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AMERICAN NATIONAL STANDARD FOR SUCTION ENTRAPMENT AVOIDANCE IN SWIMMING POOLS, WADING POOLS, SPAS, HOT TUBS, AND CATCH BASINS (APSP-7 2006)

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2012 International Swimming Pool and Spa Code[™]

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PREFACE

Introduction

Internationally, code officials recognize the need for a modern, up-to-date code governing the design, construction, alteration, repair and maintenance of swimming pools, spas, hot tubs and aquatic facilities. This first edition, the 2012 edition, of the *International Swimming Pool and Spa Code™*, is designed to meet this need through model code regulations in a single document that contains clear and specific requirements that safeguard the public health and safety in all communities.

This 2012 edition is fully compatible with all of the *International Codes*® (I-Codes®) published by the International Code Council (ICC)®, including the *International Building Code®*, *International Energy Conservation Code®*, *International Existing Building Code®*, *International Fire Code®*, *International Fuel Gas Code®*, *International Green Construction Code™*, *International Mechanical Code®*, ICC Performance Code®, *International Plumbing Code®*, *International Private Sewage Disposal Code®*, *International Property Maintenance Code®*, *International Residential Code®*, *International Wildland-Urban Interface Code®* and *International Zoning Code®*.

The *International Swimming Pool and Spa Code* provisions provide many benefits, among which is the model code development process that offers an international forum for code officials, design professionals, pool and industry representatives and other interested parties to discuss performance and prescriptive code requirements relative to aquatic safety. This forum provides an excellent arena to debate proposed revisions. This model code also encourages international consistency in the application of provisions.

Development

This first edition of the 2012 International Swimming Pool and Spa Code is the culmination of an effort that started in 2010 with the drafting of Public Version 1.0 by the Swimming Pool Code Drafting Committee (SPCDC) established by the ICC Board of Directors, with The Association of Pool & Spa Professionals® (APSP®) as a cooperating sponsor. The goal of the SPCDC was to draft a code which coordinated and enhanced the provisions previously found in the International Codes and APSP standards to upgrade pool and spa safety and to meet the requirements of the Virginia Graeme Baker Pool and Safety Act.

Following drafting of Public Version 1.0, a full cycle of code development in accordance with ICC's Code Development Procedures was held in 2011. This included the submission of code change proposals followed by a Code Development Hearing, the submission of public comments and a Final Action Hearing. A new edition of the code will be promulgated every three years.

This code is founded on principles intended to establish provisions consistent with the scope of a swimming pool and spa code that adequately protects public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

Adoption

The International Swimming Pool and Spa Code is available for adoption and use by jurisdictions internationally. Its use within a governmental jurisdiction is intended to be accomplished through adoption by reference in accordance with proceedings established in the jurisdiction's laws. At the time of adoption, jurisdictions should insert the appropriate information in provisions requiring specific local information, such as the name of the adopting jurisdiction. These locations are shown in bracketed words in small capital letters in the code and in the sample legislation. The sample adoption ordinance on page ix addresses several key elements of a code adoption ordinance, including the information required for insertion into the code text.

Maintenance

The *International Swimming Pool and Spa Code* will be kept up to date through the review of proposed changes submitted by code officials, pool and industry representatives, design professionals and other interested parties. Proposed changes are carefully considered through an open code development process in which all interested and affected parties may participate.

The contents of this work are subject to change both through the Code Development Cycles and the governmental body that enacts the code into law. For more information regarding the code development process, contact the Codes and Standards Development Department of the International Code Council.

While the development procedure of the *International Swimming Pool and Spa Code* assures the highest degree of care, ICC and APSP, their memberships and those participating in the development of this code do not accept any liability resulting from compliance or noncompliance with the provisions because ICC and APSP do not have the power or authority to police or enforce compliance with the contents of this code. Only the governmental body that enacts the code into law has such authority.

Note that, for the development of the 2015 edition of the I-Codes, there will be two groups of code development committees and they will meet in separate years. The groupings are as follows::

| Group A Codes (Heard in 2012, Code Change Proposals Deadline: January 3, 2012) | Group B Codes (Heard in 2013, Code Change Proposals Deadline: January 3, 2013) | |
|--|---|--|
| International Building Code | Administrative Provisions (Chapter 1 all codes except IRC and ICC PC, administrative updates to currently referenced standards, and designated definitions) | |
| International Fuel Gas Code | International Energy Conservation Code | |
| International Mechanical Code | national Mechanical Code International Existing Building Code | |
| International Plumbing Code | International Fire Code | |
| International Private Sewage Disposal Code | International Green Construction Code | |
| | ICC Performance Code | |
| | International Property Maintenance Code | |
| | International Residential Code | |
| | International Swimming Pool and Spa Code | |
| | International Wildland-Urban Interface Code | |
| | International Zoning Code | |

Italicized Terms

Selected terms set forth in Chapter 2, Definitions, are italicized where they appear in code text. Such terms are not italicized where the definition set forth in Chapter 2 does not impart the intended meaning in the use of the term. The terms selected have definitions which the user should read carefully to facilitate better understanding of the code.

EFFECTIVE USE OF THE INTERNATIONAL SWIMMING POOL AND SPA CODE

The International Swimming Pool and Spa Code (ISPSC) is a model code that regulates the minimum requirements for the design, construction, alteration, repair and maintenance of swimming pools, spas, hot tubes and aquatic facilities. This includes public swimming pools, public spas, public exercise spas, aquatic recreation facilities, onground storable residential pools, permanent inground residential pools, permanent residential spas, permanent residential exercise spas, portable residential spas and portable residential exercise spas. In this code, these applications fall under the defined term "aquatic vessels" in Chapter 2.

In many jurisdictions, in addition to code officials having the responsibility for reviewing plans and inspecting the construction of aquatic vessels, environmental health officials also have a responsibility for oversight of the operation of aquatic vessels. In order to prevent disease and prevent injuries, environmental health officials conduct operational evaluations (inspections). This may include water chemistry, credentials and training of pool operators and lifeguards, proper water circulation, facility staff's preparedness to respond to injuries and accidents, and proper sanitation and safety of the facility.

Code officials and environmental health officials commonly work closely in the plan review and inspection of aquatic vessels. This collaboration between departments to jointly review plans and inspect aquatic vessels is critical in order to achieve a safe and healthy environment for all that utilize these facilities.

The Association of Pool & Spa Professionals (APSP), a cooperating sponsor with ICC in the development and update of the ISPSC, further notes: "While it is recognized that proper construction and installation are essential, safe use of pools and spas requires common sense, including constant adult supervision of children, and proper maintenance. It is assumed and intended that pool users will exercise appropriate personal judgment and responsibility (including constant adult supervision of children) and that operators will create and enforce rules and warning appropriate for their pool/spa."

Arrangement and Format of the 2012 ISPSC

The format of the ISPSC allows each chapter to be devoted to a particular subject with the exception of Chapter 3 which contains general compliance subject matter that is coordinated with the provisions for each type of aquatic vessel regulated in Chapters 4 - 10. The ISPSC is divided into eleven different parts:

| Chapters | Subjects |
|----------|--|
| 1 | Scope and Administration |
| 2 | Definitions |
| 3 | General Compliance |
| 4 | Public Swimming Pools |
| 5 | Public Spas and Public Exercise Spas |
| 6 | Aquatic Recreation Facilities |
| 7 | Onground Storable Residential Swimming Pools |
| 8 | Permanent Inground Residential Swimming Pools |
| 9 | Permanent Residential Spas and Permanent Residential Exercise Spas |
| 10 | Portable Residential Spas and Portable Residential Exercise Spas |
| 11 | Referenced Standards |

The following is a chapter-by-chapter synopsis of the scope and intent of the provisions of the *International Swimming Pool and Spa Code*:

Chapter 1 Scope and Administration. This chapter contains provisions for the application, enforcement and administration of subsequent requirements of the code. The scope is noted as applying to "aquatic vessels," a term which is defined in Chapter 2. In addition to establishing the scope of the code, Chapter 1 identifies which swimming pools and spas come under its purview. Chapter 1 is largely concerned with maintaining "due process of law" in enforcing the design and construction criteria contained in the body of the code. Only through careful observation of the administrative provisions can the code official reasonably expect to demonstrate that "equal protection under the law" has been provided.

Chapter 2 Definitions. All terms that are defined in the code are listed alphabetically in Chapter 2. While a defined term may be used in one chapter or another, the meaning provided in Chapter 2 is applicable throughout the code. Of specific importance is the definition of "aquatic vessels" which addresses the types of vessels regulated by the code and specific water depth considerations which dictate the application of the code.

Where understanding of a term's definition is especially key to or necessary for understanding of a particular code provision, the term is shown in italics wherever it appears in the code. This is true only for those terms that have a meaning that is unique to the code. In other words, the generally understood meaning of a term or phrase might not be sufficient or consistent with the meaning prescribed by the code; therefore, it is essential that the code-defined meaning be known.

Guidance regarding tense, gender and plurality of defined terms as well as guidance regarding terms not defined in this code is provided.

Chapter 3 General Compliance. Chapter 3, "General Compliance," is broad in scope. It includes a variety of requirements for pools and spas. This chapter provides requirements that are intended to maintain a minimum level of safety and sanitation for both the general public and the users of pools or spas. Chapter 3 provides specific criteria for electrical, plumbing, mechanical and fuel gas requirements; energy savings requirements; construction in flood hazard areas; barrier requirements; decks around pools and spas; general design; dimensional design; equipment; suction entrapment avoidance; circulation systems; filters; pumps and motors; return and suction fittings; skimmers; heaters; air blowers and air induction systems; water supply; sanitizing equipment; waste water disposal; lighting; ladders and recessed treads; and safety. It is important to note that Chapter 3 is intended to provide general requirements not found in Chapters 4 – 10. Chapters 4 – 10 specifically reference Chapter 3 in order to coordinate the general provisions with the specific provisions based on the type of vessel.

Chapter 4 Public Swimming Pools. The purpose of Chapter 4 is to set forth specific requirements in the code for public swimming pools with regard to diving equipment, bather load limitations, rest ledges, wading pools, decks, deck equipment, filters, dressing and sanitary facilities, special features and signage. The term "public swimming pool" is defined in Chapter 2 and includes the different classes of pools (Class A – Class E).

Chapter 5 Public Spas and Public Exercise Spas. Chapter 5 establishes the specific criteria for public spas and public exercise spas with regard to materials, structure and design, pumps and motors, return and suction fittings, heater and temperature requirements, water supply, sanitation, oxidation equipment and chemical feeders, and safety features. The term "spa" is defined in Chapter 2.

Chapter 6 Aquatic Recreation Facilities. The purpose of Chapter 6 is to establish specific requirements for aquatic recreation facilities with regard to floors, markings and indications, circulation systems, handholds and ropes, depths, barriers, number of occupants, toilet rooms and bathrooms, special features and signage. The term "aquatic recreation facilities" is defined in Chapter 2 and includes wave pools, leisure rivers, inner tube rides and body slides, to name a few.

Chapter 7 Onground Storable Residential Swimming Pools. The purpose of Chapter 7 is to establish specific requirements for onground storable residential swimming pools with regard to ladders and stairs, decks and circulation systems. The term "onground storable pool" is defined in Chapter 2. This chapter applies to what has been commonly referred to in past standards and codes as onground or above-ground pools. The application of the provisions for onground residential pools is limited to pools associated with detached one- and two-family dwellings and townhouses not more than three stories high in accordance with the definition of the term "residential" in Chapter 2.

Chapter 8 Permanent Inground Residential Swimming Pools. The purpose of Chapter 8 is to establish specific requirements for permanent inground residential swimming pools with regard to design, construction tolerances, diving water envelopes, walls, offset ledges, pool floors, diving equipment, special features, circulation systems and safety features. The application of the provisions for inground residential pools is limited to pools associated with detached one- and two-family dwellings and townhouses not more than three stories high in accordance with the definition of the term "residential" in Chapter 2.

Chapter 9 Permanent Residential Spas and Permanent Residential Exercise Spas. The purpose of Chapter 9 is to establish specific requirements for permanent residential spas and permanent residential exercise spas with regard to safety features. The application of the provisions for residential spas ("spa" is defined in Chapter 2) is limited to spas associated with detached one- and two-family dwellings and townhouses not more than three stories high in accordance with the definition of the term "residential" in Chapter 2.

Chapter 10 Portable Residential Spas and Portable Residential Exercise Spas. The purpose of Chapter 10 is to establish specific requirements for portable residential spas and portable residential exercise spas with regard to standards that the equipment must meet. The application of the provisions for residential spas ("spa" is defined in Chapter 2) is limited to spas associated with detached one- and two-family dwellings and townhouses not more than three stories high in accordance with the definition of the term "residential" in Chapter 2.

Chapter 11 Referenced Standards. The code contains numerous references to standards that are used to regulate materials and methods of construction. Chapter 11 contains a comprehensive list of all standards that are referenced in the code. The standards are part of the code to the extent of the reference to the standard. Compliance with the referenced standard is necessary for compliance with this code. By providing specifically adopted standards, the construction and installation requirements necessary for compliance with the code can be readily determined. The basis for code compliance is, therefore, established and available on an equal basis to the code official, contractor, designer and owner.

Chapter 11 is organized in a manner that makes it easy to locate specific standards. It lists all of the referenced standards, alphabetically, by acronym of the promulgating agency of the standard. Each agency's standards are then listed in either alphabetical or numeric order based upon the standard identification. The list also contains the title of the standard; the edition (date) of the standard referenced; any addenda included as part of the ICC adoption; and the section or sections of this code that reference the standard.

LEGISLATION

The *International Codes* are designed and promulgated to be adopted by reference by legislative action. Jurisdictions wishing to adopt the 2012 *International Swimming Pool and Spa Code* as an enforceable regulation governing swimming pools, spas, hot tubs, aquatic facilities and related equipment should ensure that certain factual information is included in the adopting legislation at the time adoption is being considered by the appropriate governmental body. The following sample adoption legislation addresses several key elements, including the information required for insertion into the code text.

SAMPLE LEGISLATION FOR ADOPTION OF THE INTERNATIONAL SWIMMING POOL AND SPA CODE ORDINANCE NO.

A[N] [ORDINANCE/STATUTE/REGULATION] of the [JURISDICTION] adopting the 2012 edition of the International Swimming Pool and Spa Code, regulating and governing the design, construction, alteration, movement, renovation, replacement, repair and maintenance of swimming pools, spas, hot tubs, aquatic facilities and related equipment in the [JURISDICTION]; providing for the issuance of permits and collection of fees therefore; repealing [ORDINANCE/STATUTE/REGULATION] No. ______ of the [JURISDICTION] and all other ordinances or parts of laws in conflict therewith.

The [GOVERNING BODY] of the [JURISDICTION] does ordain as follows:

Section 1. That a certain document, three (3) copies of which are on file in the office of the [TITLE OF JURISDICTION'S KEEPER OF RECORDS] of [NAME OF JURISDICTION], being marked and designated as the *International Swimming Pool and Spa Code*, 2012 edition, as published by the International Code Council, be and is hereby adopted as the Pool and Spa Code of the [JURISDICTION], in the State of [STATE NAME] regulating and governing the design, construction, alteration, movement, renovation, replacement, repair and maintenance of swimming pools, spas, hot tubs, aquatic facilities and related equipment as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Pool and Spa Code on file in the office of the [JURISDICTION] are hereby referred to, adopted, and made a part hereof, as if fully set out in this legislation, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

Section 2. The following sections are hereby revised:

Section 101.1. Insert: [NAME OF JURISDICTION]
Section 105.6.2. Insert: [APPROPRIATE SCHEDULE]
Section 105.6.3: [PERCENTAGE IN TWO LOCATIONS]

Section 107.4. Insert: [OFFENSE]

Section 107.4. Insert: [DOLLAR AMOUNT] Section 107.4. Insert: [NUMBER OF DAYS]

Section 107.5. Insert: [DOLLAR AMOUNT IN TWO LOCATIONS]

Section 3. That [ORDINANCE/STATUTE/REGULATION] No. _____ of [JURISDICTION] entitled [FILL IN HERE THE COMPLETE TITLE OF THE LEGISLATION OR LAWS IN EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY DEFINITE MENTION] and all other ordinances or parts of laws in conflict herewith are hereby repealed.

Section 4. That if any section, subsection, sentence, clause or phrase of this legislation is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The **[GOVERNING BODY]** hereby declares that it would have passed this law, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

Section 5. That nothing in this legislation or in the Pool and Spa Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 3 of this law; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation.

Section 6. That the **[JURISDICTION'S KEEPER OF RECORDS]** is hereby ordered and directed to cause this legislation to be published. (An additional provision may be required to direct the number of times the legislation is to be published and to specify that it is to be in a newspaper in general circulation. Posting may also be required.)

| Continue 7. The takin languagi the males are what are annotating a manifestation and an extension of this had and adopted bound | |
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| Section 7. That this law and the rules, regulations, provisions, requirements, orders and matters established and adopted hereball take effect and be in full force and effect [TIME PERIOD] from and after the date of its final passage and adoption. | y |
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