations for bathers shall be installed in minimum 1-inch (25.4 mm) letters which must be legible from the pool deck, and shall contain the following:

1. No food or beverages in pool or on pool wet deck.
2. No glass or animals in the fenced pool area (or 50 feet (15 240 mm) from unfenced pool).
3. Bathing load: ____ persons.
4. Pool hours: ____ a.m. to ____ p.m.
5. Shower before entering.
6. Pools of 200 square feet (18.58 m2) in area or greater without an approved diving well configuration shall have "NO DIVING", in 4 inch (102 mm) letters included with the above listed pool rules.
7. Do not swallow the pool water. This statement shall be added to signs at pools that conduct alterations as that term is defined.
8. If the pool includes a sun shelf, "WARNING: DROP OFF AT SUN SHELF EDGE IS _x_ FEET DEEP" in 4-inch (102 mm) letters.
9. If the pool includes a sun shelf, "DO NOT PLACE FURNITURE IN POOL."
10. By January 1, 2022, all pools shall add: "POOL MAXIMUM DEPTH: _x_ FEET," in 2" (51 mm) letters with the above listed pool rules



Date Submitted	11/8/2018	Section	454.1.2.3.5	Proponent	Bruce Petricca
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

As per the change in the DOH rule 64E-9 now allows beverages within the Wet Deck area. this change went into effect in July of 2016. I am requesting the Building department not post signage that is in conflict with this change

Summary of Modification

As per the change in the DOH rule 64E-9 now allows beverages within the Wet Deck area. this change went into effect in July of 2016. I am requesting the Building department not post signage that is in conflict with the DOH change

Rationale

Private 55+ communities still enforce the DOH rule 64E-9 which discriminates against seniors right to have easy access to hydration while taking aerobic therapy. Persons with medical conditions are not allowed easy access to water if this outdated DOH rule is posted at private condo pool areas.

The signage the building dept. requires pool owners in private condo and HOA communities is in conflict with the modifications to the DOH rule change to 64E-9 in July of 2016: Communities have removed the verbiage which bans beverage from the wet deck area. Kindly modify the signage in private pools that remove this verbiage. Only glass containers should be banned from the pool wet deck and pool area...as you can see, condo communities are posting conflicting information as per the DOH in Talahassee

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

No impact

Impact to building and property owners relative to cost of compliance with code

This proposed change allows seniors and handicapped persons allowing easy access to hydration, which is essential to senior health

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Seniors must keep hydrated in the heat of the Florida sun while in their community pools. Forcing seniors and handicapped individuals to climb a set of stairs, exit a pool to take a sip of water is detrimental to senior health and welfare

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

The DOH has modified their rule 64E-9, the Building dept signage is now in conflict

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not discriminate

Does not degrade the effectiveness of the code

does not...the health Department will support this building code modification

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal.

SW7217-G1

I m requesting the words *OR BEVERAGES* be removed:

454.1.2.3.5 Rules and regulations signage. Rules

and regulations for bathers shall be installed in minimum

1-inch (25.4 mm) letters which must be legible

from the pool deck, and shall contain the following:

1. No food ~~or beverages~~ in pool or on pool wet deck.

2. No glass or animals in the fenced pool area (or 50 feet (15 240 mm) from unfenced pool).

3. Bathing load: ____ persons.

4. Pool hours: __ a.m. to __ p.m.

5. Shower before entering.

6. Pools of 200 square feet (18.58 m²) in area or greater without an approved diving well configuration shall have "NO DIVING", in 4 inch (102 mm) letters included with the above listed pool rules.

7. Do not swallow the pool water. This statement shall be added to signs at pools that conduct alterations as that term is defined.

8. If the pool includes a sun shelf, "WARNING: DROP OFF AT SUN SHELF EDGE IS __ FEET DEEP" in 4-inch (102 mm) letters.

9. If the pool includes a sun shelf, "DO NOT PLACE FURNITURE IN POOL."

T

Date Submitted	12/3/2018	Section	454.1.10.1.6	Proponent	Kari Hebrank
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Currently, there are older pools that are still in use that were built with 12 inch step risers. When the pools are being resurfaced, the costs to make the step rises comply with 10 inch risers is cost-prohibitive. These risers were approved when the steps were originally built.

Rationale

Currently, there are older pools that are still in use that were built with 12 inch step risers. When the pools are being resurfaced, the costs to make the step rises comply with 10 inch risers is cost-prohibitive. These risers were approved when the steps were originally built.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

This amendment will make resurfacing projects less expensive for older pools with 12 inch risers.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Florida Dept. of Health Rule 64E-9 previously allowed for 12 inch risers on renovations only. Returning to this standard may facilitate the renovation of pools in a more timely fashion which leads to safer pools.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

This amendment strengthens the code by providing that older pools may be resurfaced without the need to redesign step risers.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This amendment does not discriminate against materials, products, methods or systems of construction of demonstrated capabilities.

Does not degrade the effectiveness of the code

This amendment does not degrade the effectiveness of the code.

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal to return step riser height to 12-inches for resurfacing projects rather than 10 inches.

454.1.10 Resurfacing ~~Modifications~~.

454.1.10.1.6 Should resurfacing works affect the step riser heights, no riser shall exceed 12 ~~10~~ inches (305 ~~254~~ mm) for pools and 12 inches (305mm) for spas, and the intermediate risers shall be made uniform.

Date Submitted	12/9/2018	Section	454.1.2.1	Proponent	Mo Madani
Chapter	4	Affects HVHZ	No	Attachments	Yes
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments** No**Alternate Language** No**Related Modifications**

None

Summary of Modification

Incorporating Commission's declaratory statements as required by 553.73(7)(d), Florida Statutes. DS2017-070

Rationale

To clarify that grout line is allowed to be included in the measurement of tile when such tile is sold and distributed as nominal or trade size.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

There is no fiscal impact on the local entity relative to enforcement.

Provides needed clarification to the code

Impact to building and property owners relative to cost of compliance with code

There is no fiscal impact to building and property owners relative to the cost of compliance.

Provides clarification to the code

Impact to industry relative to the cost of compliance with code

There is no fiscal impact to industry relative to the cost of compliance.

Provides clarification to the code

Impact to small business relative to the cost of compliance with code

There is no fiscal impact to small business relative to the cost of compliance.

Provides clarification to the code

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Has a reasonable and substantial connection with the health and safety and welfare of the general public.

Provides clarification to the code

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Strengthens or improves the code by making the code requirements clearer to the user.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not discriminate against materials, products, methods, or systems of construction.

Provides clarification to the code

Does not degrade the effectiveness of the code

Does not degrade the effectiveness of the code.

Improve the effectiveness of the code by providing needed clarification.

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
------------------	--------------	------------------	-----------	--------------------	----

Comment:

The Florida Swimming Pool Association SUPPORTS this code modification.

SW7801-G1

Revise section 454.1.2.1 to read as follows:

454.1.2.1 Pool structure.

Pools shall be constructed of concrete or other impervious and structurally rigid material. All pools shall be watertight, free from structural cracks and shall have a nontoxic smooth and slip resistant finish. All materials shall be installed in accordance with manufacturer's specifications unless such specifications violate Chapter 64E-9, Florida Administrative Code, rule requirements or the approval criteria of NSF/ANSI Standard 50 or NSF/ANSI Standard 60.

(a) Floors and walls shall be white or pastel in color and shall have the characteristics of reflecting rather than absorbing light. Tile used in less than 5 feet (1524 mm) of water must be slip resistant. A minimum 4-inch (102 mm) tile line, each tile a minimum size of 1 inch (25 mm) on all sides, shall be installed at the water line, but shall not exceed 12 inches (305 mm) in height if a dark color is used. Gutter-type pools may substitute 2-inch (51 mm) tile, each a minimum size of 1 inch (25 mm) on all sides, along the pool wall edge of the gutter lip.

(b) One-inch (25 mm) square tile may be used if the manufacturer has specified the adhesive for use underwater to adhere the type of tile used [vitreous (glass) or ceramic]. Tiles shall not have sharp edges exposed that could cause bather injury.

(c) Grout line is allowed to be included when meeting the 1 inch square tile requirements, if the tile is sold and distributed as nominal or trade size tile.

**STATE OF FLORIDA
BUILDING COMMISSION**

FILED	
Department of Business and Professional Regulation Deputy Agency Clerk	
CLERK	Brandon Nichols
Date	12/18/2017
File #	2017-09625

In the Matter of

AQUATIC DESIGN SERVICES, LLC

Petitioner.

DS 2017-070

DECLARATORY STATEMENT

The foregoing proceeding came before the Florida Building Commission (Commission) by a Petition from John Centera, for Aquatic Design Services, LLC (Petitioner) that was received October 31, 2017. Based on the statements in the petition, the material subsequently submitted and the subsequent request by the Petitioner, the Commission states the following:

Findings of Fact

1. The petition is filed pursuant to, and must conform to the requirements of Rule 28-105.002, Florida Administrative Code.
2. Petitioner's representative in this matter is John Centera, 2681 NE 23rd Court, Pompano Beach, FL 33062.
3. Petitioner provides commercial pool and spa design, construction, and remodeling services, and is in the process of designing a condominium commercial pool project that will include the application of 1" x 1" tiles.
4. Petitioner seeks clarification of Section 454.1.2.1, Florida Building Code, Building, 5th Edition (2014), and Section 454.1.2.1, Florida Building Code, Building, 6th Edition (2017), regarding what measurements are included when determining the dimensions of a 1" x 1" tile.
5. Specifically, the Petitioner requests an answer to the following question based upon the project described within the petition for declaratory statement:

Is the grout line allowed to be included in the measurement of a 1" x 1" tile installed on a commercial pool per section 454.1.2.1, when the tile is sold and distributed as 1" x 1"?

Conclusions of Law

6. The Commission has the specific statutory authority pursuant to Section 553.775(3)(a), Florida Statutes (2017) to interpret the provisions of the Florida Building Code by issuing a declaratory statement.

7. Section 454.1.2.1, Florida Building Code, Building, 5th Edition (2014), and Section 454.1.2.1, Florida Building Code, Building, 6th Edition (2017) both identically state:

454.1.2.1 Pool structure.

Pools shall be constructed of concrete or other impervious and structurally rigid material. All pools shall be watertight, free from structural cracks and shall have a nontoxic smooth and slip resistant finish. All materials shall be installed in accordance with manufacturer's specifications unless such specifications violate Chapter 64E-9, Florida Administrative Code, rule requirements or the approval criteria of NSF/ANSI Standard 50 or NSF/ANSI Standard 60.

(a) Floors and walls shall be white or pastel in color and shall have the characteristics of reflecting rather than absorbing light. Tile used in less than 5 feet (1524 mm) of water must be slip resistant. A minimum 4-inch (102 mm) tile line, each tile a minimum size of 1 inch (25 mm) on all sides, shall be installed at the water line, but shall not exceed 12 inches (305 mm) in height if a dark color is used. Gutter type pools may substitute 2-inch (51 mm) tile, each a minimum size of 1 inch (25 mm) on all sides, along the pool wall edge of the gutter lip.

(b) One-inch (25 mm) square tile may be used if the manufacturer has specified the adhesive for use underwater to adhere the type of tile used [vitreous (glass) or ceramic]. Tiles shall not have sharp edges exposed that could cause bather injury.

8. Section 202, Florida Building Code, Building, 5th Edition (2014), states:

DIMENSIONS

Nominal: The *specified* dimension plus an allowance for the *joints* with which the units are to be laid. Nominal dimensions are usually stated in whole numbers. Thickness is given first, followed by height and then length.

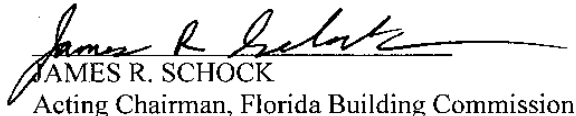
9. Section 202, Florida Building Code, Building, 6th Edition (2017), states:

DIMENSIONS (for Chapter 21)

Nominal: The *specified* dimension plus an allowance for the *joints* with which the units are to be laid. Nominal dimensions are usually stated in whole numbers. Thickness is given first, followed by height and then length.

10. In response to Petitioner's question, the answer is yes, pursuant to the definition of the term "Nominal" in Section 202, Florida Building Code, Building, 5th Edition (2014), and Section 202, Florida Building Code, Building, 6th Edition (2017), the grout line can be included when meeting the 1"x 1" tile requirements set forth in Section 454.1.2.1, Florida Building Code, Building, 5th Edition (2014) and Section 454.1.2.1, Florida Building Code, Building, 6th Edition (2017), if the tile is sold and distributed as 1"x 1" nominal or trade size tile.

DONE AND ORDERED this 14TH day of DECEMBER, 2017, in St. Augustine, St. Johns County, State of Florida.


JAMES R. SCHOCK
Acting Chairman, Florida Building Commission

NOTICE OF RIGHT TO APPEAL

Petitioner and all other interested parties are hereby advised of their right to seek judicial review of this Order in accordance with Section 120.68(2)(a), Florida Statutes (2017), and Florida Rules of Appellate Procedure 9.110(a) and 9.030(b)(1)(C). To initiate an appeal, a Notice of Appeal must be filed with the Agency Clerk, Department of Business and Professional Regulation, 2601 Blair Stone Road, Tallahassee, Florida 32399-2203 and with the appropriate District Court of Appeal not later than thirty (30) days after this Order is filed with the Clerk of the Department of Business and Professional Regulation. A Notice of Appeal filed with the District Court of Appeal shall be accompanied by the filing fee specified by Section 35.22(3), Florida Statutes (2017).

CERTIFICATE OF FILING AND SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing order has been filed with the undersigned and furnished by U. S. Mail to the persons listed below this 18th day of December, 2017.



Agency Clerk's Office
Department of Business and Professional Regulation
& Florida Building Commission
2601 Blair Stone Road
Tallahassee, Florida 32399-2203

Via U.S. Mail

Aquatic Design Services, LLC
Attn: John Centera
2681 NE 23rd Court
Pompano Beach, FL 33062

Via Inter-Office or Email Delivery

Mo Madani, Planning Manager
Codes and Standards Section
Department of Business and Professional
Regulation
2601 Blair Stone Road
Tallahassee, Florida 32399
Mo.Madani@myfloridalicense.com

Marjorie Holladay
Joint Administrative Procedures Committee
Pepper Building, Room 680
Tallahassee, Florida 32399-1300

Date Submitted	12/10/2018	Section	454.1.9.8.6.3	Proponent	Michael Weinbaum
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments** No**Alternate Language** No**Related Modifications****Summary of Modification**

The last sentence here reads the same as the last sentence in 454.1.9.8.6.1, even though they are really talking about two different things.

Rationale

This would save a lot of confusion and long conversations.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

The proposed language is clearer, that in this scenario the filter pump and feature pump are separate.

Impact to building and property owners relative to cost of compliance with code

No change to the meaning of the code

Impact to industry relative to the cost of compliance with code

No change to the meaning of the code

Impact to small business relative to the cost of compliance with code

No change to the meaning of the code

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

It is important to prevent Crypto and Giardia from spreading via IWFs

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

For a code, clarity is strength.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No change to the meaning of the code

Does not degrade the effectiveness of the code

No change to the meaning of the code

In lieu of Section 454.1.9.8.6.1, the recirculation system must be designed to continuously return 100 percent of the water to the collector tank after all (100 percent) of the water is first filtered, treated with disinfectant and pH adjustment chemicals, and the final treatment provided by a validated UV disinfectant unit described in Section 454.1.6.5.16.6 ~~before any of this treated water is piped to the water features.~~ In this scenario, the feature pumps do not need their own filter or disinfection, but they must be interlocked such that they do not operate unless the filter pump, chemical, and UV systems are all working properly.

Date Submitted	12/10/2018	Section	454.1.9.8.6.3	Proponent	Michael Weinbaum
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments**

No

Alternate Language

No

Related Modifications**Summary of Modification**

Clear up another stumbling block in this section

Rationale

The UV treatment is not "final". It kills Crypto and Giardia equally well regardless of if it is before or after the addition of chemicals. It should come before the addition of chlorine because UV light degrades hypochlorite molecules, so really, it is better if it is not "final".

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

Increases flexibility, reduces questions

Impact to building and property owners relative to cost of compliance with code

If they have been forced to place UV treatment after the addition of chlorine, they will now be able to spend a lot less on chlorine

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

Perhaps less spending on chlorine.

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Yes, UVs prevent disease from spreading

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not.

Does not degrade the effectiveness of the code

Does not.

In lieu of Section 454.1.9.8.6.1, the recirculation system must be designed to continuously return 100 percent of the water to the collector tank after all (100 percent) of the water is first filtered, treated with disinfectant and pH adjustment chemicals, and ~~the final treatment provided by~~ a validated UV disinfectant unit described in Section 454.1.6.5.16.6 before any of this treated water is piped to the water features.

Date Submitted	12/11/2018	Section	454.1.1	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Clarifies the definition of a public pool, and eliminates confusion whether two separate pools can share the same treatment system.

Rationale

There has been confusion in the past whether multiple pools which are separate structural bodies can share a common recirculation system if they are classified in the same manner. The addition of the word "single" eliminates this confusion.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

The pools would need to be separately permitted with the local entity.

Impact to building and property owners relative to cost of compliance with code

The owners would need to design the pools to have separate treatment systems, which would increase cost.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Would improve the health, safety and welfare of the general public by ensuring water quality in the pools can be separately monitored and controlled.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Improves clarity of the code.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal.

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code modification.

A “**public swimming pool**” or “**public pool**” means a single watertight structure of concrete, masonry, or other approved materials which is located either indoors or outdoors, used for bathing or swimming by humans, and filled with a filtered and disinfected water supply, together with buildings, appurtenances, and equipment used in connection there-with.

REMAINING TEXT UNCHANGED

Date Submitted	12/11/2018	Section	454.1.2.2.2	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Corrects punctuation.

Rationale

The first sentence is missing a comma. The second sentence needs to be broken into separate sentences.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

No

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes, clarifies this section.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal.

SW7901-G1

Offset steps, spa coves, spa pools and wading pools are exempt from this clearance requirement.

This radius shall be continued through the top of the gutter edge; chamfering is allowed. Pool coping shall not overhang into the pool more than 1 ½ inches (38 mm).

REMAINING TEXT UNCHANGED

Date Submitted	12/11/2018	Section	454.1.2.8.1	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Clarifies how sun shelves can be designed and constructed.

Rationale

This will prohibit sun shelf from being designed and constructed with drop-offs to deeper water on multiple edges. This code was written with the idea that a sun shelf originate from only one side of a pool.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Prohibits a sun shelf from having separate drop-offs to deeper water, which could be confusing and unsafe to bathers.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Makes potential design of sun shelves safer.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/14/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code modification.

SW7903-G1

Sun shelf areas must be a minimum of 20 inches (508 mm) wide and provide a minimum of 10 square feet (0.93 m²) of horizontal surface adjoining on the edge of the pool over not less than 3 feet (914 mm). The sun shelf edge that adjoins the pool edge must be continuous. The sun shelf floor shall be horizontal or shall have uniform slope from a zero-depth entry, and its maximum depth shall be between 8 inches (203 mm) to 12 inches (254 mm) below the water surface.

Date Submitted	12/11/2018	Section	454.1.3.1.2	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Allows for paver decks to be constructed at 1% minimum slope.

Rationale

ADA code requires a maximum of 2% cross-slope on accessible routes. FBC 454 requires a minimum of 2% slope, so the deck designer is hamstrung to design only at 2% slope, which is impossible for most pool decks. Paver decks are better able to accommodate runoff since water can percolate between pavers. In addition, as an engineer who has performed many pool inspections, I have yet to find a paver deck that has ever met the minimum 2% slope. FDOH is not enforcing this rule.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

Would simplify the deck grading design process for architects.

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Would ensure ADA cross-slope requirements are more easily met.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/14/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code modification.

SW7905-G1

Pool wet decks shall be uniformly sloped at a minimum of 2 percent to a maximum of 4 percent away from the pool or to deck drains to prevent standing water. A minimum of 1 percent deck slope is allowable for paver-type decks.

REMAINING TEXT UNCHANGED

Date Submitted	12/11/2018	Section	454.1.6.1.3	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments** No**Alternate Language** No**Related Modifications****Summary of Modification**

Clarifies the requirement that floor drains must be installed within a restroom facility.

Rationale

Some architects have designed restroom facilities which have floors sloped to doorways with the intent that drainage from cleaning be directed out the doorway into a walkway or similar where it can potentially travel to a floor drain, somewhere. This mod clarifies that the floor drain must be inside the restroom which will ensure appropriate capture of water used for cleaning.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Would require floor drains and associated piping.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Yes, ensures restrooms can be adequately cleaned.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Clarifies the code.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

Floors of sanitary facilities shall be constructed of concrete or other nonabsorbent materials, shall have a smooth, slip-resistant finish, and shall slope to floor drains, which must be installed within the facility.

REMAINING TEXT UNCHANGED

Date Submitted	12/11/2018	Section	454.1.6.5.3.2.3	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Allows for skimmers to be installed with the equalizer port plugged.

Rationale

Skimmer equalizers have been required for decades to guard against loss of pump prime if the pool water level is allowed to fall. With the requirement for automatic water level control, this requirement is no longer necessary. In addition, with the passing of the Virginia Graeme Baker Act, skimmer equalizers are required to be outfitted with covers that guard against potential entrapment. These covers project into the pool from the wall and present their own hazard. FDOH has stated that the equalizer ports may be plugged, so this code is not being enforced.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Would save on cost of equalizer valves, safety cover and associated piping.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Yes, would eliminate the need for VGB-approved safety covers projecting from the pool wall.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Better system of construction.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code modification.

SW7908-G1

~~Recessed automatic surface skimmers shall be installed with an equalizer valve and an equalizer line when the skimmer piping system is connected directly to pump suction.~~ If installed, an the equalizer valve shall be a spring-loaded vertical check valve which will not allow direct suction on the equalizer line. Float valves are prohibited. The equalizer line inlet shall be installed at least 1 foot (305 mm) below the normal pool water level and the equalizer line inlet shall be protected by an ASME/ANSI A112.19.8 compliant cover/grate. The equalizer line shall be sized to handle the expected flow with a 2-inch (51 mm) minimum line size. Where an equalizer valve is not installed, the skimmer port may be plugged.

Date Submitted	12/11/2018	Section	454.1.6.5.5.1	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments** No**Alternate Language** No**Related Modifications****Summary of Modification**

Clarifies the filtration rate for regenerative media filters.

Rationale

Regenerative media filters are becoming more commonly used, so the code should be revised to include them. This is the filtration rate that FDOH has approved for these types of filters.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None. Clarifies code.

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

No effect.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Clarifies the code.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

The maximum filtration rate in gallons per minute per square foot of filter area shall be: 15 [20 if so approved using the procedure stated in Section 454.1.6.5.1 for high rate sand filters, 3 for rapid sand filters, 0.375 for pleated cartridge filters and 2 for Diatomaceous Earth (D.E.) or regenerative media type filters].

Date Submitted	12/11/2018	Section	454.1.6.5.9.6	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments**

No

Alternate Language

No

Related Modifications**Summary of Modification**

Allows for return inlets with flow rates greater than 20 gpm.

Rationale

There is a need for high turnover rates for some pools such as wave pools, water activity pools, etc. Use of return inlets with much higher flow rates than 20 gpm results in significantly fewer inlets required, which in turn means less penetration of the pool shell and less chance for leakage. These types of inlets are regularly allowed by the FDOH Public Swimming Pool Advisory Board by variance.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Makes cost of construction of pools lower.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

No effect

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Lessens the number of penetrations of the pool shell, resulting in lower risk of leakage.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

The flow rate through each inlet shall not exceed 20 gpm (1 L/s) except for inlets designed for higher flows as specified by the manufacturer.

REMAINING TEXT UNCHANGED

Date Submitted	12/11/2018	Section	454.1.6.5.16.6	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Clarifies the proper point of chemical injection into return lines where UV systems are utilized.

Rationale

There has been some confusion lately between engineers and FDOH on the proper point of injection of chemicals into return lines where UV systems are utilized. It is good practice to locate the injection points downstream of any ancillary equipment such as heaters, flowmeters, ozonators, and UV systems. UV equipment manufacturers specify this, and this is also stated in the Model Aquatic Health Code.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Ensures costly UV systems are not subjected to high concentrations of a corrosive chemical.

Impact to industry relative to the cost of compliance with code

Will help the code meet an industry standard.

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Helps ensure UV systems remain functional.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Strengthens the code by bringing into line with best management practices and industry standard for UV systems.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal.

1st Comment Period History

Proponent	Alvaro Mendoza	Submitted	2/18/2019	Attachments	No
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Comment:

Several major UV manufacturers and service centers support this clarification.

5. The UV equipment shall not be located in a side stream flow and shall be located to treat all water returning to the pool or water features. Any treatment chemicals shall be injected downstream of the UV equipment.

Date Submitted	12/11/2018	Section	454.1.9.2.1.6.2	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

7905

Summary of Modification

Allows for 1% slope for paver decks at plunge pools.

Rationale

ADA code requires a maximum of 2% cross-slope on accessible routes. FBC 454 requires a minimum of 2% slope, so the deck designer is hamstrung to design only at 2% slope, which is impossible for most pool decks. Paver decks are better able to accommodate runoff since water can percolate between pavers. In addition, as an engineer who has performed many pool inspections, I have yet to find a paver deck that has ever met the minimum 2% slope. FDOH is not enforcing this rule.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Would help ensure ADA cross slope requirements are easier to maintain.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

All plunge pool decks shall slope to the plunge pool or pump reservoir or to deck drains which discharge to waste, or other acceptable means. All slopes shall be between 2- and 4-percent grade, except for paver-type decks where a minimum of 1 percent grade is allowed.

Date Submitted	12/11/2018	Section	454.1.9.2.2.4	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments**

No

Alternate Language

No

Related Modifications**Summary of Modification**

Clarifies that slides with runout lanes shall be staffed by attendants or lifeguards but not necessarily "water park personnel."

Rationale

These types of slides may be used at facilities that do not qualify as "water parks." This mod makes the rule applicable to any facility that is not a water park.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

No effect

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Clarifies the code.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

Attendants or lifeguards ~~Water park personnel~~ shall be provided at the top of the slides and at the run out.

Date Submitted	12/11/2018	Section	454.1.9.2.3.1	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments**

No

Alternate Language

No

Related Modifications**Summary of Modification**

Allows for flexibility in design of pump reservoirs.

Rationale

Lately FDOH personnel have been requiring the pump reservoirs, also known as collector tanks, to be sized on the guideline above even where used for pools that are not plunge pools. This rule exists to ensure the tanks are sized large enough to accommodate water-in-transit surge from water slides with dedicated plunge pools. For large multipurpose pools that include water slides as a feature, this additional sizing is not necessary as the tanks are already sized to accommodate the surge. This rule provides flexibility to the design engineer to size the tanks as he/she sees fit.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Would allow for tanks to be smaller if justified by the engineer, resulting in lower costs.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

No effect.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

No effect

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

The minimum reservoir volume shall be equal to 3 minutes of the combined flow rate in gallons per minute of all filter and slide pumps. Unless justified by the design engineer.

Date Submitted	12/11/2018	Section	454.1.9.2.3.5	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments** No**Alternate Language** No**Related Modifications**

7918

Summary of Modification

Clarifies requirements for pump reservoirs that are also used as a collector tank.

Rationale

Lately FDOH personnel have been requiring separate pump reservoirs for swimming pools that are not dedicated plunge pools but which have water slides as a feature. This is a needless requirement and would incur additional costs to the owner. We have designed numerous commercial pools that have collector tanks from which the recirculation and slide pumps draw suction with no issues with respect to hydraulic operation or threats to public health.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Would eliminate the need for a separate pump reservoir, resulting in lower costs.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

No effect

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

No effect

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

The pump reservoir shall have a minimum of one main drain with separate piping and valve to the filtration system collector tank unless the reservoir is used as the collector tank.~~and the v~~Velocity through the openings of the main drain grates shall not exceed 1 ½ feet per second (457 mm/s) at the design flow rate of the filtration system pump.

REMAINING TEXT UNCHANGED

Date Submitted	12/11/2018	Section	454.1.9.8.4	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Allows for 3 footcandles of overhead lighting for IWFs with attendants/lifeguards.

Rationale

In practice, 3 footcandles of light has been shown to be adequate for IWFs. The Board has regularly granted variances for this light level.

This mod also corrects the word "maybe" to the words "may be."

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Lowers the cost for enhanced lighting levels.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

No effect

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

No effect

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code modificarion.

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal.

If night operation is proposed, 6 footcandles (60 lux) of light shall be provided on the pool deck and the water feature area. For IWFs that are operated with attendants or lifeguards 3 footcandles (30 lux) of light is acceptable. Lighting that maybe exposed to the feature pool water shall not exceed 15 volts, shall be installed in accordance with manufacturer's specifications and be approved for such use by UL or NSF.

Date Submitted	12/11/2018	Section	454.1.9.8.6.1	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments**

No

Alternate Language

No

Related Modifications

7912

Summary of Modification

Clarifies that chemical injection points in return lines shall be located downstream of UV equipment. Also removes the requirement for addition of pH adjustment chemicals to the feature return line.

Rationale

There has been some confusion lately between engineers and FDOH on the proper point of injection of chemicals into return lines where UV systems are utilized. It is good practice to locate the injection points downstream of any ancillary equipment such as heaters, flowmeters, ozonators, and UV systems. UV equipment manufacturers specify this, and this is also stated in the Model Aquatic Health Code.

This mod also addresses the addition of pH chemicals to the feature return. In the vast majority of IWFs in Florida the pH adjustment chemical is acid. We see no need for pH adjustment in the return line when pH is already being controlled and adjusted at the collector tank. This requirement increases the risk of sending dangerous amounts of acid directly to contact with bathers should there be a malfunction with the acid feeder. In addition we have heard reports that relatively high concentrations of acid being sent to the IWF has affected the composition of certain resilient surfacing products. If this is the case, then not only can this be deleterious to the surfacing but also potentially to bathers.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Protects against excessive corrosive chemicals damaging the UV unit.

Impact to industry relative to the cost of compliance with code

Positive in that it would not result in degradation of resilient surfacing.

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Would limit the risk of discharge of high concentrations of acid to the IWF.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Brings the code into line with accepted industry practice.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

All (100 percent) of the water from the collector tank must be first filtered, treated ~~with~~ by an NSF Standard 50 certified UV disinfection unit with a minimum 40 mJ/cm2 dose, and then final treatment provided by disinfectant and pH adjustment chemicals, ~~and then final treatment provided by an NSF Standard 50 certified UV disinfection unit with a minimum 40 mJ/cm2 dose~~ before any of this treated water is piped to the water features.

Date Submitted	12/11/2018	Section	454.1.9.8.6.3	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

7912

7927

Summary of Modification

Clarifies that chemical injection points in return lines shall be located downstream of UV equipment.

Rationale

There has been some confusion lately between engineers and FDOH on the proper point of injection of chemicals into return lines where UV systems are utilized. It is good practice to locate the injection points downstream of any ancillary equipment such as heaters, flowmeters, ozonators, and UV systems. UV equipment manufacturers specify this, and this is also stated in the Model Aquatic Health Code.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None

Impact to building and property owners relative to cost of compliance with code

Would help limit damage to UV equipment by high concentrations of corrosive chemicals.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Ensures UV systems remain functional.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Clarifies code and brings it inline with accepted industry standards.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	robert vincent	Submitted	2/18/2019	Attachments	No
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Comment:

Both feature and recirculation system need the chemical treatment. The collector tanks are ignored in this process and using baffles in the tank would put the disinfectant in contact longer for a better pathogen kill time. This should be addressed rather than the straight flush through this treatment tank from IWF to features in a few seconds. Designs like this are mandated for the public drinking water systems when known pathogens exist in the source water.

In lieu of Section 454.1.9.8.6.1, the recirculation system must be designed to continuously return 100 percent of the water to the collector tank after all (100 percent) of the water is first filtered, treated with a validated UV disinfectant unit described in Section 454.1.6.5.16.6, with final treatment provided by disinfectant and pH adjustment chemicals, ~~and the final treatment provided by a validated UV disinfectant unit described in Section 454.1.6.5.16.6~~ before any of this treated water is piped to the water features.

Date Submitted	12/11/2018	Section	454.1.9.8.6.12	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Approved as Submitted				

Comments**General Comments** No**Alternate Language** No**Related Modifications****Summary of Modification**

Allows for less slope on IWFs and matches the slope range up with code for swimming pools.

Rationale

This mod matches the minimum slope for pools with IWFs. 1 in 60 (1.67%) slope is more than adequate to allow for proper drainage for the IWF surface. It also allows for more flexibility for designers to accommodate the maximum ADA cross-slope for accessible routes of 2%; the routes are a requirement for designing ADA access for IWFs.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Helps ensure ADA cross-slope requirements are more easily met.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Helps ensure ADA cross-slope requirements are more easily met.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Brings slopes for IWFs inline with pool slopes.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

no

Floor slopes of an IWF shall be a maximum 1 foot (305 mm) vertical in 10 feet (3048 mm) horizontal and a minimum of 1 foot (305 mm) vertical in 60 59 feet (18,288 ~~15,240~~ mm) horizontal.

Date Submitted	12/11/2018	Section	454.1.3.1.9	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Addresses a safety concern for doors at certain facilities that open toward pool areas, which is in conflict with the pool code.

Rationale

Doored access points to adjacent pool areas at facilities such as these are required to open away from the room they serve per fire code; however, this is in direct violation of the pool code. Therefore, these doors could be opened by young children who can then access the pool area and potentially fall into the pool and drown. We understand the direction of door swing cannot be changed since fire code would supersede the pool code, but this mod is an attempt to make the risk of a young child entering the pool area an drowning somewhat less. The maximum of 48" height is in line with the ADA requirement for door operation.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

The only costs would be if the operable parts are not available for certain door models at this height range.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Would attempt to ensure these doors are not opened by young children who could potentially access the pool area and drown.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/14/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal.

SW7935-G1

Doored access points from public rooms such as lobbies or club houses need not be through gates if the door(s) meet the same self-closing, self-latching requirements as a gate. Operable parts used for opening doors at these access points shall be 45 inches (114 mm) minimum to 48 inches (122 mm) maximum above the finish floor or ground. Gates shall open outward away from the pool area.

REMAINING TEXT UNCHANGED

Date Submitted	12/14/2018	Section	454.1.1.1	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments**General Comments** No**Alternate Language** No**Related Modifications****Summary of Modification**

Would provide relief for large residential developments from the minimum pool sizing requirement.

Rationale

Larger developments are required to provide very large water volumes for the pools at their amenity centers. In many cases the developers will size pools to keep the total water surface areas below a certain threshold for restroom fixture counts. In doing so, and in order to meet 454.1.1.1, the pools must be designed significantly deeper than normal to provide the required water volume. As designers we have therefore been asked to design pools at excessive depths, 7 or even 8 feet. We feel this results in pools that are dangerous and do not provide adequate swim opportunities for residents. The rule does not take into account that many homes in these developments will include private pools, and those residents will rarely use the amenity center pools. We do not see this code requirement in the Model Aquatic Health Code, the ISPSC, the ANSI standards nor in any state in which we have designed aquatic facilities.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Would provide a significant cost savings for large developments.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Would not result in excessively deep pools with maximum slopes, which can be dangerous to weak swimmers.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code modification.

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal.

All other types of projects shall be sized according to the anticipated bathing load and proposed uses. For the purpose of determining minimum pool size only, the pool turnover period used cannot be less than 3 hours except pools serving non-transient residential developments of 1,000 units or more can be sized based on 2.5 hours.

REMAINING TEXT UNCHANGED

Date Submitted	12/14/2018	Section	454.1.6.1	Proponent	Mo Madani
Chapter	4	Affects HVHZ	No	Attachments	Yes
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

None

Summary of Modification

To clarify that Section 454.1.6.1 (Exception) does apply to hotels.

Rationale

Incorporating Commission's declaratory statements as required by 553.73(7)(d), Florida Statutes.

DS 2018 - 025

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

There is no fiscal impact on the local entity relative to enforcement. The proposed code change provides for needed clarification.

Impact to building and property owners relative to cost of compliance with code

There is no fiscal impact to building and property owners relative to the cost of compliance.

Impact to industry relative to the cost of compliance with code

There is no fiscal impact to small business relative to the cost of compliance.

Impact to small business relative to the cost of compliance with code

There is no fiscal impact to small business relative to the cost of compliance.

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Has a reasonable and substantial connection with the health and safety and welfare of the general public.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Strengthens or improves the code by making the code requirements clearer to the user.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not discriminate against materials, products, methods, or systems of construction.

Does not degrade the effectiveness of the code

Does not degrade the effectiveness of the code.

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/14/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code change.

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code proposal.

454.1.6.1 Sanitary facilities. Swimming pools with a bathing load of 20 persons or less may utilize a unisex restroom. Pools with bathing loads of 40 persons or less may utilize two unisex restrooms or meet the requirements of Table 454.1.6.1. Unisex restrooms shall meet all the requirements for materials, drainage and signage as indicated in Sections 454.1.6.1.1 through 454.1.6.1.4. Each shall include a water closet, a diaper change table, a urinal and a lavatory. Pools with a bathing load larger than 40 persons shall provide separate sanitary facilities labeled for each sex. The entry doors of all restrooms shall be located within a 200-foot (60 960 mm) walking distance of the nearest water's edge of each pool served by the facilities.

Exception: Where a swimming pool serves only a designated group of residential dwelling units including hotel rooms and not the general public, poolside sanitary facilities are not required if all living units are within a 200-foot (60 960 mm) horizontal radius of the nearest water's edge, are not over three stories in height unless serviced by an elevator, and are each equipped with private sanitary facilities.

**STATE OF FLORIDA
BUILDING COMMISSION**

FILED	
Department of Business and Professional Regulation Deputy Agency Clerk	
CLERK	Brandon Nichols
Date	7/27/2018
File #	2018-06077

In the Matter of

G.B. COLLINS ENGINEERING, P.A.

DS 2018-025

Petitioner.

DECLARATORY STATEMENT

The foregoing proceeding came before the Florida Building Commission (Commission) by a Petition from Samuel A. Liberatore, for G.B. Collins Engineering, P.A. (Petitioner) that was received April 3, 2018. Based on the statements in the petition, the material subsequently submitted and the subsequent request by the Petitioner, the Commission states the following:

Findings of Fact

1. The petition is filed pursuant to, and must conform to the requirements of Rule 28-105.002, Florida Administrative Code.
2. Petitioner's representative in this matter is Samuel A. Liberatore, 300 Alternate 19 North, Suite A., Palm Harbor, FL 34683.
3. Petitioner is a professional design engineering company which is considering a project that would involve the construction of a public pool at a hotel. Petitioner states that all living units within the hotel would be located within a 200-foot horizontal radius from the nearest water's edge of the pool. Some living units would be located more than three stories in height, but all would be accessible by elevator, and the pool would be only for those individuals who are currently residing at the hotel or who are guests of those residing at the hotel.
4. Petitioner seeks clarification of section 454.1.6.1, Florida Building Code, Building, 6th Edition (2017), as it pertains to requirements for poolside sanitary facilities.

5. Specifically, the Petitioner requests an answer to the following question based upon the project described within the petition for declaratory statement:

Would the exception to the requirement for poolside sanitary facilities in section 454.1.6.1 of the Florida Building Code apply to the hotel described above?

Conclusions of Law

6. The Commission has the specific statutory authority pursuant to Section 553.775(3)(a), Florida Statutes (2018) to interpret the provisions of the Florida Building Code by issuing a declaratory statement.

7. Section 202, Florida Building Code, Building, 6th Edition (2017), provides the following definitions:

HABITABLE SPACE. A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, screen enclosures, sunroom Categories I, II, III and IV as defined in Section 2002.6, storage or utility spaces and similar areas are not considered habitable spaces.

...
MULTISTORY UNIT. A *dwelling unit* or *sleeping unit* with *habitable space* located on more than one *story*.

...
SLEEPING UNIT. A room or space in which people sleep, which can also include permanent provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a *dwelling unit* are not sleeping units.

8. Section R202, Florida Building Code, Residential, 6th Edition (2017), provides the following definition:

[RB] DWELLING UNIT. A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

9. Section 310, Florida Building Code, Building, 6th Edition (2017), provides for the following use and occupancy classifications:

310.1 Residential Group R.

Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the Florida Building Code, Residential.

310.2 Definitions.

The following terms are defined in Chapter 2:

BOARDING HOUSE.

CONGREGATE LIVING FACILITIES.

DORMITORY.

GROUP HOME.

GUEST ROOM.

LODGING HOUSE.

PERSONAL CARE SERVICE.

TRANSIENT.

310.3 Residential Group R-1.

Residential Group R-1 occupancies containing *sleeping units* where the occupants are primarily *transient* in nature, including:

Boarding houses (transient) with more than 10 occupants

Congregate living facilities (transient) with more than 10 occupants

Hotels (transient)

Motels (transient)

310.4 Residential Group R-2.

Residential Group R-2 occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

Apartment houses

Boarding houses (nontransient) with more than 16 occupants

Congregate living facilities (nontransient) with more than 16 occupants

Convents

Dormitories

Fraternities and sororities

Hotels (nontransient)

Live/work units

Monasteries

Motels (nontransient)

Vacation timeshare properties

310.5 Residential Group R-3.

Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two *dwelling units*
Boarding houses (nontransient) with 16 or fewer occupants
Boarding houses (transient) with 10 or fewer occupants
 Care facilities that provide accommodations for five or fewer persons receiving care
Congregate living facilities (nontransient) with 16 or fewer occupants
Congregate living facilities (transient) with 10 or fewer occupants
Lodging houses with five or fewer *guest rooms*

10. Section 454.1, Florida Building Code, Building, 6th Edition (2017), provides the following:

454.1 Public swimming pools and bathing places.

Public swimming pools and bathing places shall comply with the design and construction standards of this section.

Exceptions:

1. A portable pool used exclusively for providing swimming lessons or related instruction in support of an established educational program sponsored or provided by a school district may not be regulated as a public pool. Such pool shall be regulated as a private swimming pool under Section 454.2.
2. A temporary pool may not be regulated as a public pool. Such pool shall be regulated as a private swimming pool under Section 454.2.

454.1.1 Flood hazard areas.

Public swimming pools installed in flood hazard areas established in Section 1612.3 shall comply with Section 1612.

Note: Other administrative and programmatic provisions apply. See Department of Health (DOH) Rule 64E-9, Florida Administrative Code and Chapter 514, Florida Statutes. The regulation and enforcement of the initial and annual operation permit for public pools are preempted to the DOH. The construction permit holder is responsible for obtaining an operation

permit issued by DOH, as a public swimming pool shall not be put into operation without an inspection and operation permit issued from the DOH. DOH may grant variances from the provisions of the Florida Building Code specifically pertaining to public swimming pools and bathing places as authorized by Section 514.0115, Florida Statutes. Building officials shall recognize and enforce variance orders issued by the Department of Health pursuant to Section 514.0115(5), Florida Statutes including any conditions attached to the granting of the variance.

...

A **“public swimming pool” or “public pool”** means a watertight structure of concrete, masonry, or other approved materials which is located either indoors or outdoors, used for bathing or swimming by humans, and filled with a filtered and disinfected water supply, together with buildings, appurtenances, and equipment used in connection therewith. A public swimming pool or public pool shall mean a conventional pool, spa-type pool, wading pool, special purpose pool, interactive water feature or water recreation attraction, to which admission may be gained with or without payment of a fee and includes, but is not limited to, pools operated by or serving camps, churches, cities, counties, day care centers, group home facilities for eight or more clients, health spas, institutions, parks, state agencies, schools, subdivisions, or the cooperative living-type projects of five or more living units, such as apartments, boardinghouses, hotels, mobile home parks, motels, recreational vehicle parks, and townhouses. The term does not include a swimming pool located on the grounds of a private residence.

(emphasis added).

11. Section 454.1.6.1, Florida Building Code, Building, 6th Edition (2017), states:

454.1.6.1 Sanitary facilities.

Swimming pools with a bathing load of 20 persons or less may utilize a unisex restroom. Pools with bathing loads of 40 persons or less may utilize two unisex restrooms or meet the requirements of Table 454.1.6.1. Unisex restrooms shall meet all the requirements for materials, drainage and signage as indicated in Sections 454.1.6.1.1 through 454.1.6.1.4. Each shall include a water closet, a diaper change table, a urinal and a lavatory. Pools with a bathing load larger than 40 persons shall provide separate sanitary facilities labeled for each sex. The entry doors of all restrooms shall be located within a 200-foot (60 960 mm) walking distance of the nearest water's edge of each pool served by the facilities.

Exception: Where a swimming pool serves only a designated group of residential dwelling units and not the general public, poolside sanitary facilities are not required if all living units are within a 200-foot (60 960 mm) horizontal radius of the nearest water's edge, are not over three stories in height unless serviced by an elevator, and are each equipped with private sanitary facilities.

12. Table 454.1.6.1, Florida Building Code, Building, 6th Edition (2017), provides:

TABLE 454.1.6.1
PUBLIC SWIMMING POOL—REQUIRED FIXTURE COUNT

SIZE OF POOL (square feet)	MEN'S RESTROOM			WOMEN'S RESTROOM	
	Urinals	WC	Lavatory	WC	Lavatory
0 – 2,500	1	1	1	1	1
2,501 – 5,000	2	1	1	5	1
5,001 – 7,500	2	2	2	6	2
7,501 – 10,000	3	2	3	8	3

For SI: 1 square foot = 9.2903 m².


13. Section 454.1.3.1.9, Florida Building Code, Building, 6th Edition (2017), states:

All public pools shall be surrounded by a minimum 48 inch (1219 mm) high fence or other approved substantial barrier. The fence shall be continuous around the perimeter of the pool area that is not otherwise blocked or obstructed by adjacent buildings or structures and shall adjoin with itself or abut to the adjacent members. Access through the barrier or fence from dwelling units, such as homes, apartments, motel rooms and hotel rooms, shall be through self-closing, self-latching lockable gates of 48 inch (1219 mm) minimal height from the floor or ground with the latch located a minimum of 54 inches (1372 mm) from the bottom of the gate or at least 3 inches (76 mm) below the top of the gate on the pool side. If the self-closing, self-latching gate is also self-locking and is operated by a key lock, electronic opener or integral combination lock, then the operable parts of such locks or openers shall be 34 inches minimum (864 mm) and 48 inches maximum (1219 mm) above the finished floor or ground. Doored access points from public rooms such as lobbies or club houses need not be through gates if the door(s) meet the same self-closing, self-latching requirements as a gate. Gates shall open outward away from the pool area. A latched, lockable gate shall be placed in the fence within 10 feet (3048 mm) of the closest point between the pool and the equipment area for service access.

(emphasis added)

14. In response to Petitioner's question, the answer is yes. Pursuant to section 454.1, Florida Building Code, Building, 6th Edition (2017), the definition of "Public swimming pools" (which clarifies that the term "living units" includes projects such as hotels), and section 454.1.3.1.9, Florida Building Code, Building, 6th Edition (2017) (which clarifies that the term "dwelling units" includes units such as motel rooms and hotel rooms), the exception to the requirement of poolside sanitary facilities of section 454.1.6.1 would apply to the project in question.

DONE AND ORDERED this ~~30~~ day of JULY, 2018, in Punta Gorda,
Charlotte County, State of Florida.


E. JAY CARLSON
Chairman, Florida Building Commission

NOTICE OF RIGHT TO APPEAL

Petitioner and all other interested parties are hereby advised of their right to seek judicial review of this Order in accordance with Section 120.68(2)(a), Florida Statutes (2018), and Florida Rules of Appellate Procedure 9.110(a) and 9.030(b)(1)(C). To initiate an appeal, a Notice of Appeal must be filed with the Agency Clerk, Department of Business and Professional Regulation, 2601 Blair Stone Road, Tallahassee, Florida 32399-2203 and with the appropriate District Court of Appeal not later than thirty (30) days after this Order is filed with the Clerk of the Department of Business and Professional Regulation. A Notice of Appeal filed with the District Court of Appeal shall be accompanied by the filing fee specified by Section 35.22(3), Florida Statutes (2018).

CERTIFICATE OF FILING AND SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing order has been filed with the undersigned and furnished by U. S. Mail to the persons listed below this 27th day of July, 2018.



Agency Clerk's Office
Department of Business and Professional Regulation
& Florida Building Commission
2601 Blair Stone Road
Tallahassee, Florida 32399-2203

Via U.S. Mail

G.B. Collins Engineering, P.A.
Attn: Samuel A. Liberatore
300 Alternate 19 North, Suite A.
Palm Harbor, FL 34683

Benjamin Lute
Cotney Construction Law, LLP
8621 E. Dr. Martin Luther King Jr. Blvd.
Tampa, FL 33610-7305

Via Inter-Office or Email Delivery

Mo Madani, Planning Manager
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Department of Business and Professional
Regulation
2601 Blair Stone Road
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Marjorie Holladay
Joint Administrative Procedures Committee
Pepper Building, Room 680
Tallahassee, Florida 32399-1300

Date Submitted	12/14/2018	Section	454.1.6.5.10.1	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Approved as Submitted				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Allows for the depth at a main drain to be greater than 3" in difference from the sidewall depth.

Rationale

Many pools being designed currently include circular areas at the deep points that are "dished" to the centers, usually at depth differences that are more than 3". Other irregularly-shaped pools will include this same type of depth difference. This mod will allow for these types of pools to be designed without violating code.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

No effect

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Allows for diverse types of pool designs.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
Comment:	The Florida Swimming Pool Association SUPPORTS this code revision.				

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
Comment:	The Florida Swimming Pool Association SUPPORTS this code proposal.				

If the depth at the outlet shall not deviates more than 3 inches (76 mm) from the side wall, that depth shall be identified on depth markers in addition to the markers normally required for the sidewall depth. Markers for the depth at the drains shall be in accordance with 454.1.2.3 with the following words added: "AT CENTER" for circular areas and "AT DEEP POINT" for other pool shapes.

TAC: Swimming Pool

Total Mods for **Swimming Pool** in **No Affirmative Recommendation**: 9

Total Mods for report: 42

Sub Code: Building

SW7125

34

Date Submitted 6/9/2018
Chapter 4

Section 454
Affects HVHZ No

Proponent Robert Cohen
Attachments Yes

TAC Recommendation No Affirmative Recommendation
Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

E6452

Summary of Modification

Revise Section 454.4.1.2 to reinsert provisions of 2014 that were deleted in 2017 Code. Chapter 27 and NEC have no requirements for illumination. Alternatively, add provisions for illumination based on the 2015 (or later) ICC Swimming Pool Code to follow a current national standard.

Rationale

Restore major life safety requirements that were deleted and that have no equivalent elsewhere in Florida Code or Law.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Revert to 2014 Code level. No impact compared to recent (end of 2017) past practice.

Impact to building and property owners relative to cost of compliance with code

Revert to same cost impact as prior to December 31, 2017.

Impact to industry relative to the cost of compliance with code

Revert to same cost impact as prior to December 31, 2017.

Impact to small business relative to the cost of compliance with code

Revert to same cost impact as prior to December 31, 2017.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Restore deleted major life safety practices and requirements for drowning and electrocution prevention.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Restore deleted major life safety practices and requirements for drowning and electrocution prevention.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No change to common past materials and practices.

Does not degrade the effectiveness of the code

Restore deleted major life safety practices and requirements for drowning and electrocution prevention.

1st Comment Period History

Proponent Kari Hebrank Submitted 2/13/2019 Attachments No

Comment:

The Florida Swimming Pool Association is OPPOSED to this code modification which reinserts provisions of the 2014 Code on illumination and lighting requirements.

SW7125-G1

454.1.4.2.3 Underwater lighting. ~~Underwater luminaires shall comply with Chapter 27 of the Florida Building Code, Building.~~ Underwater lighting shall utilize transformers and low-voltage circuits with each underwater light being grounded. The maximum voltage for each light shall be 15 volts and the maximum incandescent lamp size shall be 300 watts. The location of the underwater lights luminaires shall be such that the underwater illumination is as uniform as possible, and shall not be less than 18 inches (457 mm) below the normal operating water level determined by the center-line of the skimmer or top lip of the gutter. All underwater lights which depend upon submersion for safe operation shall have protection from overheating when not submerged. Underwater lighting requirements can be waived when the overhead lighting provides at least 15 footcandles (150 lux) of illumination at the pool water surface and pool wet deck surface. Alternative lighting systems which use 15 volts or less, or use no electricity in the pool or on the pool deck, such as LED (light emitting diode) fiber-optic systems, may be utilized if the manufactures specifications provide for the equivalency in watt output.

The changes to section 454.4.1 effectively eliminate all the provisions of the 2014 and prior Florida Codes and Health Department Regulations (now repealed) that provide pool illumination for indoor or outdoor night swimming. Chapter 27 of the 2017 FBC referred to in 2017 FBC 454 has NO REQUIREMENTS FOR ILLUMINATION. The NEC has no requirements for illumination. Florida changed the requirements for residential pools to require low voltage (15 volts maximum) after several electrocutions.

Either restore the 2014 Code requirements or base FBC on the International Swimming Pool and Spa Code extracted below.

454.A Artificial lighting required.

When a pool is open during periods of low natural illumination, artificial lighting shall be provided so that all areas of the pool, including alt suction outlets on the bottom of the pool will be visible. Illumination shall be sufficient to enable a lifeguard or other persons standing on the deck or sitting on a lifeguard stand adjacent to the pool edge to determine if a pool user is lying on the bottom of the pool and that the pool water is transparent and free from cloudiness These two conditions shall be met when all suction outlets are visible from the edge of the deck at all times when artificial lighting is illuminated and when an 8+ inch-diameter (152 mm) black disk, placed at the bottom of the pool in the deepest point, is visible from the edge of the pool deck at all times when artificial lighting is illuminated.

454.A.1 Pool and deck illumination.

Overhead lighting, underwater lighting or both shall be provided to illuminate the pool and adjacent deck areas. The lighting shall be listed and labeled. The lighting shall be installed in accordance with NFPA 70.

454.A.2 Illumination intensity.

For outdoor pools, any combination of overhead and underwater lighting shall provide maintained illumination not less than 10 horizontal foot-candles (10 lumens per square foot) [108 lux] at the pool water surface. For indoor pools, any combination of overhead and underwater lighting shall provide maintained illumination of not less than 30 horizontal foot-candles (30 lumens per square foot) [323 lux] at the pool water surface. Deck area lighting for both indoor and outdoor pools shall provide maintained illumination of not less than 10 horizontal foot-candles (10 lumens per square foot) [108 lux] at the walking surface of the deck.

454.A.3 Underwater lighting.

Underwater lighting shall provide not less than 8 horizontal foot-candles (8 lumens per square foot) [86 lux] at the pool water surface area, or not less than a total wattage of 1/2 watts/ft² (5.4 watts/m²) of pool water surface for incandescent underwater lighting where the fixtures and lamps are rated in watts

Exception: The requirement of this section shall not apply where overhead lighting provides not less than 15 foot-candles (15 lumens per square foot) [161 lux] of maintained illumination at the pool water surface, the overhead lighting provides visibility, without glare, of all areas of the pool, and the requirements of Section 321.2.2 are met or exceeded.

454.A.4 Emergency illumination.

Public pools and public pool areas that operate during periods of low illumination shall be provided with emergency lighting that will automatically turn on to permit evacuation of the pool and securing of the area in the event of power failure. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than 0.1 foot-candle (0.1 lumen per square foot) [1 lux] measured at any point on the water surface and at any point on the walking surface of the deck, and not less than an average of 1 foot-candle (1 lumen per square foot) [11 lux]. At the end of the emergency lighting time duration, the illumination level shall be not less than 0.06 foot-candle (0.06 lumen per square

foot) (0.65 lux) measured at any point on the water surface and at any point on the walking surface of the deck, and not less than an average of 0.6 foot-candle (0.6 lumen per square foot) [6.46 lux]. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.

Date Submitted	11/2/2018	Section	454.1.2.3.5	Proponent	Michael Weinbaum
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

454.1.3.1.7, 454.1.9.8.7.1

Summary of Modification

Allow drinks/beverages at public pools and public pool decks

Rationale

Drinks or beverages near pools do not pose a public health risk on their own.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

Training on new rule

Impact to building and property owners relative to cost of compliance with code

No new costs; owners would not be required to change signs if they don't want to allow drinks or beverages

Impact to industry relative to the cost of compliance with code

No new costs

Impact to small business relative to the cost of compliance with code

No new costs

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Health, safety and welfare are considered in maintaining the bans on food, glass, and animals - which are all possible sources of disease and injury.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Reducing unnecessary restrictions in the code improves the code.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

None of this is mentioned

Does not degrade the effectiveness of the code

Health, safety and welfare are considered in maintaining the bans on food, glass, and animals - which are all possible sources of disease and injury.

1st Comment Period History					
7179-A1	Proponent	Michael Weinbaum	Submitted	2/18/2019	Attachments Yes
	Rationale				
	People doing water aerobics will want to bring water bottles to the water's edge, and this is not a public health risk. To the extent that spilled drinks and increased urination may increase chlorine demand, an automated chemical controller will catch that and react accordingly.				
	Fiscal Impact Statement				
	Impact to local entity relative to enforcement of code				
	Training would be required on the nuances of this proposal				
	Impact to building and property owners relative to cost of compliance with code				
	No impact				
	Impact to industry relative to the cost of compliance with code				
	No impact				
	Impact to Small Business relative to the cost of compliance with code				
	No new costs				
	Requirements				
	Has a reasonable and substantial connection with the health, safety, and welfare of the general public				
	It is reasonable to prevent food and glass and animals from being anywhere near the water.				
	Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction				
	Proposal may incentivize pools that do not have automated chemical control to install it.				
	Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities				
	Does not.				
	Does not degrade the effectiveness of the code				
	Adds nuance, still enforceable.				

1st Comment Period History					
SW7179-G1	Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments No
	Comment: The Florida Swimming Pool Association SUPPORTS this code proposal which allows drinks and beverages in the public pool and deck area.				

1st Comment Period History					
SW7179-G2	Proponent	robert vincent	Submitted	2/18/2019	Attachments No
	Comment: Similar to 7217- This proposal goes further by also allowing beverage service to be within 12 feet of the waters' edge, such as a swim up bar adjoining the swimming pool and serve beverages to patrons while in the swimming pool. These changes to the building code would be detrimental to public health and safety. Spilled food and drink in the pool would create a additional chlorine demand, thus inhibit rapid disinfection, and potentially allow for pathogens to be retained longer in water than they are presently. Debris, organics and oils from these consumables would likely affect filtration equipment efficacy. This allowance also encourages pool patrons to remain in the pool instead of leaving the pool area to use the restroom when necessary. Other unintended and unforeseen negative consequences may result.				

454.1.2.3.5**Rules and regulations signage.**

Rules and regulations for bathers shall be installed in minimum 1-inch (25.4 mm) letters which must be legible from the pool deck, and shall contain the following:

1. No food or beverages other than water in pool or on pool wet deck.
- ...

454.1.2.3.5.1

Beverages other than water may be allowed on the pool wet deck provided that the pool has automated oxidation reduction potential (ORP) and pH controllers with sensing probes. For these pools, the rules sign may indicate

1. No food in pool or on pool wet deck.
- ...

454.1.3.1.7

Food or drink service facilities shall not be located within 12 feet (3658 mm) of the water's edge. However, drinks may be served within 12 feet if:

1. the pool serves a transient facility
2. The pool is equipped with automated oxidation reduction potential (ORP) and pH controllers with sensing probes
3. The pool has a three hour turnover or less.
- ...

454.1.9.8.7.1

Rules and regulations for water theme parks shall be posted in minimum 1-inch (305 mm) letters at each entrance to the park and shall contain the following:

1. 1.No food, drink, glass or animals in or on the pool decks.

454.1.2.3.5**Rules and regulations signage.**

Rules and regulations for bathers shall be installed in minimum 1-inch (25.4 mm) letters which must be legible from the pool deck, and shall contain the following:

1. No food or beverages in pool or on pool wet deck.

...

454.1.3.1.7

Food or drink service facilities shall not be located within 12 feet (3658 mm) of the water's edge.

...

454.1.9.8.7.1

Rules and regulations for water theme parks shall be posted in minimum 1-inch (30.5 mm) letters at each entrance to the park and shall contain the following:

1. No food, drink, glass or animals in or on the pool decks.

Date Submitted	11/13/2018	Section	454.1.6.5.8	Proponent	Michael Weinbaum
Chapter	4	Affects HVHZ	No	Attachments	Yes
TAC Recommendation	No Affirmative Recommendation				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

454.1.6.5.10.2,
 454.1.7.3.2,
 454.1.9.2.1.4,
 454.1.9.2.3.5,
 454.1.9.2.3.6,

Summary of Modification

Allow designers to exceed 3 ft/s and 1.5 ft/s rule so long as design otherwise complies with ANSI/APSP 16

Rationale

Here the building code conflicts with national standards and current practice from leading drain grate manufacturers. Note the attached drawing. This popular drain grate is stamped with a maximum, national code compliant flow rate of 816 gallons per minute, but only accepts an 8" pipe. In Florida currently, a pool builder can only route about 500 gallons per minute through this drain, legally, because any faster would violate the 3 ft/s rule for pipes. Further, flows above about 570 gallons per minute would violate the 1.5 ft/s rule.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

Code enforcement becomes simpler

Impact to building and property owners relative to cost of compliance with code

The costs to owners are reduced as fewer drains and pipes are needed.

Impact to industry relative to the cost of compliance with code

This revision is intended to make full use of products that industry is already providing.

Impact to small business relative to the cost of compliance with code

Small businesses will see reduced costs.

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Yes, it is of paramount importance to prevent suction entrapment.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes, the national codes mirror the Florida code in the case of field-built sumps, requiring no more than 1.5 ft/s at the grate. With manufactured sumps, specific tests are done to verify the safety of higher flow rates

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This code allows manufactured sumps and grates to be specified within the full extent of their tested capabilities

Does not degrade the effectiveness of the code

Yes, the national codes mirror the Florida code in the case of field-built sumps, requiring no more than 1.5 ft/s at the grate. With manufactured sumps, specific tests are done to verify the safety of higher flow rates

1st Comment Period History

7258-A1

Proponent	Michael Weinbaum	Submitted	2/18/2019	Attachments	Yes
Rationale					
ANSI/APSP compliant sumps and grates are often designed to be safe while more than 3 ft/s flows through the drain piping.					
Fiscal Impact Statement					
Impact to local entity relative to enforcement of code					
One less thing to check					
Impact to building and property owners relative to cost of compliance with code					
Smaller pipes and fewer sumps may be used					
Impact to industry relative to the cost of compliance with code					
Makes better use of what industry already offers					
Impact to Small Business relative to the cost of compliance with code					
Small businesses will see reduced costs.					
Requirements					
Has a reasonable and substantial connection with the health, safety, and welfare of the general public					
The 1.5 ft/s rule on grates concerns a part of the pool that users will actually touch. The 6 ft/s on suction pipes prevents cavitation. The 10 ft/s on discharge pipes prevents erosion. This 3 ft/s rule does not help the same way and should go.					
Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction					
Allows the designer to use product as the manufacturer intended					
Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities					
Allows the designer to use product as the manufacturer intended					
Does not degrade the effectiveness of the code					
Allows the designer to use product as the manufacturer intended					

1st Comment Period History

SW7258-G1

Proponent	Michael Weinbaum	Submitted	1/8/2019	Attachments	No
Comment:					
What I wrote under "rationale" has a math error.					
The 1.5 ft/s rule would actually limit the grate shown in the attached drawing to 855 gallons per minute, not 570 like I wrote. But the ANSI/APSP-16 rating is less, 816 gpm is stamped on the grate. As written, Florida code requires the engineer and the building department official to check three things: the ANSI/APSP-16 flow rate, and the open area, and the pipe connection size, and then do math to figure out which of the three works out to less flow. This seems like unnecessary work in light of how much testing the manufacturers perform to obtain their ANSI/APSP-16 flow rate.					

1st Comment Period History

SW7258-G2

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
Comment:					
The Florida Swimming Pool Association is OPPOSED to this code modification because it exceeds all other design standards and there are safety concerns with maximum flow velocity.					

1st Comment Period History

SW7258-G3

Proponent	robert vincent	Submitted	2/18/2019	Attachments	No
Comment:					
<p>This Mod will weaken the code for anti-entrapment and would likely violate the federal law for pool suction outlet anti-entrapment which references the national suction outlet standard in the FBC, as does also the Florida Statute at s.514.0315(1). There is no need to eliminate the 1.5 ft/s flow through main drains as all professional designers are familiar with the FBC and the gravity drainage criteria. When a lab using the nationally referenced standard tests a drain grate at 1.4 ft/s or less, this is reflected in published spec sheets of the manufacturer and compiled in a code compliant drain list by the Dept. of Health on the public swimming pool webpage: http://www.floridahealth.gov/environmental-health/swimming-pools/index.html</p> <p>Florida's gravity flow systems to collector tanks, combined with the current maximum flow velocities through main drain gates, suction, gravity and pressure lines has served the citizens of this State well – without a single documented suction entrapment. The issue of direct suction vacuum ports is recognized and a proposed code modification has been submitted to address this issue.</p>					

454.1.6.5.8 Flow velocity.

Pressure piping shall not exceed 10-feet per second (2038 mm/s), except that precoat lines with higher velocities may be used when necessary for agitation purposes. The flow velocity in suction piping shall not exceed 6-feet per second (1829 mm/s) except that flow velocities up to 10-feet per second (3048 mm/s) in filter assembly headers will be acceptable. ~~Main drain systems and s~~Surface overflow systems which discharge to collector tanks shall be sized with a maximum flow velocity of 3-feet per second (914 mm/s). The filter and vacuuming system shall have the necessary valves and piping to allow filtering to pool, vacuuming to waste, vacuuming to filter, complete drainage of the filter tank, backwashing for sand and pressure D.E.- type filters and precoat recirculation for D.E.-type filters.

...

454.1.9.2.1.4 Plunge pool main drains.

The plunge pool shall have a minimum of one main drain with separate piping and valve to the filtration system collector tank. The velocity through the openings of the main drain grate shall not exceed $1\frac{1}{2}$ feet per second (457 mm/s) at the design flow rate of the recirculation pump. ~~The main drain piping shall be sized to handle 100 percent of the design flow rate of the filtration system with a maximum flow velocity of 3 feet (914 mm) per second.~~

...

454.1.9.2.3.5 Pump reservoir main drains.

The pump reservoir shall have a minimum of one main drain with separate piping and valve to the filtration system collector tank and the velocity through the openings of the main drain grates shall not exceed $1\frac{1}{2}$ feet per second (457 mm/s) at the design flow rate of the filtration system pump. ~~The main drain piping shall be sized to handle 100 percent of design flow rate of the filtration system pump with a maximum flow velocity of 3 feet per second (914 mm/s).~~

454.1.9.2.3.6

The pump reservoir shall be fed by main drains within the plunge pool itself (either in the floor or side wall). They shall have the maximum flow velocity of $1\frac{1}{2}$ feet per second (457 mm/s) through the main drain grating ~~and 3 feet per second (3962 mm/s) through the reservoir piping.~~

454.1.6.5.8 Flow velocity.

Pressure piping shall not exceed 10-feet per second (3048 mm/s), except that precoat lines with higher velocities may be used when necessary for agitation purposes. The flow velocity in suction piping shall not exceed 6-feet per second (1829 mm/s) except that flow velocities up to 10-feet per second (3048 mm/s) in filter assembly headers will be acceptable. ~~Main drain systems and s~~Surface overflow systems which discharge to collector tanks shall be sized with a maximum flow velocity of 3-feet per second (914 mm/s). The filter and vacuuming system shall have the necessary valves and piping to allow filtering to pool, vacuuming to waste, vacuuming to filter, complete drainage of the filter tank, backwashing for sand and pressure D.E.-type filters and precoat recirculation for D.E.-type filters.

...

454.1.6.5.10.2

Outlets shall comply with ASME A112.19.8 and ANSI/APSP-16. ~~If these standards are deprecated, or if a revision to them, or a novel design approach, casts doubt on their applicability, outlets shall instead be covered by a secured grating which requires the use of a tool to remove and whose open area is such that the maximum velocity of water passing through the openings does not exceed 1½ feet per second (457 mm/s) at 100 percent of the design recirculation flow. Main drain covers/grates shall comply with the requirements of ANSI/APSP-16 and the water velocity of this section.~~

...

454.1.7.3.2

~~The grate cover shall be sized so as not to allow the flow to exceed 1½ feet per second (457 mm/s) to comply with 454.1.6.5.10.2 when the equalizer line is operating.~~

...

454.1.9.2.1.4 Plunge pool main drains.

~~The plunge pool shall have a minimum of one main drain with separate piping and valve to the filtration system collector tank. The velocity through the openings of the main drain grate shall comply with 454.1.6.5.10.2 not exceed 1½ feet per second (457 mm/s) at the design flow rate of the recirculation pump. The main drain piping shall be sized to handle 100 percent of the design flow rate of the filtration system with a maximum flow velocity of 3 feet (914 mm) per second.~~

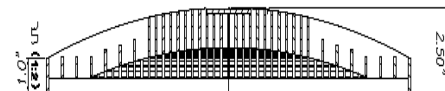
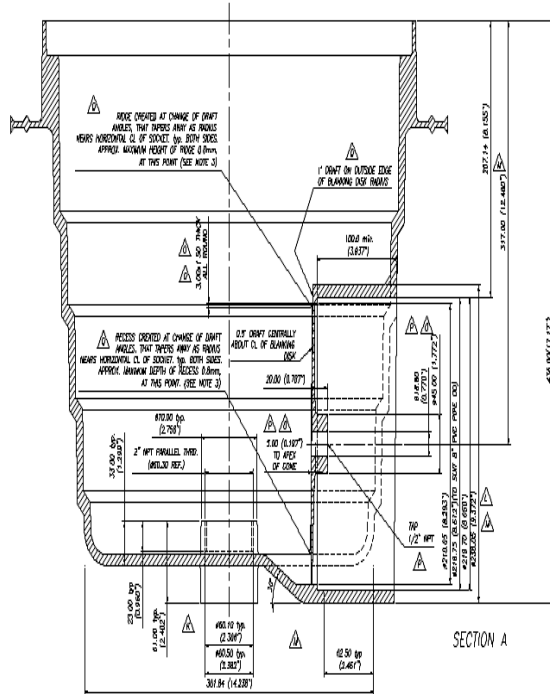
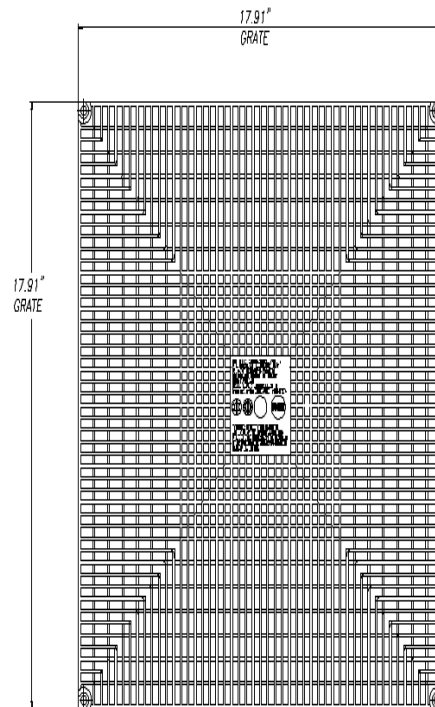
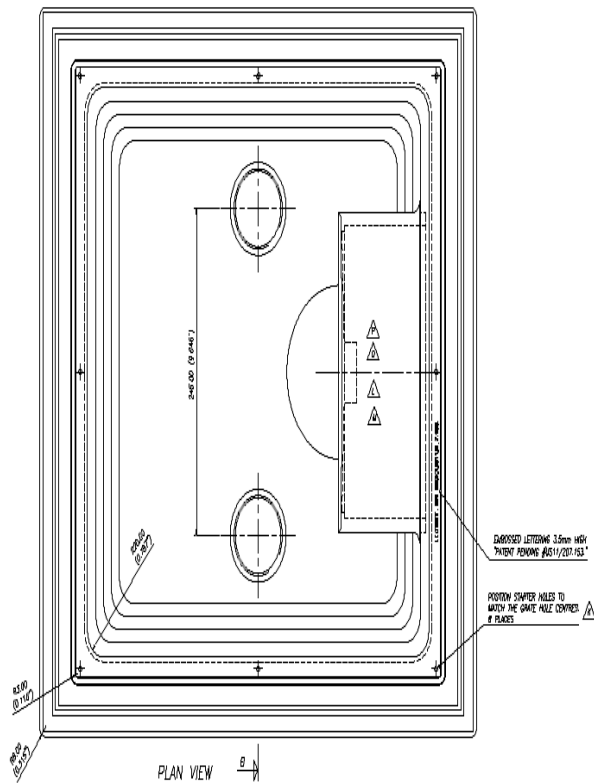
...

454.1.9.2.3.5 Pump reservoir main drains.



~~The pump reservoir shall have a minimum of one main drain with separate piping and valve to the filtration system collector tank and the velocity through the openings of the main drain grates shall not exceed 1½ feet per second (457 mm/s) comply with 454.1.6.5.10.2 at the design flow rate of the filtration system pump. The main drain piping shall be sized to handle 100 percent of design flow rate of the filtration system pump with a maximum flow velocity of 3 feet per second (914 mm/s).~~

454.1.9.2.3.6

~~The pump reservoir shall be fed by main drains within the plunge pool itself (either in the floor or side wall). They shall comply with 454.1.6.5.10.2, have the maximum flow velocity of 1½ feet per second (457 mm/s) through the main drain grating and 3 feet per second (3962 mm/s) through the reservoir piping.~~



All drawing dimensions supplied by Lawson Aquatics Inc. website are for reference only. All CAD files were created using AutoCAD file (.dwg) and were posted on the website as a service to our customers using AutoCAD. Errors sometimes occur during this process and with software incompatibility upon opening a file. Lawson Aquatics Inc. and/or any authorized distributor of our products will not be held responsible for problems arising from files which have been converted and does not warranty the documents against deficiencies or typographical errors of any kind. We recommend that all measurements be verified with actual physical product before any custom fabrication in the field occurs.

ITEM #	MLD-SG-1818-WT	MLD-SG-1818-BK	 LAWSON AQUATICS
	WHITE ONLY	BLACK ONLY	
MLD-SG-1818-WT(WHITE)	PVC WHITE / BLACK	REVERSE ATX	 CROWN DRAIN 18" x 18" MAIN DRAIN SUMP AND GRATE
MLD-SG-1818-BK(BLACK)	MLD-SG-1818		

Date Submitted	12/4/2018	Section	454.1.9.8	Proponent	Nikki Barney
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

454.1.9.8.3

Summary of Modification

Mod to require pH adjustment chemicals to be fed ONLY into Holding tank and ORP tested in Holding Tank in regards to Interactive Water Features

Rationale

In 454.1.9.8 there is not a definitive location stated for pH adjustment chemicals for pH balancing. In current and previous years (Jan 1, 2015-Present day) Engineers and pool builders / operators are locating the pH adjustment chemicals into a closed pipe after filtration as the final treatment alongside the required disinfection chemical feeder into the closed water pipe going directly to the feature. The introduction of Acid and other chemicals for pH balance are not being diluted when this occurs and is sending a high quantity of "Acid" to the patrons of the water feature. The soft surfacing, AquaFlex, we manufacture and install for safety and protection from slip and fall injuries, gets damaged within six months to one year of its life, where expected life-cycle is seven years. This shortening of life cycle in our soft surface is a tell-tale sign the patrons of the water features are being exposed to high amounts of Acid. In the beginning of our companies AquaFlex installations in Florida (2008) until 2014, the surface would survive the chemicals in treated pool water for approximately 7 years, starting in 2015 through current day, as the FBC pool code is written now, our surface is attacked by Acid and is only serving the end-users for approximately one year before repairs and or replacement is required. Through our in-house and 3rd-party testing, we are sure it is the Acid component in the water that is destroying the surface. Our manufacturer installs this surfacing product worldwide and ONLY sees the damaged (softening / sticky) surface in Florida. The pH balancing chemicals are only injected into the holding tank and pH is only balanced in the holding tank in all other states of the United States. Florida is the only state with Acid going directly to the features without dilution. The code needs to be revised to give more direction of proper location of pH balancing chemical introduction.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

No Impact

Impact to building and property owners relative to cost of compliance with code

They will save money in maintaining their soft surface and protect their patrons better.

Impact to industry relative to the cost of compliance with code

No Impact, only change in design and location of injection for pH balancing chemicals

Impact to small business relative to the cost of compliance with code

Relocation of pH balancing chemicals should not have a huge cost associated for the operators. The cost of damage to their soft surfaces and patrons outweighs any monetary cost of the relocation of injection site.

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Since 2015 the engineers / designers place the acid injection next to Chlorine injection, of which CL is required in return line to features. When this occurs, the pH levels intermittently reaching the feature is in the lower 6's or even 5's. Very dangerous for peoples health.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Proposed Mod will be better for patrons and the life cycle of the soft surfacing operators prefer using to protect patrons from slip and fall injuries. Water should always be balanced in holding tank.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

the proposed mod is fair and actually protects our product from becoming obsolete in the market, due to high concentration of acid exposure, our surface is only lasting 1-2 years compared to original life cycle in FL of 5-7 years.

Does not degrade the effectiveness of the code

Absolutely not. Actually protects patrons better than way code is interpreted now.

454.1.9.8 Interactive Water Features

454.1.9.8.3 Chemical Feeders shall be in accordance with section 454.1.6.5; except that the disinfection feeder shall be capable of feeding 12ppm of free chlorine to the pressure side of the recirculation system or the collector tank (based on hypothetical 30-minute turnover of contained volume within the system) Automated oxidation reduction potential (ORP) and pH controllers with sensing probes shall be installed to assist in maintaining proper disinfection and pH levels. pH Adjustment Chemicals to be introduced in the Holding Tank Only. pH Balance to be probe tested and achieved in Holding Tank before water is pumped to the filters and water feature.

Date Submitted	12/12/2018	Section	454	Proponent	CK Hamilton
Chapter	4	Affects HVHZ	No	Attachments	Yes
TAC Recommendation	No Affirmative Recommendation				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

PMT proposes adding a Storm Front/Lightning Detector into the code for swimming pools since our state leads the nation in fatalities and injuries caused by lightning. A product that is a safety/situational awareness device that alert swimmers and life guards of approaching storms/lightning.

Rationale

Please see attached PDF above

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

No impact, easy to install, can be battery or powered operated

Impact to building and property owners relative to cost of compliance with code

No impact, low cost, easy to install, can be battery or powered operated

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

The product will provide a safety situational awareness warning/alert to swimmers and life guards that storms/lightning is approaching the area. When the audible alert is heard or seen with LEDs flashing, the swimmers/life guards should seek shelter.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

Correct

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association is OPPOSED to this code modification.

SW7875-G1

Add section 454.1.11 and it shall read as follows:

Public Pool Storm Front and Lightning Detector. All new swimming pool construction/modifications for hotels, schools, public pools, commercial pools and municipalities shall include a situational awareness Storm Front/Lightning Detector as a safety device in the building code. The device shall be seen or heard for a minimum distance of 30 feet. The product will provide a visual and audible (for visually impaired) alert to swimmers and life guards that storms/lightning is approaching or departing the area. When the visual/audible alerts are heard or seen with LEDs flashing (indicating storm distance), the swimmers/life guards should seek shelter. A minimum of 3 different color LED's shall indicate approaching or departing storms indicating distance to storm front for the hearing impaired.

Add section 454.2.24 and it shall read as follows:

Private Pool Storm Front and Lightning Detector. All new swimming pool construction/modifications for private/residential pools shall include a situational awareness Storm Front/Lightning Detector as a safety device in the building code. The device shall be seen or heard for a minimum distance of 30 feet. The product will provide a visual and audible (for visually impaired) alert to swimmers and life guards that storms/lightning is approaching or departing the area. When the visual/audible alerts are heard or seen with LEDs flashing (indicating storm distance), the swimmers/life guards should seek shelter. A minimum of 3 different color LED's shall indicate approaching or departing storms indicating distance to storm front for the hearing impaired.





Date Submitted	12/11/2018	Section	454.1.9.2.6.3	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications**Summary of Modification**

Deletes the requirement for a minimum strainer size for slide pumps.

Rationale

Strainer size for any pump should depend on hydraulics and flow rate. We don't understand why this mandated minimum is in the code.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Would save cost of larger strainers where they are not necessary.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

No effect

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

No effect

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association is OPPOSED to this code modification.

Any filtration system pump which takes suction directly from the plunge pool and reservoir shall have a ~~minimum~~ 8-inch (208 mm) diameter hair and lint strainer on the suction side of the pump.

Date Submitted	12/11/2018	Section	454.1.9.3.3	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation				
Commission Action	Pending Review				

Comments**General Comments** No**Alternate Language** No**Related Modifications****Summary of Modification**

Clarifies that skimmer systems can be used for Water Activity Pools (WAP) at the discretion of the design engineer.

Rationale

Section 454.1.9.3.1 allows for WAPs to be designed "within the limits of sound engineering practice." Lately FDOH personnel have been holding design of WAPs to standard swimming pool design requirements, even though this section specifically allows for alternate means of design. Specifically, we were required to provide gutters for a WAP with a dimension (that was not the width) greater than 20 feet. We have designed many of these types of pools both in Florida and around the country that function as intended with skimmers and do not present a threat to public health. If the code already contains a provision that these types of pools can be designed "within the limits of sound engineering practice," and we have proven designs for these types of pools in operation that work well, we do not understand why our designs are still being questioned by FDOH.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

Would significantly lower costs of construction where skimmers can be used in lieu of gutter systems.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

No effect

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

No effect

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/17/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association SUPPORTS this code amendment.

1st Comment Period History

SW7922-G2	Proponent	robert vincent	Submitted	2/18/2019	Attachments	No
	Comment: FBC Section 104.11 has criteria for alternative materials, design, construction and equipment with research reports and testing that apply to the public pools. This section should be referenced here for this Mod, and more information provided. Proof of adequacy provided by reports by manufacturers or other research provided with design submittal before permitting should be available. If not, then skimmer effectiveness tests after construction should be required by code, with alternatives upon test failure spelled out, such as reduced bather load, installation of additional recirculation capabilities with portable equipment or permanent, and/or installed supplemental UV light or Ozone disinfection, etc. Section 454.1.9.1 Water recreation attractions references all the construction criteria in 454.1 through 454.1.6.5, and the 20' max. pool width and 1000 sq. ft max. area for recessed automatic surface skimmers is included at 454.1.6.5.3.2 Florida's pool rule and FBC has been updated 14 times in 90 years to enhance engineering design options that better protect public health and safety, normally after evidenced-based engineering has shown they result in better water quality and fewer bather injuries; such as pool safety demarcations, gravity drainage collector tanks, zero depth entry gutter systems, IWVs with UV disinfection systems.					

The recirculation-filtration system of water activity pools shall achieve a minimum of one turnover every 2 hours for water activity pools over 2 feet (610 mm) deep, and 1 hour for these pools that are 2 feet (610 mm) deep or less. Pools can utilize skimmers or gutters regardless of pool size at the discretion of the design engineer.

Date Submitted	12/11/2018	Section	454.1.9.6.4	Proponent	James LePetrie
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation				
Commission Action	Pending Review				

Comments**General Comments** No**Alternate Language** No**Related Modifications****Summary of Modification**

Allows for use of landscape beds along zero entry pools where the depth is less than 3 feet without counting towards cumulative perimeter obstruction.

Rationale

The code used to allow for landscape beds along the zero entry that did not count as obstructions but was inexplicably removed at one point. All code requires are "No Entry" signage along the pool edge, but these do little to limit bather entry. Landscape beds will help deter bathers from entering along these points. These beds are regularly allowed by the Board by variance as long as the beds contain landscaping that allows easy access to the pool for responders to bathers in distress.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

None

Impact to building and property owners relative to cost of compliance with code

None. Use of landscape beds would be at owner's option.

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Aids in ensuring bathers do not enter the pool at areas that are not designated as access points.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

1st Comment Period History

Proponent	Kari Hebrank	Submitted	2/13/2019	Attachments	No
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Comment:

The Florida Swimming Pool Association is OPPOSED to this code modification.

“No Entry, Shallow Water” signs shall be provided along the pool wall edge where the water depth is less than 3 feet (914 mm) deep. No entry signs shall be slip-resistant, shall have 4-inch-high (102 mm) letters, shall be located within 2 feet (610 mm) of the pool edge and shall be spaced no more than 15 feet (4572 mm) apart. Landscape beds that allow unobstructed access from the pool deck to bathers in distress in the pool are allowed along the pool edge from zero to 3 feet of water depth. These beds shall not be considered as obstructions where wet deck area is provided as per 454.1.3.1.6.

Date Submitted	12/15/2018	Section	454.1	Proponent	Mark Bowers
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation				
Commission Action	Pending Review				

Comments**General Comments**

No

Alternate Language

No

Related Modifications**Summary of Modification**

I am proposing to exempt Floatation pods from FBC regulatory requirements. Unlike pools and spas, floatation pods are portable, are super saturated with magnesium sulfate, have a bathing load of 1, and create an extremely low risk of transmission of disease or safety risk to the public.

Rationale

Epsom salt floatation tanks are not pools or spas and have unique design and operational requirements that require a float spa owner to apply for a variance for dozens of code requirements in order to open for business.

Some of these requirements actually create safety hazards to the public, such as requiring a halogen sanitizer in and enclosed environment.

These devices are therapeutic appliances, are portable and not hard plumbed, have a bathing load of 1; and are super saturated with magnesium sulfate creating an extremely inhospitable environment for pathogens.

These are not pools and as such, should be regulated differently.

These devices were developed by the National Institute of Health in the US in the 1950's and since that time, there has been no documented case of disease outbreak from using a floatation pod.

Many other states choose not to regulate Floatation pods as they do not meet the definition of a pool and have such a low safety risk to the public.

Fiscal Impact Statement**Impact to local entity relative to enforcement of code**

none

Impact to building and property owners relative to cost of compliance with code

none

Impact to industry relative to the cost of compliance with code

Implementing this code change would save the floatation industry in Florida many tens of thousands of dollars and many hours of bureaucratic paperwork that each new float center must contend with.

Impact to small business relative to the cost of compliance with code

Implementing this proposed Mod would not have any impact other than encouraging more floatation centers to open up in Florida.

Requirements**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

This proposed modification improves the safety and welfare of the general public by considering these appliances for what they are and not attempting to define them under a different category (that would impose a safety risk to the public.)

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

This strengthens the code by not forcing floatation spa owners to apply for variances to dozens of code requirements that just do not apply to these devices.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

These devices are appliances and should be viewed and regulated as such.

Does not degrade the effectiveness of the code

This Mod improves upon the effectiveness of the code by not attempting to define floatation pods as pools when they do not meet basic definitions of "pool". This improves the effectiveness of the code.

1st Comment Period History

Proponent	robert vincent	Submitted	2/18/2019	Attachments	Yes
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Comment:

Exempting Epsom salt float tanks from all code criteria can lead to unhealthy bodies of water that could lead to disease outbreaks. The typical float tank only changes the water about every 6 months due to the cost of the salt, with the potential for over a dozen people to use the pods daily (1,800 patrons in 6 months). Maintaining statewide Variances to the select code sections not necessary and minimum design standards for float tanks along with routine inspections will ensure that the critical components outlined in the variances will be maintained. See attached code citation list for variances. Alternatively, and more efficient; FBC code language for these special purpose public "swimming" pools could be proposed and promulgated.

454.1Public swimming pools and bathing places.

Public swimming pools and bathing places shall comply with the design and construction standards of this section.

Exceptions:

1. 1.A portable pool used exclusively for providing swimming lessons or related instruction in support of an established educational program sponsored or provided by a school district may not be regulated as a public pool. Such pool shall be regulated as a private swimming pool under Section 454.2.
2. 2.A temporary pool may not be regulated as a public pool. Such pool shall be regulated as a private swimming pool under Section 454.2.
3. 3.A pre-manufactured Commercial Epsom Salt Floatation Tank, (aka floatation pod, room or cabin), used in a commercial setting according to the manufacturers specified intended purpose.

FL Dept. of Health Advisory Board, Summary of Epsom salt float tank code citations; 4/20/2018

Epsom salt float tanks, which are deemed special purpose public pools under Chapter 514 Florida Statutes, are commonly non-compliant with the operation and design construction criteria cited in the following sections of the Florida Administrative Code (F.A.C.) and Florida Building Code section 454.1 (FBC).

SECTIONS OF 64E-9, F.A.C., TOPIC

64E-9.004(5) Recirculation system must operate any time pool is open (proviso # 1 and 2)

64E-9.008(3)(b&c) Safety equipment: Shepard's hook & life ring with rope

64E-9.008(10)(a) NSF/ANSI standard 50 certified recessed skimmer, O3 generators, and UV systems

64E-9.008(10)(e) pH feeders required, and must be certified to NSF 50

SECTIONS OF 454.1, FBC, TOPIC

454.1.2.1 Impervious, slip resistant (a) Water line tile requirement, color of floor /wall

454.1.2.2 Minimum width 15 feet

454.1.2.2.3.1 Minimum floor slope 1:60

454.1.2.2.4 Minimum water depth shall be 3 feet

454.1.2.3.1 Markers for depth and no-diving

454.1.2.3.5 Pool rules sign (proviso # 7)

454.1.2.5 Access shall consist of ladders, stairs, recessed treads or swimouts (proviso # 5)

454.1.3.1.2 Clear 4 feet wet deck width, deck slope (proviso # 6)

454.1.3.2 Overhead obstruction clearance of 4 feet from water surface (in pools with lids)

454.1.3.3.1 Safety equipment: Shepard's hook & life ring with rope

454.1.4.2.2 Lighting requirements for indoor pools

454.1.5.5 Equipment enclosure must have minimum 3 x 6-foot opening and easy access

454.1.5.7 Equipment area lighting must provide 30 foot-candles

454.1.6.1 Unisex restrooms must include a urinal, floor drain, and diaper change table

454.1.6.5.1 NSF/ANSI standard 50 certified: recessed skimmer, O3 generators, and UV systems

454.1.6.5.3.2.5 Six-inch water line tile required for skimmer pools

454.1.6.5.10 Pools require an outlet at the deepest point

454.1.6.5.10.5 Main drain must be connected to a collector tank (proviso #4)

454.1.6.5.11 Automatic makeup water control

454.1.6.5.14 Heater must be plumbed with a bypass and influent & effluent valves

454.1.6.5.16 & 454.1.6.5.16.3 Automatic feeders for pH control required (proviso # 3)

454.1.6.5.16.4.2 Ozone generating equipment shall meet NSF/ANSI Standard 50 (proviso # 8)

454.1.6.5.16.4.4 Air flow meter required for ozone system (proviso # 8)

454.1.6.5.16.6 3. UV validation requirements by USEPA method (proviso # 8)

Facts:

The following five pool codes' requirements are specifically addressed by the variance provisos:

- 1) Halogen residual of 1-6 mg/L indoors is required at 64E-9.004(1)(d)2.
- 2) NSF/ANSI Standard 50-certified disinfectant feeder & requirements at 64E-9.008(10)(e) & 454.1.6.5.16 & 454.1.6.5.16.2
- 3) NSF/ANSI Standard 50-certified recirculation filter & requirements at 64E-9.008(10)(a) & 64E-9.008(10)(d) & 454.1.6.5 & 454.1.6.5.4

DOH Advisory Board, Summary of Epsom salt float tank code citations; 4/20/2018

- 4) NSF/ANSI Standard 50-certified ozone generator & requirements at 64E-9.008(10)(a) & 64E-9.008(10)(e)4. and 6. & 454.1.6.5.16.4.2
- 5) NSF/ANSI Standard 50-certified UV light systems & requirements at 64E-9.008(10)(a) & 64E-9.008(10)(e)5. & 454.1.6.5.16.6

There are twenty-five (25) unique public pool code violations listed in the table above for this special purpose swimming pool with three duplications between the two state codes.

Conclusions:

The twenty-five (25) unique requirements of Chapter 64E-9, F.A.C., and the FBC, Chapter 4, section 454.1, as listed in the table above will not be met. The above five (5) Facts and the table of twenty-five (25) unique requirements have been addressed by the Advisory Board. The special condition mitigations for eight (8) code requirements and other specific requirements for safety and health are addressed in the following eleven (11) provisos.

Provisos:

1. 64E-9.004(5) F.A.C. The variance Applicant and Permittee (the pool owner) will ensure that the recirculation treatment manual (or automated) controls provides complete water treatment for at least five (5) full water volume turnovers between each patron's float session. The public pool Permittee must comply with this water treatment regimen. Each float tank shall be provided with a timer to ensure the turnover requirement is met. **Per the specifications provided in the variance application, the (name brand & model) float tank manufactured by (name brand) requires (xx) minutes at (xx) gallons per minute to achieve five (5) turnovers.**
2. 64E-9.004(5) F.A.C. Within two (2) days of starting float sessions, the Permittee shall: use a Department-certified water laboratory to **test for and enumerate E. coli bacteria** from one 100mL water sample collected from each float tank, to be collected once per week for two (2) consecutive weeks, and collected after several client's float sessions on that day, and shall provide laboratory copies of the microbiology test results and the Permittee's water chemistry field test kit results for halogen residual and pH to the Department's Bureau of Environmental Health Water Programs Administrator at xxx within two (2) days of receipt of lab test results.
3. 454.1.6.5.18 FBC: The use of hydrogen peroxide shall be discontinued. **Halogen feeder and filtration system must be certified by an ANSI Nationally Recognized Testing Laboratory** under NSF/ANSI Standard 50 by the variance Applicant and **shall be maintained in good operating order** and in accordance with the sizing requirements of both state codes by the Permittee.
4. The applicable **standards for suction outlet drain covers and equipment area safety features required in section 514.0315, Florida Statutes, must be met** by installation of anti-entrapment devices for daily use of this special purpose public pool by the Applicant, and then **maintained over the life of the float tank by the Permittee (pool owner) to remain in compliance with the law.** Paired suction outlets as defined in the referenced national standard must be at least 36 inches apart and hydraulically balanced.

DOH Advisory Board, Summary of Epsom salt float tank code citations; 4/20/2018

5. 454.1.2.5 FBC: The Permittee (pool owner) **must provide entrance/exit access on the floor adjacent to the float tank wall with a support handrail.**
6. 454.1.3.1.3 FBC: At least **4 feet of slip resistant wet deck area must be maintained as available for patron egress at the float tank entrance/exit opening** by the Permittee (pool owner) and the operator.
7. 454.1.2.3.5 FBC: The Applicant or Permittee must create and **provide a code compliant pool rules sign with patron rules posted on the wall of the float tank room** that complies with statements from FBC 454.1.2.3.5 1., 5., and 7., and the statements from 454.1.8.13 1. and 3.
8. 454.1.6.5.16.4. and 454.1.6.5.16.6 FBC: The halogen dosing feeder installed per swimming pool code requirements for this float tank **precludes the need for either an UltraViolet light system or an ozone generating system due to each device acts only as an optional supplemental system** that can improve water quality. **If used, the device(s) must comply with the state code sections listed above**, except that NSF/ANSI Standard 50 certification and UV validation by USEPA methods are not required.
9. A list documenting any operational and equipment corrections made to the float tank after the initial operating permit inspection shall be provided to the County Health Department within 7 days of completion. This document shall provide the make and model numbers of any original or replacement equipment installed on the float tank. The department reserves the right to assure these changes meet state codes.
10. 454.1.10.4 and 64E-9.001(3)(b), F.A.C. Before opening to the public, the Operating Permit Applicant, **the Permittee (pool owner), must provide the DOH County Health Department a copy of an approved electrical inspection** that is conducted by the local building department, or by a Florida licensed electrician in accordance with the Florida Building Code. Equipment grounding, equipotential bonding, and Ground-fault Circuit Interrupters (GFCIs) required by the FBC shall be addressed, as shall any electrical appurtenances (float tank lighting, audio systems, system controls, call buttons, etc.).
11. The variance Applicant and Permittee (pool owner) **must provide a slip resistant floor in the float tank** in accordance with the FBC definition of that term at section 454.1 of the code. An ASTM or ANSI test for slip resistance for residential bathtubs can be substituted for ANSI tile slip resistance tests. Additionally, the **floor of the float tank room shall be slip resistant between the float tank for at least 15 feet on the path to both the shower and the restroom** that serve the float tank.