2021 GROUP A PUBLIC COMMENT AGENDA

SEPTEMBER 21 - 28, 2021
DAVID L. LAWRENCE CONVENTION CENTER
PITTSBURGH, PA
Proposed Change as Submitted

Proponents: Hope Medina, representing Self (hmedina@coloradocode.net); Gil Rossmiller, representing Self (gilrossmiller@coloradocode.net)

2021 International Swimming Pool and Spa Code

Revise as follows:

303.1 Energy consumption of pools and permanent spas. The energy consumption of pools and permanent spas shall be controlled by the requirements in Sections 303.1.1 through 303.1.3, conform to the requirements of the International Energy Conservation Code.

303.1.1 Heaters. The electric power to heaters shall be controlled by a readily accessible on-off switch that is an integral part of the heater, mounted on the exterior of the heater or external to and within 3 feet (914 mm) of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas-fired heaters shall not be equipped with continuously burning ignition pilots.

303.1.2 Time switches.

Time switches or other control methods that can automatically turn off and on heaters and pump motors according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built-in time switches shall be in compliance with this section.

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Pumps that operate solar- or waste-heat recovery pool heating systems.

303.1.3 Covers. Outdoor heated pools and outdoor permanent spas shall be provided with a vapor-retardant cover or other approved vapor-retardant means in accordance with Section 104.12.

Exception: Where more than 70 percent of the energy for heating, computed over an operating season, is from a heat pump or solar energy source, covers or other vapor-retardant means shall not be required.

303.2 Portable spas. The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP 14.

303.3 Residential pools and permanent residential spas. The energy consumption of residential swimming pools and permanent residential spas shall be controlled in accordance with the requirements of APSP 15.

Reason: The I-codes are a family of codes. Something that many of us say probably on a daily basis, and there is a reason for that. The individual code books are based on a specific component of a building. You have the IBC that focuses on the physical construction of commercial buildings. The IPC that focuses on the plumbing of that commercial building. The IMC that focuses on the mechanical systems of that commercial building. IECC that focuses on the energy conservation of that commercial building. All of these individual codes work together to create a safe structure to be occupied. The one thing these codes also have in common is that they allow the other codes to be the lead for their strong suit. Chapter 13 of the IBC refers you to the IECC for your energy requirements. Even though the IECC has requirements dealing with the mechanical equipment and the IMC has requirements for duct insulation they do not impede on the others forte. The IECC provides guidance on energy conservation for the mechanical equipment and not that fire dampers shall be installed. Section 604 of the IMC has duct insulation requirements such as flame spread index and smoke development index, but the first sentence of this section refers you to the IECC for the actual energy requirements for the duct insulation.

The 2012 ISPSC was the first edition of this code which was heard in the code cycle year C, the year after the proposals were heard for the 2012 IRC. For the 2012 edition there resided several locations for the requirements of swimming pools and spas. The 2015 IRC code cycle rectified this by removed appendix G, Swimming Pools, Spas, and Hot Tubs, and created a new section R326. Section R326 stated only that the design and construction of pools and spas shall comply with the International Swimming Pool and Spa Code.

The International Energy Conservation Code has had energy requirements for swimming pools since the 1998 edition of the International codes. We are asking that the ISPSC follow the precedent set forth by the other I-codes and allow the IECC to address the energy requirements for swimming pools and spas rather than having competing energy requirements.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. The requirements are already existing. Just referring to the correct code to follow.
Public Hearing Results

Committee Action: Disapproved

Committee Reason: Although the Committee understands that the I-Codes function well with correlation with and referencing other I-codes, in this instance, removing energy requirements in this code (and forcing the reader to go to another I-Code) would not be beneficial to the pool and spa industry at this time. The pool and spa industry is just now beginning to understand how codes affect the industry. There is significant training and education underway to bring everyone up to speed with the code so now is not the time to take the focus on energy out of the ISPSC. Also, the next IECC might become much difficult than what it currently is because of changing the technical part over to standards committee. The pool and spa industry needs to have everything about pools and spa in one book to help with the education efforts currently underway. (10-1)

Individual Consideration Agenda

Public Comment 1:
ISPSC: 303.1.3 (New)
Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jen@hatfieldandassociates.com) requests As Modified by Public Comment
Replace as follows:

2021 International Swimming Pool and Spa Code

303.1.3 Covers . Outdoor heated pools and outdoor permanent spas shall be provided with a vapor-retardant cover or other approved vapor-retardant means in accordance with Section 104.12.

Exception: Where more than 75 percent of the energy for heating, computed over an operating season of not fewer than 3 calendar months, is from a heat pump or solar energy source, covers or other vapor-retardant means shall not be required.

Commenter’s Reason: This public comment aligns language in the International Swimming Pool and Spa Code with language in the International Energy Conservation Code, to ensure consistency between the codes. Aligning the language, versus a reference, creates a more user-friendly method for pool contractors who may not be familiar with or have access to the International Energy Conservation Code.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Public Comment# 2428

Public Comment 2:
ISPSC: 303.1
Proponents: Hope Medina, representing Self (hmedina@coloradocode.net) requests As Modified by Public Comment
Further modify as follows:

2021 International Swimming Pool and Spa Code

303.1 Energy consumption of pools and permanent spas . The energy consumption of pools and permanent spas shall conform to comply with the requirements of the International Energy Conservation Code.

Commenter’s Reason: Currently the energy code requirements found in the ISPSC do differ from what the pool and spa energy code requirements found in the IECC, and they have for cycles. This is what happens when two books contain similar requirements they have the possibility of divergence. That is what has happened between the ISPC and the IECC. Which requirements is a jurisdiction going to enforce? Why create this conflict within the I-codes family intentionally? Everyone involved in the code development process whether testifying at the code hearings or voting on cdpACCESS does their best to not intentionally create a conflict in our family of I-codes. Currently we have a known conflict between the two
codes that we need to address to keep our code usable, enforceable, and relevant. Until the provisions for swimming pools and spas found within the IECC are just duplicated into ISPSC as they are in Chapter 11 of the IRC, we have to do what is needed to be done to keep us from intentionally creating conflict between requirements and two code books. We need to have the ISPSC refer to the IECC for the energy requirements.

This is not unheard of for other codes to reference the specific code to oversee the provisions. Section 604.1 of the International Mechanical Code refer to the IECC for duct insulation. The ISPSC is no different, and refers you to the other codes to govern the various construction and Code specific to that discipline. Currently this code refers you to the NEC(NFPA 70), IPC, IRC, IMC, IFGC, and the IECC. This code already refers to the IECC for the installation of the heaters in section 316.4. With all due respect to the committee's reason for disapproving this proposal stating the need of keeping all of the requirements with in this one code is not a current possibility. The ISPSC already refers you to the previously stated codes and various standards.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is a coordination of the already existing requirements within two code books.
Public Comment 3:

Proponents: Hope Medina, representing Self (hmedina@coloradocode.net) requests As Submitted

Commenter’s Reason: Currently the energy code requirements found in the ISPSC do differ from what the pool and spa energy code requirements found in the IECC, and they have for cycles. This is what happens when two books contain similar requirements they have the possibility of divergence. That is what has happened between the ISPC and the IECC. Which requirements is a jurisdiction going to enforce? Why create this conflict within the I-codes family intentionally? Everyone involved in the code development process whether testifying at the code hearings or voting on cdpACCESS does their best to not intentionally create a conflict in our family of I-codes. Currently we have a known conflict between the two codes that we need to address to keep our code usable, enforceable, and relevant. Until the provisions for swimming pools and spas found within the IECC are just duplicated into ISPSC as they are in the IRC we have to do what needs to be done to keep us from intentionally creating conflict between requirements and two code books. We need to have the ISPSC refer to the IECC for the energy requirements.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
This is a coordination between two codes.
Proposed Change as Submitted

Proponents: Glenn Mathewson, representing North American Deck and Railing Association (glenn@glennmathewson.com)

2021 International Swimming Pool and Spa Code

Revise as follows:

306.5 Slope. The minimum slope of decks shall be in accordance with Table 306.5 except where an alternative drainage method is provided that prevents the accumulation or pooling of water. The slope for decks, other than wood decks, shall be not greater than 1/2 inch per foot (1 mm per 24 mm) except for ramps. The slope for wood and wood/plastic composite decks shall be not greater than 1/4 inch per foot (1 mm per 48 mm). Decks shall be sloped so that standing water will not be deeper than 1/8 inch (3.2 mm), 20 minutes after the cessation of the addition of water to the deck.

Exceptions:

1. The minimum slope of decks in Table 306.5 shall not be required where an alternative drainage method is provided that prevents the accumulation or pooling of water deeper than 1/8 inch (3.2 mm), 20 minutes after the cessation of the addition of water to the deck.

2. The minimum slope of decks in Table 306.5 shall not be required where the decking is gapped in accordance with Section 306.6

Reason: The single paragraph of text is confusing and appears to embed exceptions within the general requirements. This proposal restructures the section to provide the general minimum and maximum slopes for decks. Exceptions then provide clarity for when the general provisions are not required due to more specific conditions. We are not aware of the justification for why wood decks would be permitted to slope more than decks of any other material. “wood” and “non-wood” are not sufficiently descriptive of the performance differences that would allow for differing slopes. There is no reason to include “except for ramps”. The IRC provides specific provisions for construction of ramps and it is clear what a ramp is. This is an elementary clarification that is unnecessary to the professional interpretation of this code.

The final statement “Deck shall be sloped so that standing water will not be deeper than 1/8 inch, 20 minutes after the cessation of the addition of water to the deck,” is not appropriate for the design community. This statement is “more specific” than the reference to the maximum slope table 306.5, and will therefore rule in a conflict. However, it is a performance metric that cannot be evaluated until after project completion. The result may be a designer and contractor adhering to the provisions of Table 306.5 only to find disapproval of the completed project at the time of inspection. Retaining this provision, but as an exception, is more appropriate. If a designer chooses not to use the prescriptive and definitive slopes in Table 306.5, they can make the choice to use the exception and chose to have the drainage verified after project completion.

There is no reason to require a drainage slope of a deck when the decking is gapped for drainage. The use of gaps between decking materials has been an effective way to drain precipitation from decks for decades. Installing a hot tub or pool adjacent to an existing deck with gapped decking constructed level (as is standard practice) would cause said deck to become non-compliant under this code. Existing, level decks with gapped decking have no history of inhibited drainage. A reference to 306.6 for gapped decking is an appropriate exception to required slope.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. Cost of construction will be unchanged or possibly reduced. Providing the design community reliable provisions they can design and construct under provides more assurance that completed work will not need to be modified due to an in-situ drainage testing protocol. Similarly, existing decks constructed level and with gapped decks (as is standard) will not require modification due to the installation of an adjacent pool or hot tub.

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The maximum of a 1/2 inch per foot slope should have been addressed in the proposal. The Committee wants the stakeholders to get together to create a public comment that addresses the various types of decking currently available and to find a solution for the maximum of a 1/2 inch per foot slope. (7-4)
Public Comment 1:

Proponents: Glenn Mathewson, representing North American Deck and Railing Association (glenn@glennmathewson.com) requests As Submitted

Commenter’s Reason: This proposal is designed to work with the modifications approved “as submitted” in SP16-21 (306.6), but was disapproved during the committee hearings out of concern that a 1/2-inch in 12-inch slope for wood decks was too great.

However, the 1/2-inch slope was already permitted in the 2021 ISPSC Section 306.5 for all decks other than wood and wood/plastic composite, which are limited to 1/4-inch slope. No characteristics of wood or wood/plastic surface texture or slipperiness are included in this provision and thus the reduced allowable slope for any surface except wood and composite is without justification. In the published committee action reason statement, there was a universal concern for a 1/2” slope that was voiced, but this proposal did not attempt to change that maximum.

As the original proponent and per request of the committee, we reached out the the Pool & Hot Tub Alliance and asked for their assistance in selecting an appropriate maximum slope, as their members are more familiar with building sloped decks for pools. Unfortunately, together, we were unable to develop a way to address the committee concerns, as the tolerances between the minimum slopes in Table 306.5 and the maximum slope of 1/2-inch are so minimal. It is important to note that no other hearing participants spoke in opposition to this proposal. The concerns were from the committee only.

The proposal includes an exception to slope when the decking is gapped in accordance with the committee-approved modifications in SP16-21 (306.6). Wood decking is typically installed level and with gaps and would meet the exception. Wood/plastic decking is required to be installed in accordance with the manufacturer’s installation instructions, and we are not aware of any such product that can be installed without drainage gaps between decking members.

We ask for approval of this proposal as submitted so that the intended and prepared modifications can work in tandem with the changes in SP16-21 (306.6). We ask that our proposal be evaluated for what we have proposed, rather than what we have not proposed.

We will continue to work with the pool industry to determine what maximum slopes they believe are acceptable for the relatively rare condition where a wood or composite deck is built with a slope and without drainage between boards. However, at this time, approval of this proposal will make positive changes to Section 306.5

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This public comment does not modify the original proposal, therefore the cost impact is unchanged as originally provided:

Cost of construction will be unchanged or possibly reduced. Providing the design community reliable provisions they can design and construct under provides more assurance that completed work will not need to be modified due to an in-situ drainage testing protocol. Similarly, existing decks constructed level and with gapped decks (as is standard) will not require modification due to the installation of an adjacent pool or hot tub.
Proposed Change as Submitted

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

2021 International Swimming Pool and Spa Code

Revise as follows:

307.1.2 Colors and finishes. For other than residential pools and residential spas, the colors, patterns, or finishes of the pool and spa interiors shall not obscure objects or surfaces within the pool or spa. The interior finish coating floors and walls shall be white or light-colored.

307.1.2.1 Munsell color value, grey scale. Finishes shall be not less than 6.5-8.0 on the Munsell color value, grey scale.

Exceptions: The following shall not be required to comply with this section:

1. Competitive lane markings.
2. Floors of dedicated competitive diving wells.
3. Step or bench edge markings.
4. Pools shallower than 24 inches (609.6 mm).
5. Water line tiles.
6. Wave and surf pool depth change indicator tiles.
7. Depth change indicator tiles where a rope and float line is provided.
8. Features such as rock formations, as approved.

Reason: Use of 6.5 as the minimum requirement is obsolete as the current aim by professionals is at least 8.0 or equivalent. This update removes the ambiguous mandatory minimum lightness. The 8.0 Munsell grey scale (80 CIE L.a.b. lightness equivalent) requirement represents the more common lightness minimum for commercial work found in the industry, along with guidance to accurately reflect how the lightness system should be used.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Public Hearing Results

Committee Action: As Submitted

Committee Reason: This revision provides a better method for light finishes that is independent of color choice. (9-2)

Individual Consideration Agenda

Public Comment 1:

ISPSC: 307.1.3 (New)

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org) requests As Modified by Public Comment

Modify as follows:
2021 International Swimming Pool and Spa Code

307.1.3 Designs or Logos. Any design or logos on the pool floor or walls shall be such that it will not hinder the detection of a human in distress, algae, sediment, or other objects in the pool.

Commenter’s Reason: This public comment addresses a concern raised by the International Swimming Pool and Spa Code Committee that the original proposal did not address designs and logos, when used. This comment simply adds a new subsection in addition to what was originally proposed and approved by the committee, to provide guidance for designs and logos.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.
Proposed Change as Submitted

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

2021 International Swimming Pool and Spa Code

Revise as follows:
TABLE 307.2.2 RESERVOIRS AND SHELLS

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>STANDARD</th>
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</thead>
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<td>fiberglass reinforced plastic</td>
<td>IAPMO Z124.7</td>
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<tr>
<td>plastic</td>
<td>IAPMO Z124.7</td>
</tr>
<tr>
<td>stainless steel (Types 316, 316L, 304, 304L)</td>
<td>ASTM A240</td>
</tr>
<tr>
<td>reinforced concrete</td>
<td>ACI 318</td>
</tr>
<tr>
<td>reinforced shotcrete</td>
<td>ACI 318</td>
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<tr>
<td>tile</td>
<td>ANSI A108/A118/A136.1</td>
</tr>
<tr>
<td>vinyl</td>
<td>ASTM D1593</td>
</tr>
</tbody>
</table>

Add new definition as follows:

**SHOTCRETE.** Concrete placed by a high velocity pneumatic projection from a nozzle.

Add new text as follows:

**ACI**

Add new standard(s) as follows:

**ACI 318-19.** Building Code Requirements for Structural Concrete

Reason: Concrete is not identified for use currently in the *International Swimming Pool and Spa Code* and a literal interpretation would suggest that concrete is not permitted as a building material. This proposal seeks to add concrete and shotcrete as materials with the relevant ACI standard referenced within Table 307.2.2. A definition of shotcrete is also added. The ACI 318 standard is already referenced in other I-Codes including the *International Building Code* and *International Residential Code*.

Bibliography: See the 2021 IRC sections that reference the 2019 edition of the ACI 318 in Chapter 44 and the 2021 IBC sections that reference the 2019 edition of the ACI 318 in Chapter 35.

Cost Impact: The code change proposal will increase the cost of construction

Additional concrete use will be necessary for new construction that would not meet psi requirements of the referenced ACI standard. This minor increase in the cost of construction is estimated at $20-$25 per yard of material, $150-$250 per average pool. This increase is offset by an anticipated increased lifespan and lack of secondary issues requiring repair.

Staff Analysis: ACI 318-19, Building Code Requirements for Structural Concrete, is currently referenced in the 2021 IBC and IRC.

**Public Hearing Results**

Committee Action: As Modified

Committee Modification:

SHOTCRETE. Concrete, wet or dry, placed by a high velocity pneumatic projection from a nozzle.

Committee Reason: For the modification: A simple clarification that shotcrete can be either a wet or dry product.

For the proposal as modified: This is a necessary addition to the pool shell materials table. However, the proponent needs to bring this back in public comment to address the issue that ACI 318 requires the use of 4000 psi concrete and this can be problematic. Use of a lower strength material needs to be accommodated. (11-00)
Individual Consideration Agenda

Public Comment 1:

ISPSC: 307.2.2

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jen@jhatfieldandassociates.com) requests As Modified by Public Comment

Further modify as follows:

2021 International Swimming Pool and Spa Code

307.2.2 Materials and structural design. Pools and spas shall conform to one or more of the standards indicated in Table 307.2.2. The structural design of pools and spas shall be in accordance with the International Building Code or the International Residential Code, as applicable in accordance with Section 102.7.1 of this code.

Exception: Pools and spas constructed with reinforced concrete or reinforced shotcrete with a minimum compressive strength of 2500 psi as designed by a design professional and approved shall be permitted.

Commenter's Reason: This public comment simply provides an exception to the ACI 318 Standard to provide flexibility to builders and engineers, a concern mentioned by the International Swimming Pool and Spa Code Committee, who requested this be addressed in public comment.

Cost Impact: The net effect of the public comment and code change proposal will increase the cost of construction. Additional concrete use will be necessary for new construction that would not meet psi requirements of the proposal and public comment. This increase is offset by an anticipated increased lifespan and lack of secondary issues requiring repair.
SP21-21

Proposed Change as Submitted

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

2021 International Swimming Pool and Spa Code

Add new definition as follows:

INCREASED RISK AQUATIC VENUE. An aquatic venue which has an increased risk of microbial contamination due to its primary users being children under the age of 5 or people more susceptible to infection, such as therapy patients with open wounds. Examples of increased risk aquatic venues include spray pads, wading pools, therapy pools, and other aquatic venues designed primarily for children under the age of 5.

SECONDARY DISINFECTION SYSTEM. Disinfection processes or systems installed in increased risk aquatic venues in addition to the required primary disinfection system.

Add new text as follows:

319.3 Secondary disinfection systems. Secondary disinfection systems shall be installed for the following increased risk aquatic venues in addition to the required primary disinfection system:

1. Wading Pools.
2. Interactive Water Play Features.
3. Therapy Pools.
4. Other aquatic venues designed primarily for children under the age of 5.

The secondary disinfection system shall be listed and labeled to NSF 50 and installed in accordance with the manufacturer’s specifications.

319.4 Supplemental Treatment Systems. Supplemental treatment systems shall be certified to NSF 50 and installed in accordance with the manufacturer’s specifications.

Reason: This proposal seeks to harmonize the ANSI/APSP (PHTA)/ICC-11, upcoming ANSI/PHTA/ICC-2 Standard, Model Aquatic Health Code, and NSF 50 with the International Swimming Pool and Spa Code. These additions are consistent with, and will not require modification of, Section 612.

The Model Aquatic Health Code and the ANSI/APSP (PHTA)/ICC-11 Standard delineated the type of disinfection systems required in an aquatic venue based on a stratified risk model. The International Swimming Pool and Spa Code addresses interactive water play features in Section 612 but there are additional increased risk aquatic venues which the Code is currently silent on. Since non-halogen-based disinfection systems are installed and maintained in these venues, it is important to apply Code requirements to other high-risk venues.

Secondary disinfection systems are currently defined in the ANSI/APSP (PHTA)/ICC-11 Standard, the Model Aquatic Health Code, and NSF 50 to be those non-halogen disinfection systems designed to achieve a minimum 3-log reduction in the number of infective Cryptosporidium parvum oocysts per pass through the secondary disinfection system at the maximum flow. Those systems that reduce pathogens, but do not necessarily meet the 3-log reduction criteria for Secondary Disinfection Systems are termed Supplemental Treatment Systems.

Many public aquatic venues elect to install supplemental treatment systems to improve water quality, enhance system performance, and reduce overall maintenance costs. A definition is not currently in the International Swimming Pool and Spa Code but is a term used in the Model Aquatic Health Code and in ANSI/APSP (PHTA)/ICC-11.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Public Hearing Results

Committee Action: As Modified
Committee Modification:

319.3 Secondary disinfection systems. Secondary disinfection systems shall be installed for the following increased risk aquatic venues in addition to the required primary disinfection system:

1. Wading Pools.
2. Interactive Water Play Features.
3. Therapy Pools.
4. Other aquatic venues designed primarily for children under the age of 5.

The secondary disinfection system shall be listed and labeled to NSF 50 and installed in accordance with the manufacturer’s specifications. Where electrically-powered, such equipment shall additionally be listed and labeled in accordance with UL 1563 or UL 1081.

319.4 Supplemental Treatment Systems. Supplemental treatment systems in public pools and spas shall be certified to NSF 50 and installed in accordance with the manufacturer’s specifications. Where electrically-powered, such equipment shall additionally be listed and labeled in accordance with UL 1563 or UL 1081.

Committee Reason: For the modification: A needed clarification that this is only required for public pools and spas. The electrical safety standards are consistent with other I-Code requirements.

For the proposal as modified: The Committee agreed with the published reason statement. The committee would appreciate a public comment to change "aquatic venue" term to be "pool or spa" to be in alignment with what the ISPSC currently uses. (11-0)

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Individual Consideration Agenda

Public Comment 1:

ISPSC: (New)

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jen@jhatfieldandassociates.com) requests As Modified by Public Comment

Further modify as follows:

2021 International Swimming Pool and Spa Code

**AQUATIC VENUE.** A constructed structure or modified natural structure containing water and intended for recreational or therapeutic use. Exposure to water in these structures may occur by contact, ingestion, or aerosolization. Examples include swimming pools, wave pools, lazy rivers, surf pools, spas, hot tubs, therapy pools, spray pads, waterpark pools, and other interactive water venues.

Commenter’s Reason: This public comment adds a needed definition to the *International Swimming Pool and Spa Code* (ISPSC) to address a concern from the ISPSC Committee that the term is used in the proposal without being defined. The Code Committee suggested removing the term “aquatic venue” and replacing it with “pool or spa” but by adding the definition and continuing to use “aquatic venue” within this proposal, it will align with the PHTA-1 Public Pool and Spa Standard and the PHTA-11 Water Quality in Public Pools and Spas Standard which both use the term. In addition, an “aquatic venue” can be something beyond a pool or spa, such as an interactive water feature; therefore, this term is needed to ensure all types of venues are captured.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Public Comment# 2427

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SP21-21

SP24-21
Proposed Change as Submitted

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

2021 International Swimming Pool and Spa Code

Add new definition as follows:

ELEVATED POOL. Any pool, spa, cold plunge, water feature, catch basin, overflow trough, or body of water that is 1) inside a weather envelope or 2) outside a weather envelope, and installed over occupied/conditioned space, or installed over occupiable space (mechanical room, crawlspace, etc.), or installed over unoccupied/non-conditioned spaces (parking garages), or installed in an above-grade with no occupied, occupiable or unoccupied space below.

Add new text as follows:

SECTION 308
ELEVATED POOLS

308.1 Design of elevated pools.
Elevated pools shall be designed and constructed in accordance with PHTA 10.

Add new standard(s) as follows:

APSP
Pool & Hot Tub Alliance (formerly The Association of Pool & Spa Professionals)
2111 Eisenhower Avenue, Suite 500
Alexandria, VA 22314

ANSI/PHTA/ICC 10 - 2021
American National Standard for Elevated Pools and Spas

Reason: This proposal seeks to recognize elevated pools and spas in the International Swimming Pool and Spa Code with a reference to the upcoming ANSI/PHTA (formerly APSP)/ICC-10. There is currently no code guidance on this type of structure. The reasoning for the creation of an ANSI/PHTA/ICC Standard on elevated pools and spas stems from multiple sources. Jurisdictions and regulators seek guidance on this issue as the number of elevated pools and spas constructed and installed has increased greatly in recent years. Various issues including leaking and other consumer issues has led to litigation. The specialized construction of an elevated pool or spa including materials, piping, valves, waterproof systems, and leak detection equipment should be addressed. Design and construction guidelines in this Standard - and in the International Swimming Pool and Spa Code - seeks to diminish these issues.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Staff Analysis: A review of the standard proposed for inclusion in the code, ANSI/PHTA/ICC 10 - 2021, American National Standard for Elevated Pools and Spas, with regard to some of the key ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before March 20, 2021.
Committee Reason: For the modification: This better clarifies exactly what spaces are below an elevated pool.
For the proposal as modified: Pools are being built in areas where the real estate is free such as above parking garages, on roofs and other areas previously having no purpose. Standards for this type of construction are needed as it is currently unregulated and many problems have been occurred. (11-0)

Individual Consideration Agenda

Public Comment 1:
ISPSC: SECTION 202

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jen@jhatfieldandassociates.com) requests As Modified by Public Comment

Further modify as follows:

2021 International Swimming Pool and Spa Code

ELEVATED POOL. Any pool, spa, cold plunge, water feature, catch basin, overflow trough, or body of water that is over a habitable, occupiable, or unoccupied space that is 1) inside a thermal envelope or 2) outside a thermal envelope, or 3) a combination of inside and outside the thermal envelope.

ELEVATED POOL. Any permanently installed pool, spa, cold plunge, catch basin, overflow trough, including any connected water feature, or body of water water feature, that is over a habitable, occupiable or unoccupied space that is 1) inside a thermal envelope or 2) envelope or , outside a thermal envelope, or 3) a combination of inside and outside the thermal envelope, envelope.

Commenter’s Reason: This public comment makes further updates to the definition of an "elevated pool" to align with the definition found in the PHTA-10 Standard for Elevated Pools and Spas. This new standard was part of the original proposal approved by the committee to add to the ISPSC, as currently no code requirements exist within the ISPSC for these type of pools.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Public Comment 2:

Proponents: CP28 Administration

Commenter’s Reason: The administration of ICC Council Policy 28 (CP28) is not taking a position on this code change. This public comment is being submitted to bring a procedural requirement to the attention of the ICC voting membership. In accordance with Section 3.6.3.1.1 of ICC Council Policy 28 (partially reproduced below), the new referenced standard(s) ANSI/PHTA/ICC-10-2021 must be completed and readily available prior to the Public Comment Hearing in order for this public comment to be considered.

(CP28) 3.6.3.1.1 Proposed New Standards. In order for a new standard to be considered for reference by the Code, such standard shall be submitted in at least a consensus draft form in accordance with Section 3.4. If the proposed new standard is not submitted in at least consensus draft form, the code change proposal shall be considered incomplete and shall not be processed. The code change proposal shall be considered at the Committee Action Hearing by the applicable code development committee responsible for the corresponding proposed changes to the code text. If the committee action at the Committee Action Hearing is either As Submitted or As Modified and the standard is not completed, the code change proposal shall automatically be placed on the Public Comment Agenda with the recommendation stating that in order for the public comment to be considered, the new standard shall be completed and readily available prior to the Public Comment Hearing.
Proposed Change as Submitted

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

2021 International Swimming Pool and Spa Code

Revise as follows:

UNDERWATER BENCH. An underwater seat that can be recessed into the pool wall or placed completely inside the perimeter shape of the pool, such as a sun shelf.

809.2 Entry and exit. Pools shall have a means of entry and exit in all shallow areas where the design water depth of the shallow area at the shallowest point exceeds 24 inches (610 mm). Where a vanishing edge catch basin has a water depth exceeding 24 inches (610 mm) when the edge system is off, an exit shall be provided. Entries and exits shall consist of one or a combination of the following: steps, stairs, ladders, treads, ramps, beach entries, underwater seats, underwater benches, swimouts, and other approved designs. The means of entry and exit shall be located on the shallow side of the first slope change.

Reason: This proposal seeks to add additional safety needs to permanent inground residential swimming pools to ensure ample exits under certain conditions. The proposed language stems from a current draft for the next update to the ANSI/APSP (PHTA)/ICC-5 Standard. The International Swimming Pool and Spa Code adopts language from this Standard where appropriate. This proposal also seeks to clarify that a sun shelf is an underwater bench as the term is used in Section 411.5.2.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Public Hearing Results

Committee Action: As Modified

Committee Modification:

809.2 Entry and exit. Pools shall have a means of entry and exit in all shallow areas where the design water depth of the shallow area at the shallowest point exceeds 24 inches (610 mm). Where a vanishing edge catch basin has a water depth exceeding 24 inches (610 mm) when the edge system is off, an exit shall be provided. Entries and exits shall consist of one or a combination of the following: steps, stairs, ladders, treads, ramps, beach entries, underwater seats, underwater benches, swimouts, and other approved designs. The means of entry and exit shall be located on the shallow side of the first slope change.

809.2.1. Catch Basins. Where a vanishing edge catch basin has a water depth exceeding 24 inches (610 mm) when the edge system is off, an exit shall be provided.

Committee Reason: For the modification: This is needed to provide better clarification for the catch basin application. For the proposal as modified: The Committee agreed with the published reason statement. (11-0)

Individual Consideration Agenda

Public Comment 1:

ISPSC: (New)
**Proponents:** Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jen@jhatfieldandassociates.com) requests As Modified by Public Comment

**Modify as follows:**

2021 International Swimming Pool and Spa Code

**SUN SHELF.** An area of a pool that adjoins the pool wall with a water depth less than 12 inches (305 mm) and is used for seating and play.

**Commenter’s Reason:** This public comment simply adds a needed definition to the initial proposal approved by the *International Swimming Pool and Spa Code* (ISPSC) Committee to address a concern from that Committee that the term sun shelf is used in the proposal without being defined. The definition used comes from the Florida Building Code's definition of sunshelf.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.
Proposed Change as Submitted

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

2021 International Swimming Pool and Spa Code

Revise as follows:

809.6 Beach and sloping entries. The slope of beach and sloping entries used as a pool entrance shall not exceed 1 unit vertical in 7 units horizontal (14-percent slope). The entrance shall not have any step transition from deck to sloping entry. There shall be a zero height riser from sloped floor to deck. The slope from shallowest point to deepest point shall be comprised of straight lines to form a plane or linear cone surface; the lines defining the slope surface shall not be convex or concave with a tolerance ±1/2 inch (12.7 mm).

809.7 Steps and sloping entries. Where steps and benches are used in conjunction with sloping entries, the vertical riser distance shall not exceed 12 inches (305 mm). The slope from the shallowest point to deepest point shall be comprised of straight lines to form a plane or a linear cone surface; the lines forming the slope surface shall not be convex or concave with a tolerance of ±1/2 inch (12.7 mm). For steps used in conjunction with sloping entries, the requirements of Section 809.6 shall apply.

Reason: This proposal looks to address safety matters on sloping entries. Industry stakeholders have suggested concerns regarding entries and wish to ensure the safest sloping entries possible. The language comes from a draft proposal for the next update of the ANSI/APSP (PHTA)/ICC-5 Standard. The International Swimming Pool and Spa Code typically adopts language from this Standard where appropriate.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Public Hearing Results

Committee Action: As Submitted

Committee Reason: This area in a beach entry pool is especially problematic as the code didn't provide any guidance. (11-0)

Individual Consideration Agenda

Public Comment 1:

ISPSC: 809.6, 809.7

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org) requests As Modified by Public Comment

Modify as follows:

2021 International Swimming Pool and Spa Code

809.6 Beach and sloping entries. The slope of the floor in beach and sloping entries used as a pool entrance shall not exceed 1 unit vertical in 7 units horizontal (14-percent slope). The entrance shall not have any step transition from deck to sloping entry. There shall be a zero height riser from sloped floor to deck. The slope from shallowest point to deepest point shall be comprised of straight lines to form a plane or linear cone surface; the lines defining the slope surface shall not be convex or concave with a tolerance ±1/2 inch (12.7 mm). The top of the slope of the entry floor shall be at a uniform elevation. Where the top of the slope is a straight line, the floor slope shall be developed from lines that are perpendicular or uniformly skew to the top of slope. Where the top of the slope is a curved line, the floor slope shall be developed from lines perpendicular to tangents to the curved line. The length of the development lines shall be equal except for those lines that intersect longer slope development lines. The flatness of
the sloping entry floor, across the width of the slope and from the top of the slope to the toe of the slope, shall be within +/- ½ inch (13 mm). The top of the slope of the floor shall transition uniformly at the same or lesser slope of the sloped entry and without a step, to the top of the deck adjacent.

809.7 Steps and sloping entries. Where steps or benches are used located adjacent to the side of a sloped floor of a beach or sloping entry, the vertical rise distance from the top of the step or bench to the sloped floor shall not exceed 12 inches (305 mm). Steps and benches shall not be located along the top of the slope of a beach or sloping entry. For steps used in conjunction with sloping entries, the requirements of Section 809.6 shall apply. The slope from the shallowest point to deepest point shall be comprised of straight lines to form a plane or a linear cone surface; the lines forming the slope surface shall not be convex or concave with a tolerance of ± 1/2 inch (12.7 mm).

Commenter's Reason: This public comment continues to address the original proposal's concern that the Code Committee agreed with but goes further to provide guidance on curved bowl entries. This is being done based on the suggestion of a Code Committee member who encouraged some type of clarity be submitted as a public comment on the proposed language, to ensure it was clear for the code user on how to address curved bowl entries.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.
Proposed Change as Submitted

Proponents: Nicholas Capezza, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

2021 International Swimming Pool and Spa Code

Add new text as follows:

Appendix B
PUBLIC POOL AND SPA OPERATIONS AND MAINTENANCE

SECTION B101
GENERAL

B101.1 Scope.
Public pool and spa operations and maintenance shall comply with PHTA 2.

Add new standard(s) as follows:

APSP

Pool & Hot Tub Alliance (formerly The Association of Pool & Spa Professionals)
2111 Eisenhower Avenue, Suite 500
Alexandria, VA 22314

ANSI/PHTA/ICC 2 - 2021 American National Standard for Public Pool and Spa Operations and Maintenance

Reason: This proposal would add the ANSI/PHTA/ICC-2 Standard for Public Pool and Spa Operations and Maintenance, which is intended to cover public/commercial aquatic venues operation and maintenance, as a resource for jurisdictions seeking guidance on this topic. This Standard can then be used by state and local authorities as a health and safety guidance document for the operation and maintenance of all types of public aquatic venues. Industry partners such as commercial pool and spa service companies, water park operators and public pool operators can also use this Standard as the benchmark for the minimum standards to operate and maintain public aquatic venues. Further, public health officials can adopt this Standard through adoption of the ISPSC by specifically referencing the appendix when adopting the Code by rule or ordinance. In many states building and health officials regulate public pools and spas together, by adding this Standard into the ISPSC, we are providing one document that covers design, construction, operation and maintenance. This will make it easier for the building and health officials by having all requirements in one place.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

Staff Analysis: A review of the standard proposed for inclusion in the code, PHTAANSI/PHTA/ICC-2 2021 Standard for Public Pool and Spa Operations and Maintenance, with regard to some of the key ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before March 20, 2021.

Public Hearing Results

Committee Action: As Submitted

Committee Reason: Water efficiency is becoming more important in the industry and the code does not provide any guidance because operations is not within the scope of the code. However, this information is useful in an appendix. (11-0)

Individual Consideration Agenda
Public Comment 1:

Proponents: CP28 Administration

Commenter’s Reason: The administration of ICC Council Policy 28 (CP28) is not taking a position on this code change. This public comment is being submitted to bring a procedural requirement to the attention of the ICC voting membership. In accordance with Section 3.6.3.1.1 of ICC Council Policy 28 (partially reproduced below), the new referenced standard(s) ANSI/PHTA/ICC-2-2021 must be completed and readily available prior to the Public Comment Hearing in order for this public comment to be considered.

(CP28) 3.6.3.1.1 Proposed New Standards. In order for a new standard to be considered for reference by the Code, such standard shall be submitted in at least a consensus draft form in accordance with Section 3.4. If the proposed new standard is not submitted in at least consensus draft form, the code change proposal shall be considered incomplete and shall not be processed. The code change proposal shall be considered at the Committee Action Hearing by the applicable code development committee responsible for the corresponding proposed changes to the code text. If the committee action at the Committee Action Hearing is either As Submitted or As Modified and the standard is not completed, the code change proposal shall automatically be placed on the Public Comment Agenda with the recommendation stating that in order for the public comment to be considered, the new standard shall be completed and readily available prior to the Public Comment Hearing.