

2021 GROUP A PROPOSED CHANGES TO THE I-CODES

April 11 – May 5, 2021 Virtual Committee Action Hearings



First Printing

Publication Date: March 2021

Copyright © 2021 By International Code Council, Inc.

ALL RIGHTS RESERVED. This 2021-2022 Code Development Cycle, Group A (2021 Proposed Changes to the 2021 *International Codes* is a copyrighted work owned by the International Code Council, Inc. Without advanced written permission from the copyright owner, no part of this book may be reproduced, distributed, or transmitted in any form or by any means, including, without limitations, electronic, optical or mechanical means (by way of example and not limitation, photocopying, or recording by or in an information storage retrieval system). For information on permission to copy material exceeding fair use, please contact: Publications, 4051 West Flossmoor Road, Country Club Hills, IL 60478 (Phone 1-888-422-7233).

Trademarks: "International Code Council," the "International Code Council" logo are trademarks of the International Code Council, Inc.

PRINTED IN THE U.S.A.

2021 GROUP A – PROPOSED CHANGES TO THE INTERNATIONAL SWIMMING POOL AND SPA CODE

SWIMMING POOL AND SPA CODE COMMITTEE

Lee Hovis, Chair Rep: World Waterpark Association Director of Operations Tolomato Community Development District Ponte Vedra, FL

Eugene "Gene" Novak, Jr., CBO, *Vice Chair* **Rep:** Metro West Building Officials of MA District State Building Inspector Commonwealth of Massachusetts Office of Public Safety & Inspections Framingham, MA

Steve Barnes, CPO Rep: Pool & Hot Tub Alliance

Director of Science and Compliance AquaStar Pool Products, Inc. Ventura, CA

Derek Downey Rep: Pool & Hot Tub Alliance Legal Pools Solana Beach, CA

Sydonia Garrott, PE

Fire Protection Engineer Howard County Government Department of Inspections, Licenses and Permits Ellicott City, MD

Kenneth L. Gregory

Rep: Pool and Hot Tub Alliance Manager, Safety & Compliance Pentair Washington, UT

Doug Hughes, CBO

Chief Building Official City of Petaluma Petaluma, CA Brian Irvin Rep: Pool & Hot Tub Alliance Drafting/Design Manager Claffey Pools Southlake, TX

Clifton Kirby Building Inspector II City of Athens, AL Athens, AL

Tim Moroney, CBO

Chief Building Official Safebuilt Loveland, CO

Wendy L. Purser, CPO, CBP, CPI Rep: Pool & Hot Tub Alliance President Wendy Purser Pool Consulting LLC Green Mountain, NC

Jeffrey Simpson, MCP

Lead Regulatory Engineer UL LLC Burnsville, NC

Staff Secretariat:

Fred Grable, PE Senior Staff Engineer - Plumbing International Code Council Central Regional Office Country Club Hills, IL

TENTATIVE ORDER OF DISCUSSION 2021 PROPOSED CHANGES TO THE INTERNATIONAL SWIMMING POOL AND SPA CODE

The following is the tentative order in which the proposed changes to the code will be discussed at the public hearings. Proposed changes which impact the same subject have been grouped to permit consideration in consecutive changes.

Proposed change numbers that are indented are those which are being heard out of numerical order. Indentation does not necessarily indicate that one change is related to another. Proposed changes may be grouped for purposes of discussion at the hearing at the discretion of the chair. Note that some SP code change proposals may not be included on this list, as they are being heard by another committee.

SP1-21 G1-21 Part VI SP2-21 SP3-21 SP4-21 SP5-21 SP6-21 SP7-21 SP8-21 SP9-21 SP10-21 SP11-21 SP12-21 SP13-21 SP14-21 SP15-21 SP16-21 SP17-21 SP18-21 SP19-21 SP20-21 SP21-21 SP22-21 SP23-21 SP24-21 SP25-21 SP26-21 SP27-21 P17-21 Part II SP28-21 SP29-21 SP30-21 SP31-21 SP32-21 SP33-21

SP1-21 ISPSC: [A] 102.3, APSP Chapter 11 (New)

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:

[A] 102.3 Maintenance. Pools and spas and related mechanical, electrical and plumbing systems, both existing and new, and parts thereof, shall be maintained in proper operating condition in accordance with the original design in a safe and sanitary condition. Devices or safeguards that are required by this code shall be maintained in compliance with the edition of the code under which they were installed. The owner or the owner's authorized agent shall be responsible for maintenance of systems. To determine compliance with this provision, the *code official* shall have the authority to require any system to be reinspected. <u>The maintenance and operations of public swimming pools and spas shall comply with PHTA-2.</u>

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: Standard for Public Pool and Spa Operations and Maintenance

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.

Reason Statement: This proposal seeks to incorporate the ANSI/PHTA/ICC-2 *Standard for Public Pool and Spa Operations and Maintenance* into the *International Swimming Pool and Spa Code* to ensure maintenance and operations requirements and guidance exist for public pools and spas from design stage to ongoing end use. This Standard correlates with the design and construction provisions contained already within the *International Swimming Pool and Spa Code*. There is precedent for a maintenance standard to be referenced in Chapter 1 of an I-Code as ASHRAE 180 is referenced in Section 102.3 of the *International Mechanical Code*.

The PHTA-2 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 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 will then be required to use this Standard as the benchmark for the minimum standards to operate and maintain public aquatic venues.

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. Further, public health officials can adopt this Standard through adoption of the ISPSC when adopting the Code by reference in their rule or ordinance. By inserting this in Chapter 1, Scope & Administration, when a jurisdiction so chooses, it can easily be amended out, if that is preferred.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

ISPSC: SECTION 202

Proponents: Pennie L Feehan, representing Copper Development Association (penniefeehan@me.com)

2021 International Swimming Pool and Spa Code

Revise as follows:

COPPER ALLOY. A homogeneous mixture of not less than two or more metals where not less than 50% of the finished metal is in which copper is the primary component, such as brass and bronze.

Reason Statement: This definition is not clear and enforcement language using a percentage that is not necessary. This proposal is a clear definition without enforcement language.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This proposal will not increase the cost of construction as it only clarifies the definition.

SP3-21 ISPSC: SECTION 202

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:

SHALLOW AREAS. Portions of a pool or spa with water depths less than or equal to 5 feet (1524 mm).

Reason Statement: This revision provides guidance for water depths that are exactly 5 feet as the current definitions of shallow areas and deep area refer to depths less than or greater than 5 feet respectively. This change has been made by separate jurisdictions and was an oversight in the current Code. The same clarification, defining a Shallow Area to include 5 feet or less, is expected to be reflected in the updates currently underway in both the ANSI/APSP (PHTA)/ICC-1 Standard for Public Pool & Spas and the ANSI/APSP (PHTA)/ICC-5 Standard for Residential Inground Swimming Pools.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

SP4-21

ISPSC: 302.1

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:

302.1 Electrical. Electrical requirements for aquatic facilities shall be in accordance with NFPA 70 or the *International Residential Code*, as applicable in accordance with Section 102.7.1.

Exception: Internal wiring for portable *residential* spas and portable *residential* exercise spas <u>listed and labeled in accordance with UL 1563 or</u> CSA C22.2 No. 218.1.

Reason Statement: The purpose of this proposal is to ensure uniformity in all mentions of portable residential spas and portable residential exercise spas in the International Swimming Pool and Spa Code by adding the "listed and labeled" language that is found in other areas of the ISPSC. This ensures that the exception only applies to those portable residential spas and portable residential exercise spas that are listed and labeled in accordance with one of the Standards listed.

Bibliography: International Swimming Pool and Spa Code:

302.3 Pipe, fittings and components. Pipe, fittings and components shall be *listed* and *labeled* in accordance with NSF 50 or NSF 14. Plastic jets, fittings, and outlets used in public spas shall be *listed* and *labeled* in accordance with NSF 50. **Exceptions:** 1. Portable *residential* spas and portable *residential* exercise spas *listed* and *labeled* in accordance with UL 1563 or CSA C22.2 No. 218.1

309.1 Electrically operated equipment. Electrically operated equipment shall be *listed* and *labeled* in accordance with applicable product standards. **Exception:** Portable *residential* spas and portable *residential* exercise spas listed and labeled in accordance with UL 1563 or CSA C22.2 No. 218.1.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

ISPSC: 303.1, 303.1.1, 303.1.2, 303.1.3, 303.2, 303.3

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* vaporretardant 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 Statement: 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.

SP6-21

ISPSC: 304.1, 304.2 (New)

Proponents: Gregory Wilson, representing FEMA (gregory.wilson2@fema.dhs.gov); Rebecca Quinn, representing Federal Emergency Management Agency (rcquinn@earthlink.net)

2021 International Swimming Pool and Spa Code

Revise as follows:

304.1 General. The provisions of Section 304 shall control the design and construction of pools, and spas and equipment rooms installed in *flood* hazard areas.

Add new text as follows:

304.2 Equipment Rooms. Equipment rooms located in flood hazard areas shall comply with Section 1612 of the International Building Code.

Reason Statement: Requirements for pool equipment rooms were added in the 2021 ISPSC. This proposal specifies that pool equipment rooms located in flood hazard area comply with Section 1612 of the IBC, which contains requirements for structures in flood hazard areas. IBC Section 1612, by reference to ASCE 24, requires detached buildings and structures to be elevated or dry floodproofed. This proposal does not add a new requirement; it points to existing structural requirements for users of the ISPSC now that pool equipment rooms have been added to the scope.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This proposal does not add a new requirement; it points to existing structural requirements and therefore does not add cost.



Proponents: Gregory Wilson, representing FEMA (gregory.wilson2@fema.dhs.gov); Rebecca Quinn, representing Federal Emergency Management Agency (rcquinn@earthlink.net)

2021 International Swimming Pool and Spa Code

Revise as follows:

304.5 GFCI protection. Electrical equipment installed below the design flood elevation shall be supplied by branch circuits <u>originating from that have</u> ground-fault circuit interrupter <u>breakersprotection for personnel</u>.

Reason Statement: This proposal clarifies that the ground-fault circuit interrupter (GFCI) protection for pool equipment must originate from GFCI breakers. GFCI breakers are necessary to achieve GFCI protection for personnel. GFCI branch circuits exposed to floodwater can remain energized if fed from non-GFCI breakers.

Cost Impact: The code change proposal will not increase or decrease the cost of construction The code change proposal will not impact the cost of construction because it is a clarification, not a new requirement.

SP8-21

ISPSC: 305.2.4, ASTM Chapter 11 (New)

Proponents: Joseph P. Summers, Chair of PMGCAC, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

2021 International Swimming Pool and Spa Code

Revise as follows:

305.2.4 Mesh fence as a barrier. Mesh fences, other than chain link fences in accordance with Section 305.2.7, shall be installed in accordance with the manufacturer's instructions and shall comply with ASTM F2286 and with both of the following:

- 1. The bottom of the mesh fence shall be not more than 1 inch (25 mm) above the deck or installed surface or grade.
- 2. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not permit the fence to be lifted more than 4 inches (102 mm) from grade or decking.
- The fence shall be designed and constructed so that it does not allow passage of a 4-inch (102 mm) sphere under any mesh panel. The
 maximum vertical clearance from the bottom of the mesh fence and the solid surface shall be not greater than 4 inches (102 mm) from
 grade or decking.
- 4. An attachment device shall attach each barrier section at a height not lower than 45 inches (1143 mm) above grade. Common attachment devices include, but are not limited to, devices that provide the security equal to or greater than that of a hook-and-eye-type latch incorporating a spring-actuated retaining lever such as a safety gate hook.
- 5.1. Where a hinged gate is used with a mesh fence, the gate shall comply with Section 305.3.
- 6. Patio deck sleeves such as vertical post receptacles that are placed inside the patio surface shall be of a nonconductive material.
- 7. 2. Mesh fences shall not be installed on top of onground residential pools.

Add new standard(s) as follows:

ASTM

ASTM International 100 Barr Harbor, P.O. Box C700 West Conshohocken PA 19428-2959

F2286-16: Standard Design and Performance Specification for Removable Mesh Fencing for Swimming Pools, Hot Tubs, and Spas

Staff Analysis: A review of the standard proposed for inclusion in the code, ASTM F2286-16: Standard Design and Performance Specification for Removable Mesh Fencing for Swimming Pools, Hot Tubs, 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.

Reason Statement: The manufacturers of these types of barriers design and fabricate to ASTM F2286. There isn't any reason for the ISPSC to have the detailed information in it as the installation instructions for the product has to reflect the requirements of the standard. Referring to the standard simplifies the code.

This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC). The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020, the PMG CAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMG CAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development-process/pmg-code-action-committee-pmgcac/ Reference PMGCAC Working Document Item 19.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

These products are already compliant with the current code. Referring to the standard in the code doesn't change the cost of the product and therefore doesn't impact the cost of construction.

SP8-21

SP9-21

ISPSC: 305.2.4 (New), 305.2.4.1 (New), ASTM Chapter 11 (New)

Proponents: Joseph J. Summers, Chair of the PMGCAC, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

2021 International Swimming Pool and Spa Code

Add new text as follows:

<u>305.2.4</u> Screen enclosure as a barrier. A swimming pool screen enclosure shall be permitted to be utilized as part, or all, of a required barrier provided that the enclosure complies with the requirements of Section 305.2. Such screen enclosures shall be designed by a registered design professional. Walls of such screen enclosures shall not be considered to be dwelling walls.

<u>305.2.4.1</u> Mesh for screen enclosures. The mesh utilized in the barrier portion of the screen enclosure shall have a tensile strength of not less than 100 psf when tested in accordance with ASTM D5034 and a ball burst strength of not less than 150 psf when tested in accordance with ASTM D3787.

Add new standard(s) as follows:

ASTM

ASTM International 100 Barr Harbor, P.O. Box C700 West Conshohocken PA 19428-2959

D5034-09(2017): Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)

D3787-16(2020): Standard Test Method for Bursting Strength of Textiles—Constant-Rate-of-Traverse (CRT) Ball Burst Test

Staff Analysis: A review of the standard proposed for inclusion in the code, D5034-09(2017), Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test) and D3787-16(2020), Standard Test Method for Bursting Strength of Textiles—Constant-Rate-of-Traverse (CRT) Ball Burst Test, 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.

Reason Statement: "Screen enclosures" for outdoor pools are common in the southern areas of the country because of mosquitos. Screen enclosures are designed by registered design professionals to withstand wind loads and to resist mesh (screen) pullout from the frame of the enclosure. The Florida Building Code has allowed, for many years, screen enclosures to serve as the barrier for a pool or spa.

This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC). The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020, the PMG CAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMG CAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development-process/pmg-code-action-committee-pmgcac/ Reference PMGCAC Working Document Item 18.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

A screen enclosure is an option for providing the required barrier. The designer does not have to use a screen enclosure but could opt for other types of fencing. Options to code requirements are not mandatory and therefore have no impact to the cost of construction.

SP10-21

ISPSC: 305.3

Proponents: Joseph J. Summers, Chair of the PMGCAC, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

2021 International Swimming Pool and Spa Code

Revise as follows:

305.3 Doors and gates. Doors and gates in barriers shall comply with the requirements of Sections 305.3.1 through 305.3.3 and shall be equipped to accommodate a locking device. Pedestrian access doors and gates shall open outward away from the pool or spa, shall be self-closing and shall have a self-latching device. Doors and gates shall not swing over stairs.

Reason Statement: Doors and gates swinging over stairs is a safety issue for the user. The building code doesn't allow this and neither should the ISPSC.

This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC). The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020, the PMG CAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMG CAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development-process/pmg-code-action-committee-pmgcac/ Reference PMGCAC Working Document Item 15.

Cost Impact: The code change proposal will increase the cost of construction The added cost of installing a landing area might be needed for some projects.

SP11-21

ISPSC: 306.2, SA (New)

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:

306.2 Slip resistant. Decks, ramps, coping, and similar step surfaces shall be slip resistant and cleanable. Special features in or on decks such as markers, brand insignias, and similar materials shallbe slip resistant. <u>Where surfaces are evaluated for slip resistance in accordance with AS 4586</u>, such surfaces shall have, when tested wet, a pendulum slip rating classification of not lower than P4, a Slider 55 pendulum slip resistance value of not lower than 40 or a Slider 96 pendulum slip resistance value of not lower than 45.

Add new text as follows:

<u>SA</u>

Standards Australia Level 10, The Exchange Centre 20 Bridge Street, Sydney Australia

Add new standard(s) as follows:

SA AS 4586-2013. Slip resistance classification of new pedestrian surface materials

Staff Analysis: A review of the standard proposed for inclusion in the code, AS 4586-2013, Slip resistance classification of new pedestrian surface materials, 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.

Reason Statement: This proposal seeks to provide a non-subjective compliance verification test to be used as needed, where needed. Components such as depth marker tiles, edge grating and other discrete products fall within already-established *International Swimming Pool and Spa Code* requirements but if there is any need to test their performance, this proposal provides jurisdictions, contractors, manufacturers, and any other stakeholders with a measurable tool.

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.

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

2021 International Swimming Pool and Spa Code

Revise as follows:

306.2 Slip resistant. Decks, ramps, coping, <u>stair treads</u>, and similar step surfaces shall be slip resistant and cleanable. Special features in or on decks such as markers, brand insignias, and similar materials shall be slip resistant. <u>Decking compliant with ASTM D 7032 and untreated wood</u> <u>decking shall be considered slip resistant and cleanable for the purpose of this section.</u>

Staff Analysis: The referenced standard, ASTM D7032, is currently referenced in the 2021 IBC.

Reason Statement: The intent of this proposal is to provide guidance to designers and building authorities regarding slip resistant decking. 1) How is one to determine if a decking material is "slip resistant"? This provision is incredibly ambiguous and provides excessive responsibility in the authoritative interpretation by the building authority. Designers and contractors have no way to determine what products to select in their design, and building authorities have no guidance for what products to approve in plan review. Leaving this determination as an in-situ test at final inspection is not appropriate governance of otherwise code-compliant construction materials.

2) ASTM D7032 is a referenced standard required for all plastic composite decking according to IRC R507.2.2. Section 5.6 of ASTM D7032 covers test protocols for a "slip resistance test" that are considerably more definitive and established than the ambiguous mention of "slip resistant" in the ISPSC. Designers selecting these tested products and building authorities approving them should not be required to determine slip resistance on their own.

3) Wood decking has historically been used in decks and adjacent to hot tubs and pools. Untreated wood should be provided a definitive approval for this safety requirement, whereas treating of wood surfaces may produce differing performance in slip resistance and can still be approved as the ISPSC currently expects. This proposal does not state what other products may or may not be considered slip resistant by a building authority, simply that wood decking and products tested to ASTM D7032 shall be considered slip resistant.

4) ICC ES Acceptance Criteria 174 for deck board span ratings is available for use for manufactured decking materials that cannot be tested under the IRC reference to ASTM D 7032. Section 4.1 of AC 174 only requires compliance with sections 5.1 through 5.5 of ASTM D7032 and does not include the slip resistance section, 5.6. Therefore, these products would still be required to be determined as "slip resistant" by the interpretation of a building authority. However, this would be a narrow portion of the manufactured decking market.

5) This section should more clearly identify "stair treads" in the list of surfaces requiring slip resistance, therefore we propose including it.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

It is not definitive what affect this would have on cost. One could argue that more confidence in the code compliance of a design would lead to less corrections during construction and thus a cost savings. However, we did not feel that was significant enough to claim the result of this modification would be a statistical decrease of construction costs.

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

2021 International Swimming Pool and Spa Code

Revise as follows:

306.3 Step risers and treads. Step risers for decks of public pools and spas shall be uniform and have a height not less than $3^{3}/_{4}$ inches (95 mm) and not greater than $7^{1}/_{2}$ inches (191 mm). The tread distance from front to back shall be not less than 11 inches (279 mm). Step risers <u>and treads</u> for decks of *residential* pools and spas shall be <u>in accordance with the International Residential Code</u> uniform and shall have a height not exceeding $7^{+1}/_{2}$ inches (191 mm). The tread distance from front to back shall be not less than 10 inches (254 mm).

Reason Statement: The stair geometry for public pool deck stairs is less restrictive than standard stairs in the IBC. However, the geometry for residential pool deck stairs is more restrictive than the IRC. This appear to be contradictory.

Residential pool decks may be installed before, during, or after a pool or spa installation. If before the pool, the deck stairs may already be constructed at a maximum 7 ³/₄" and rebuilding them to be ¹/₄" shorter is not economically justified. Residential contractors are very familiar with the stair geometry requirements of the IRC. Having a unique riser height for stairs serving pool decks complicates code compliance with little justification.

The language for measuring the tread depth "from front to back" is not clear language. Compare this to IRC R311.7.5 which is very clear and established regarding stairway geometry. Referencing this section is more appropriate.

The provisions for stairway geometry are incomplete in the ISPSC as they do not address nosing design, nosing projection, opening limitations, uniformity of geometry, or lighting. There is no reason to address these subjects in the ISPSC when they are already addressed in the IRC.

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

Cost of construction will be reduced due to circumstances where an additional stair tread may not be necessary due to the increased riser height. More so, construction costs will be reduced by eliminating the need to reconstruct existing deck stairs due to the installation of a spa or pool. Similarly, costs will be reduced due to a reduction of errors made by a residential contractor that does not realize the ISPSC has a shorter maximum riser height

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, The maximum slope of 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 1 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. <u>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.</u>
- 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 Statement: 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

SP15-21

ISPSC: (New), 306.5.1 (New), 306.5.2 (New)

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:

PERIMETER FLOW POOL. A pool where the water surface is lifted and flows over the perimeter of the pool into a surrounding gutter that delivers water to the circulation pump.

Add new text as follows:

306.5.1 Drainage. Decks shall be sloped to drain away from the pool or towards the deck drains. Where site conditions require, deck drains are permitted to be placed at the back side of the pool structure or coping.

306.5.2 Site drainage. Site drainage shall direct all perimeter deck drainage, general site, and roof drainage away from the pool area.

Exception: First 3 feet (914 mm) of decking immediately surrounding perimeter flow pools.

Reason Statement: This proposal seeks to incorporate language in the current ANSI/APSP/ICC-5 2011 *American National Standard for Residential Inground Swimming* that was unintentionally left out of the *International Swimming Pool and Spa Code* with regard to drainage of decks sloping away from the pool or toward deck drains, as well as site drainage (see Section 7.2 of APSP-5). The proposal also incorporates expected updates to what will be the 2021 ANSI/PHTA/ICC-5 Standard with regard to adding a definition for perimeter flow pools and additional edits to the drainage section. Historically, the *International Swimming Pool and Spa Code* and APSP (PHTA) Standards align wherever possible, with language rolled into either for harmonization. A definition for these perimeter flow pools and guidance on proper drainage is missing from the ISPSC and this proposal will provide the clarity installers and regulators need.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

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

2021 International Swimming Pool and Spa Code

Revise as follows:

306.6 Gaps. Gaps shall be provided between deck boards in wood and wood/plastic composite decks. Gaps shall be consistent with *approved* engineering methods with respect to the type of wood used and shall not cause a tripping hazard. Gaps no less than 1/8 inch and no greater than 1/2 inch shall be provided between wood deck boards for drainage. Gaps between manufactured deck boards shall be in accordance with the manufacturer's installation instructions.

Exception. Gaps are not required between wood deck boards installed on decks sloped in accordance with Section R306.5

Reason Statement: In teaching this provision across the country since the 2012 edition, I have asked all engineers in attendance what they learned in their study and practice regarding "engineering methods for gap design" and I have received nothing but confusion as a reply. This language expects too much of the engineering community to determine a sufficient design related to occupant safety, but with no standardized method of evaluation. It is confusing and inappropriate code language. The design community should be provided clear and standardized guidance for the design of pool decks.

Plastic composite decking manufacturers provide gapping requirements in their installation instruction. These products must all be testing in accordance with ASTM D 7032 or otherwise approved as an alternative. There should be no additional requirements for these products in the ISPSC regarding gaps.

Cost Impact: The code change proposal will not increase or decrease the cost of construction It would be a stretch to say this would make any statistical change to the average cost of construction.

SP17-21

ISPSC: 307.1.2, 307.1.2.1

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. <u>The interior finish coating floors and walls shall be white or light-colored.</u>

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 Statement: 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

SP18-21

ISPSC: TABLE 307.2.2, (New), ACI (New), ACI (New)

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

MATERIAL	STANDARD	
Fiberglass reinforced plastic	IAPMO Z124.7	
Plastic	IAPMO Z124.7	
Stainless steel (Types 316, 316L, 304, 304L)	ASTM A240	
Reinforced concrete	<u>ACI 318</u>	
Reinforced shotcrete	<u>ACI 318</u>	
Tile	ANSI A108/A118/A136.1	
Vinyl	ASTM D1593	

Add new definition as follows:

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

Add new text as follows:



American concrete Institute 38800 Country Club Drive Farmington Hills MI 48331-3439

Add new standard(s) as follows:

ACI 318-19. Building Code Requirements for Structural Concrete

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

Reason Statement: 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.

SP19-21

ISPSC: SECTION 202, (New), 302.3.1 (New), 311.4.1, 311.4.4, 505.2.1

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

Delete and substitute as follows:

SUCTION OUTLET. A submerged fitting, fitting assembly, cover/grate and related components that provide a localized low-pressure area for the transfer of water from a swimming pool, spa or hot tub. Submerged suction outlets have been referred to as main drains.

SUCTION OUTLET. Any appurtenance that provides a localized low-pressure area for the transfer of water from a pool to an individual suction system including but not limited to a suction outlet fitting assembly, skimmer, or vacuum port fitting.

Add new definition as follows:

SUCTION OUTLET FITTING ASSEMBLY (SOFA). A fully submerged suction outlet comprised of all components, including the cover and/or grate, adapters, supports, riser rings, a field-built sump or manufactured sump, and fasteners.

Add new text as follows:

<u>302.3.1</u> Suction outlet fitting assembly sumps. Sumps shall be inspected for dimensional conformance to APSP 16 as specified by the suction outlet fitting assembly installation instructions.

Revise as follows:

311.4.1 Fittings. Fittings used in circulation systems shall be listed and labeled as complying with one of the standards in Table 311.4.1.

Exceptions:

- 1. Suction outlet fitting assemblies and manufacturer-provided components that conform to certified in accordance with APSP 16.
- 2. Skimmers and manufacturer-provided components.
- 3. Gutter overflow grates and fittings installed above or outside of the overflow point of the pool or spa.

311.4.4 Suction outlet fitting assemblies. Suction outlet fitting assemblies shall be *listed* and *labeled* in compliance with <u>conform to</u> APSP 16. Manufactured suction outlet fitting assemblies shall be *listed* and *labeled*. Suction outlet fitting assemblies other than the manufactured type shall be <u>certified as conforming by a *design professional*.</u>

505.2.1 Testing and certification <u>Required conformance</u>. Suction <u>outlet</u> fitting <u>sassemblies</u> shall be *listed* and *labeled* in accordance with APSP <u>16 Section 311.4.4</u>.

Reason Statement: It is important to recognize that the Consumer Product Safety Commission incorporated the APSP-16, 2017 edition, as the successor drain cover standard, effective November 24, 2020. The federal Virginia Graeme Baker Pool & Spa Act requires that drain covers (Suction Outlet Fitting Assemblies) comply with entrapment protection requirements specified by the APSP-16 successor standard. This proposal seeks to ensure that proper suction outlet fitting assemblies will be installed for safety purposes and in conformance with federal law within the ISPSC. Manufactured SOFAs are created in routine commercial production. ANSI/APSP/ICC-16 requires manufactured SOFAs conform to the Standard via testing by laboratories accredited to ISO 17025. Registered design professional SOFAs are custom-made, and field built. ANSI/APSP/ICC-16 requires registered design professional SOFAs conform to the Standard via certification from a registered design professional.

Bibliography: Code of Federal Regulations: https://www.ecfr.gov/cgi-bin/text-idx? SID=7c1cb7e95a9d7dffa1f4869a653a08ce&mc=true&node=20190524y1.8

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.

SP20-21

ISPSC: SECTION 319, 319.2, SECTION 508, 508.1

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:

SECTION 319 SANITIZING EQUIPMENT AND CHEMICAL FEEDERS.

319.2 Chemical feeders. Where installed, chemical Public pool and spas shall be equipped with chemical feed equipment such as flow-through chemical feeders, electrolytic chemical generators, mechanical chemical feeders, chemical feed pumps, or automatic controllers that are listed and labeled in compliance with NSF 50. Chemical feed systems shall be installed in accordance with the manufacturer's specifications. Chemical feed pumps <u>systems</u> shall be wired so that they cannot operate unless there is adequate return flow to disburse the chemical throughout the pool or spa as designed.

Delete without substitution:

SECTION 508 SANITIZING, OXIDATION EQUIPMENT AND CHEMICAL FEEDERS.

508.1 Automatic controllers. Where an automatic controller is installed on a spa or hot tub for public use, the controller shall be installed with an automatic pH and an oxidation reduction potential controller *listed* and *labeled* in compliance with NSF 50.

Reason Statement: The purpose of this proposal is to improve language currently in the *International Swimming Pool and Spa Code* regarding chemical feeders to avoid confusion and provide a user-friendly coherence on this topic. All information regarding chemical feeders would now be located in the appropriate section. Section 508 becomes repetitive and unnecessary given the revisions to Section 319. This language has been adopted from draft updates to the ANSI/APSP (PHTA)/ICC-1 Standard and the *Code* reflects updates to that 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.

SP21-21

ISPSC: (New), 319.3 (New), 319.4 (New)

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:

<u>319.3</u> <u>Secondary disinfection systems</u>. 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.

beyond what is currently required by the code.

- 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 Statement: 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

SP21-21

ISPSC: 322.4

Proponents: Joseph Summers, Chair, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

2021 International Swimming Pool and Spa Code

Revise as follows:

322.4 Recessed treads. Recessed treads shall have a minimum depth of not less than 5 <u>4.5</u> inches (127-mm <u>114</u>) and a width of not less than 12 inches (305 mm). The vertical distance between the pool coping edge, deck, or step surface and the uppermost recessed tread shall be not greater than 12 inches (305 mm) measured at the wall. The tread shall not protrude more than 2.5 inches (64 mm) from the wall. Recessed treads shall have slip-resistant surfaces.

Reason Statement: The photos below are of generic steps that are produced by at least three companies. The tread patterns differ, but the dimensions are almost identical. The protrusion from the wall is of 2 7/16" so I'm suggesting 2.5 to make it easier to measure. The depth of tread varies depending on where it is measured. In the center this version is 4 7/8" so I'm suggesting 4.5 inches. A ladder tread is only 2" and this is more than double. If you want to keep field verification closer to the physical products, compromise with 4.75 inches. The tread with varies depending on where it is measure; just over 10" at the rounded front edge, 12 1/2" at the wall and there is 13 ½" of clearance at the wall Sections deleted in Chapters 4, 6. 7. And 8 eliminates redundancies. Regulations only need to be in one location in the code.







This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC). The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020, the PMG CAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMG CAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development-process/pmg-code-action-committee-pmgcac/ Reference PMGCAC Working Document Item 33.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

Most constructors of inground gunite pools have been using these recessed tread inserts for many years as they offer an easy and uniform method to create recessed treads in the wall of a pool. The difference in cost of the inserts versus the labor to hand form the tread without the insert is insignificant.

SP23-21

ISPSC: 323.1

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:

323.1 Handholds required. Where the depth below the *design waterline* of a <u>residential swimming</u> pool or spa exceeds 42 inches (1067 mm) <u>or</u> <u>where the depth below the *design waterline* of a <u>public swimming pool exceeds 24 inches (610 mm)</u>, handholds along the perimeter shall be provided. Handholds shall be located at the top of deck or coping.</u>

Exceptions:

- 1. Handholds shall not be required where an underwater bench, seat or swimout is installed.
- 2. Handholds shall not be required for wave action pools and action rivers.

Reason Statement: This proposal seeks to harmonize the *Model Aquatic Health Code* and the *International Swimming Pool and Spa Code* on public swimming pool handhold requirements. Where appropriate and all are in agreement, it is best to not have conflicting code provisions that can cause confusion and questions for installers and regulators as to which applies.

Bibliography: 2018 Model Aquatic Health Code.

4.5.14.1 Handholds Provided Where not otherwise exempted, every POOL shall be provided with handholds (PERIMETER GUTTER SYSTEM, coping, horizontal bars, recessed handholds, cantilevered DECKING) around the perimeter of the POOL where the water depth at the wall exceeds 24 inches (61.0 cm).

Cost Impact: The code change proposal will increase the cost of construction The code change proposal will increase the cost of construction as additional handholds may be required for public swimming pools.

SP24-21

ISPSC: (New), SECTION 308 (New), 308.1 (New), APSP Chapter 11 (New)

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

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.

Reason Statement: 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, values, 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.

SP25-21

ISPSC: 405.6

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:

405.6 Suction entrapment avoidance. Wading pools shall not have suction outlets. Suction outlets fitting assemblies shall not be located in wading pools where bathers have access to such outlets. Where suction outlets cannot be located to avoid bather access. S skimmers or overflow gutters shall be installed and shall accommodate 100 percent of the circulation system flow rate.

Reason Statement: ANSI/PHTA/ICC-7 (formerly known as ANSI/APSP/ICC-7) prohibits suction outlet fitting assemblies where they may be accessed by bathers as a result of suction entrapment hazards presented. The Standard does not prohibit suction outlet fitting assembles where not accessed, such as in the pictures included. If the bather cannot access the assembly, there is no need to prohibit in a wading pool.





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.

SP25-21

SP26-21

ISPSC: 410.1

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:

410.1 Toilet facilities <u>Dressing space, cleansing showers and toilet facilities</u>. Class A and B pools shall be provided with <u>Cleansing showers and</u> toilet facilities having the required number of plumbing fixtures <u>shall be provided</u> in accordance with the *International Building Code* or the *International Plumbing Code*. A dressing space or room shall be provided. Cleansing showers and dressing spaces shall be <u>either separate from or within toilet facilities</u>.

Exception: Pools accessory to dwelling units or sleeping units of Group R-1 or R-2 occupancies shall not be required to be provided with dressing areas or cleansing showers.

Reason Statement: This proposal seeks to ensure that public swimming pools do not just provide toilet facilities but also cleansing showers and dressing spaces where dwelling units or sleeping units are not available. The proposed language stems from a draft update to the ANSI/APSP (PHTA)/ICC-1 Standard for Public Pools and Spas. *The International Swimming Pool and Spa Code* typical adopts language from this Standard where appropriate. The Model Aquatic Health Code provides information on cleansing showers as does the current ISPSC, but only in reference to aquatic recreation facilities, not public swimming pools. This proposal ensures language is found in both Chapter 4 and Chapter 6 of the Code.

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

The code change proposal will increase the cost of construction if a facility was not already planning on providing cleansing showers or dressing spaces as provided in this proposal. If the facility did include cleansing showers and dressing spaces in their toilet facilities, there would not be an increase in the cost of construction.

SP27-21

ISPSC: 509.2

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:

509.2 Operational signs. Operational signs shall include, but not be limited to, the following messages as required by the local jurisdiction:

- 1. <u>Children under age 5 and persons using alcohol or drugs that cause drowsiness shall not use spas.</u>
- 2. <u>Pregnant women and persons with heart disease, high blood pressure or other health problems should not use spas without prior consultation with a health provider.</u>
- 3. Children under age 14 shall be supervised by an adult.
- 4. Use of spa when alone is prohibited (if no lifeguard on site).
- 1.5. Do not allow the use of or operate spa if the suction outlet cover is missing, damaged or loose.
- 2.6. Check spa temperature before each use. Do not enter the spa if the temperature is above 104°F (40°C).
- 3.7. Keep breakable objects out of the spa area.
- 4.8. Spa shall not be operated during severe weather conditions.
- 5.9. Never place electrical appliances within 5 feet (1524 mm) of the spa.
- 6.10. No diving.

Reason Statement: This proposal seeks to include additional signage for safety purposes at public spas and public exercise spas. Many jurisdictions have already implemented at least part of this language in their own rules. The proposed language stems from a draft update to the ANSI/APSP (PHTA)/ICC-1 Standard for Public Swimming Pools & Spas. The *International Swimming Pool and Spa Code* typical adopts language from this Standard where appropriate. This proposal is for what signage is required to be installed prior to the final inspection of a public spa and does not imply that regulators are to enforce said requirements, which will be up to the operators of the public spa to do so.

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

The code change proposal will increase the cost of construction as jurisdictions not using such operational signs yet will now be required to do so.

SP28-21

ISPSC: (New), TABLE 604.2, 601.1, SECTION 613 (New), 613.1 (New), 613.1.1 (New), 613.1.2 (New), 613.1.3 (New), 613.1.3.1 (New), 613.1.3.2 (New), 613.1.4 (New), 613.1.5 (New), 613.1.6 (New), 613.1.7 (New), 613.1.8 (New), 613.1.9 (New), 613.1.10 (New), 613.1.10.1 (New), 613.1.10.2 (New), 613.1.11 (New), 613.1.12 (New), 613.1.12.1 (New), 613.1.12.2 (New), 613.1.13 (New), 613.1.14 (New), 613.1.15 (New), 613.1.16 (New), APSP Chapter 11 (New)

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:

ARTIFICIAL SWIMMING LAGOON. In an aquatic recreation facility, a human-made impoundment of water designed to visually mimic a natural body of water such as a large pond or small lake. Such impoundments consist of one or more designated swimming areas and can include one or more areas not designated for swimming. Areas not designated for swimming can be used for such purposes as kayaking, paddle-boarding, windsurfing, boating, and training for scuba diving.

DESIGNATED SWIMMING AREA. An area within an artificial swimming lagoon that is designated for recreational swimming, wading, or bathing. Such areas are visually separated from other areas of the lagoon by a rope and float line or other approved methods.

INCREASED RISK AQUATIC VENUE. Recreational or therapeutic settings that are designed primarily for use by children under the age of 5 or, for use primarily by persons more susceptible to infections such as therapy patients with open wounds. Such settings create greater potential for microbial contamination of the water and present significant potential for infections of all users. Examples of such settings are spray pads, wading pools, therapy pools and other venues where higher levels of treatment are required.

Revise as follows:

TABLE 604.2 TURNOVER TIME

CLASS OF POOL	MAXIMUM TURNOVER TIME ^a (hours)	
D-1	2	
D-2 with less than 24 inches water depth	1	
D-2 with 24 inches or greater water depth	2	
D-3	1	
D-4	2	
D-5	1	
D-6	1	
Artificial swimming lagoon - designated swimming areas	<u>6</u>	
Artificial swimming lagoon - other than designated swimming areas	None	

For SI: 1 inch = 25.4 mm.

a. Pools with a sand bottom require a 1-hour turnover time.

601.1 Scope. This chapter covers public pools and water containment systems used for aquatic recreation. This chapter provides specifications for the design, equipment, operation, signs, installation, sanitation, new construction, and rehabilitation of public pools and *artificial swimming lagoons* for aquatic play. This chapter covers Class D-1 through Class D-6 public pools <u>and *artificial swimming lagoons*</u> whether they are provided as stand-alone attractions or in various combinations in a composite attraction.

Add new text as follows:

SECTION 613 ARTIFICIAL SWIMMING LAGOONS.

613.1 General. Artificial swimming lagoons shall comply with Sections 613.1.1 through 613.1.16 and the requirements of Chapter 3 except where Section 613 specifically addresses the general requirements of Chapter 3.

613.1.1 Internal combustion engines prohibited. The operation of any internal combustion engine in any area of an artificial swimming lagoon shall be prohibited.

613.1.2 Materials and structural design. Artificial swimming lagoons shall incorporate a water containment system constructed of an impervious material or materials that comply with the requirements of Section 307. Where an artificial liner is utilized as a containment system within a designated swimming area, the liner material shall be listed and labeled to ASTM D1593.

613.1.3 Floor slopes. Floor slopes shall be in accordance with Sections 613.1.3.1 and 613.1.3.2.

613.1.3.1 Designated swimming areas. In portions of *designated swimming areas* having water depths of 3 feet (915 mm) or less, the floor slope shall not exceed 1 unit vertical in 12 units horizontal (8.3-percent slope). In portions of designated swimming areas having water depths of greater than 3 feet (915 mm), the floor slope shall not exceed 1 unit vertical in 10 units horizontal (10-percent slope).

613.1.3.2 Areas not designated as swimming areas. The floor slope in areas that are not designated as swimming areas shall not exceed 1 unit vertical to 3 units horizontal (33-percent slope).

613.1.4 Islands. In designated swimming areas, islands that are designed for bather use shall be accessed by beach entry or other approved means,

613.1.5 Location of entry and exit. Each designated swimming area shall have not less than one means of entry and exit such as natural entries, stairs, ladders, recessed steps, swimouts, and beach entries. For other than designated swimming areas, bather access shall be prohibited from deck areas surrounding an artificial swimming lagoon except where such deck areas are integral to docks or other means that are provided for launch or recovery of craft for such purposes as sailing or kayaking, and such bather access from those deck areas is approved.

613.1.6 Boundary indication. The boundary of each designated swimming area within an artificial swimming lagoon shall be marked by a rope and float line or similar approved means. The floats shall be located at a spacing of not greater than 25 ft (7.62 m) and at at the ends of rope line sections that connect together. Depth marker floats shall be provided on the rope and float line and such floats shall indicate the maximum depth of water within the designated swimming area. The text font and size of the depth indication on the floats shall be in accordance with Section 611.4.

613.1.7 Handholds. At perimeter locations of *designated swimming areas* where vertical walls exist, *handholds* shall be provided in accordance with Section 323.1. *Handholds* shall not be required at perimeter locations having vertical walls that are not in designated *swimming areas*.

613.1.8 Signage. Signs indicating the maximum depth of each designated swimming area shall be provided in accordance with Section 611. Where

the maximum depth of a *designated swimming area* is 5 feet (1524 mm) or less, the "No Diving" symbol shall be also be displayed on such signs. In a designated swimming area at perimeter locations having a vertical wall, depth markers and "No Diving" symbols in accordance with Sections 409.2 and 409.3.shall be installed on the deck.

In an artificial swimming lagoon at perimeter locations having a vertical wall, where access to that portion of the lagoon is intended to be restricted from entry and is not blocked by an *approved* barrier, "No Entry" markers that are designed and located in accordance with Section 409.3 shall be installed on the deck. Where decking in such locations does not exist, the "No Entry" markers shall be on signs.

613.1.9 Barrier requirements. Multiple designated swimming areas within an artificial swimming lagoon shall be permitted without barriers provided that a barrier separates the artificial swimming lagoon complex from the surrounding property. The design of barriers for restricting entry into a artificial swimming lagoon complex shall be in accordance with Section 305.

613.1.10 Number of occupants. The maximum number of occupants for each *artificial swimming lagoon* shall be based on the calculated peak occupanct load or the facility capacity, whichever is *approved*. Either the calculated theoretical peak occupant load or the facility capacity, whichever is approved, shall be used for designing systems and facilities that serve bathers and non-bathers.

<u>613.1.10.1</u> Theoretical peak occupant load. The calculated theoretical peak occupant load for an *artificial swimming lagoon* shall be determined by dividing the sum of the water surface areas, in ft2 (m^2) of all *designated swimming areas* within the *artificial swimming lagoon*, by an occupant load density of 25 ft² (2.32 m^2) per person,

613.1.10.2 Facility capacity. Based on the designer's and owner's intended uses of the *artificial swimming lagoon*, the theoretical peak occupant load, as determined in Section 613.1.10.1 shall be adjusted, either higher or lower, to determine to the facility capacity. The facility capacity shall be *approved*.

613.1.11 Dressing and sanitary facilities. Dressing and sanitary facilities shall be provided in accordance with the requirements of the *International Building Code*, the *International Plumbing Code* and Sections 609.2 through 609.9, except that the minimum number, types and locations of such facilities shall be based on either the theoretical peak occupant load or the facility capacity as determined in Section 613.1.10, whichever is *approved*. The number, types and locations of required dressing and sanitary facilities shall be distributed around *artificial swimming lagoons* based on the sizes and intended uses of *designated swimming areas* and other non-swimming related uses located within the aquatic recreation facility complex. The distance of travel from a designated swimming area to a sanitary facility shall not exceed 200 feet (61 m.)

613.1.12 Circulation and filtration systems. The recirculation and filtration system for artificial swimming lagoons shall provide circulation, filtration, skimming and disinfection of the water to maintain, within each designated swimming area, the water quality requirements in APSP 11. The circulation system within designated swimming areas shall be designed and documented to prevent the entry of untreated water of the lagoon into designated swimming areas. Where water for the circulation system of a designated swimming area is drawn from, either partially or exclusively, lagoon areas outside of designated swimming areas, the designated swimming area shall be classified as an increased risk aquatic venue.

613.1.12.1 Water treatment for increased risk aquatic venues. Water in circulation systems for increased risk aquatic venues shall be treated with a secondary disinfection system *listed* and *labeled* to NSF 50. Such systems shall be capable of achieving not less than a 3-log reduction in the number of infective Cryptosporidium parvum oocysts at the maximum flow rate prior to primary halogen sanitizer treatment and subsequent discharge to the *designated swimming area*.

613.1.12.2 Water outside of designated swimming areas. Lagoon water that is outside of *designated swimming areas* shall not be required to be provided with equipment in accordance with Sections 311 through 315, provided that the design professional provides rationale that such equipment is not needed for the application and the rationale is *approved*.

613.1.13 Design waterline. The maximum construction tolerance for the design waterline of an *artificial swimming lagoon* having a vertical wall adjacent to a *designated swimming area* and a water depth greater than 18 inches (457mm), shall be in accordance with Section 308.4. The maximum construction tolerance for the design waterline of an *artificial swimming lagoon* not having vertical walls shall be, at the time of completion of the work, the operating range of the surface skimming system.

613.1.14 Piping, fittings, and equipment. Piping and fittings shall comply with Section 311.4. Treatment and circulation system equipment, including filter systems, skimmers, pumps and applicable components thereof, shall be *listed* and *labeled* in accordance with NSF 50. Electrically operated equipment shall be *listed* and *labeled*.

Exception: Alternative engineered designs conforming to the intent of the provisions of this code and providing an equivalent level of quality, strength, effectiveness, durability and safety and the material, equipment and components of the design are installed in accordance with the manufacturer's instructions.

613.1.15 Water supply. Water supply and makeup water for an *artificial swimming lagoon* shall be supplied from a potable water source. The requirements of Section 318.2 shall apply to *artificial swimming lagoons*.

613.1.16 Backwash water and wastewater disposal. Where wastewater from an *artificial swimming lagoon*, including filter backwash water, will be reused, such water shall be filtered and disinfected provided that such backwash water is treated to meet potable water standards. All other wastewater shall be discharged to a sanitary sewer system, to an *approved* disposal system on the premises, or shall be disposed of by other means that are *approved* by the state or local authority.



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

11-2019: American National Standard for Water Quality in Public Pools and Spas

Staff Analysis: A review of the standard proposed for inclusion in the code, APSP 11-2019, American National Standard for Water Quality in Public 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.

:

Reason Statement: This proposal seeks to recognize artificial swimming lagoons in the *International Swimming Pool and Spa Code*. There is currently no code guidance on this type of structure. Jurisdictions and regulators seek design and construction guidance on this issue as the number of artificial swimming lagoons constructed has increased greatly in recent years and they are an emerging component of recreational water activities. This proposal ensures that artificial lagoon design and construction meets current code requirements while creating new requirements that reflect the unique nature of an artificial swimming lagoon and the designated swimming area within the lagoon. Dressing and sanitary facility requirements seek to provide realistic guidelines as current code requirements would be untenable. Water quality and safety issues are addressed specific to artificial swimming lagoons to ensure that designated swimming areas match established code requirements as much as possible.

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

The code change proposal may increase the cost of construction if construction of an artificial swimming lagoon was not expected to meet the proposed requirements. Water quality, safety, and dressing and sanitary facilities, among other items, could increase construction costs as a result.

SP29-21

ISPSC: 803.1, Table 803.1 (New)

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:

803.1 Construction tolerances. The construction tolerance for dimensions for the overall length, width and depth of the pool shall be \pm 3 inches (76 mm). The construction tolerance for all other dimensions except the location of the design waterline, shall be \pm 2 inches (51 mm), unless otherwise specified by the design engineer. The construction tolerance for the location of the design waterline shall be in accordance with Table 803.1,

Add new text as follows:

Table 803.1 DESIGN WATERLINE CONSTRUCTION TOLERANCE

Waterline on tiled surface	<u>± 1/4 inch</u>
Waterline on surfaces other than a tiled surface	<u>± 1/2 inch</u>

For SI: 1 inch = 25.4 mm

Reason Statement: This proposal seeks to provide guidance to builders on construction tolerances related to the design waterline of a pool. Currently the *International Swimming Pool and Spa Code* is silent on this issue and provides no guidance. This language stems from draft updates to the the ANSI/APSP (PHTA)/ICC-5 Standard. The *Code* typically reflects updates in that Standard where appropriate.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

SP30-21

ISPSC: SECTION 202, 809.2

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, <u>underwater</u> 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 Statement: 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

SP31-21

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)

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 Statement: 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* typical adopts language from this Standard where appropriate.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

SP32-21

ISPSC: APPENDIX B (New), SECTION B101 (New), B101.1 (New), B102 (New), B102.1 (New), TABLE B102.1 (New)

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 WATER CONSERVATION EFFICIENCY

SECTION B101 GENERAL.

B101.1 Scope. Water conservation efficiency in residential and public pools, spas, portable spas and swim spas shall be provided for in accordance with APSP 13.

B102 REFERENCE STANDARDS.

B102.1 General. See Table G102.1 for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, the standard title, and the section or sections of this appendix that reference the standard.

TABLE B102.1 REFERENCE STANDARDS.

<u>STANDARD</u> ACRONYM	STANDARD NAME	SECTIONS HEREIN REFERENCED
ANSI/APSP/ICC- 13-2017	American National Standard for Water Conservation Efficiency in Residential and Public Pools, Spas, Portable Spas and Swim Spas	<u>B101.1</u>

-

Staff Analysis: A review of the standard proposed for inclusion in the code, ANSI/APSP/ICC-13-2017, American National Standard for Water Conservation Efficiency in Residential and Public Pools, Spas, Portable Spas and Swim 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.

Reason Statement: This proposal would add the ANSI/APSP/ICC-13 2017 Standard to the *International Swimming Pool and Spa Code* as a resource on water conservation efficiency for jurisdictions seeking guidance on this topic without creating new mandatory code language. The purpose of this standard's creation was to provide recommended minimum guidelines to increase the efficient use and conservation of water for residential and public pools, spas, portable spas and swim spas. It is also intended to assist local jurisdictions and other regulatory bodies, where necessary, in their water conservation efforts during drought and impending drought conditions.

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. However, if this appendix is required by a local jurisdiction, thereby requiring compliance with the standard, it is possible there will be an increase in cost but possibly offset by less water usage that will decrease ones utility bill.

SP33-21

ISPSC: Appendix B (New), SECTION B101 (New), B101.1 (New), APSP Chapter 11 (New)

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:

<u>Appendix B</u> <u>PUBLIC POOL AND SPA OPERATIONS AND MAINTENANCE</u>

SECTION B101 GENERAL.

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

Add new standard(s) as follows:



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

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.

Reason Statement: 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.

SP33-21