ISPSC

SWIMMING POOL AND SPA



# Reasons to Adopt the 2021 International Swimming Pool and Spa Code® in California

There are many additional safety code requirements in the International Swimming Pool and Spa Code (ISPSC) that are not part of the 2019 California Residential Code (CRC). To adopt the ISPSC is to expand the safety protection of residential pool and spa users. Here is what's missing in the 2019 CRC and included in the 2021 ISPSC:

### **Additional Safety Protection:**

- ISPSC Chapter 2 includes 90+ <u>definitions</u> related to new and existing swimming pools and spas not covered by CRC Appendix V.
- <u>ISPSC Chapter 7</u> regulates <u>onground storable residential</u> <u>pools</u>. Its purpose is to regulate the unique features of onground pools including but not limited to, safety, floor slopes, ladders, stairs, decks, circulation systems and signs.
- ISPSC Chapter 8 regulates the design and construction of permanent inground residential pools. Features such as steps, diving water envelopes, diving equipment, slides, floor slopes, underwater benches and circulation systems are addressed with detailed requirements and restrictions.
- <u>ISPSC Chapter 9</u> regulates the design and construction of permanently installed residential spas to provide for a safe spa experience for the user.
- <u>ISPSC Chapter 10</u> regulates <u>portable residential spas and exercise spas (factory built portable hot tubs)</u> requiring them to be listed and labeled to standards applicable to those products.
- <u>ISPSC Chapter 11</u> lists <u>referenced standards.</u> The ISPSC includes numerous references to documents that are used to regulate materials and methods of construction.

#### FEMA:

 According to the FEMA 2022 Building Code Adoption Tracking for Region 9, California lost points during the BCEGS, for not adopting the provisions in the ISPSC with the adoption of the IRC.

Note that the California Residential Code does not adopt Section R326.1 which requires, via application of the International Swimming Pool and Spa Code, swimming pools in coastal high-hazard areas to conform to ASCE 24.





# In addition, Appendix V of the California Residential Code does not address the following Safety Requirements:

- 1. Piping, fittings and components (ISPSC Section 302.3). Piping and fitting requirements NSF 14 provides for a certain level of quality for those items so that they will not structurally fail under the intended service conditions, not impart harmful chemicals to the water in the pool or spa and will properly fit with other listed and labeled components. Where pipe, fittings, components, plastic jets and outlets are part of portable residential spas and portable residential exercise spas listed and labeled to UL 1563 or CSA C22.2 No. 218.1, the quality of the items are controlled, as necessary, by those standards.
- 2. Decks (ISPSC Section 306). The provisions of this section are to prevent slip, trip and fall accidents. Decks around residential pools and spas must be sloped to drain excess water. Puddles of water deeper than ½ inch (3.2 mm) are a slip hazard. The maximum slope of a deck other than a wood deck cannot be more than ½ inch per foot (1 mm per 24 mm) because an excessively sloped wet surface is also a slip hazard. The slope of wood and wood/plastic decks must be held to not greater than ¼ inch per foot (1 mm per 48 mm), as these surfaces are considerably "slicker" than decks of other material.
- 3. Waterline (ISPSC Section 308.4). The design waterline (defined in ISPSC Chapter 2) must be held to close tolerances so that skimmers and gutters function as designed and water depths around the perimeter are consistent.
- **4.** Treatment and circulation system equipment (ISPSC Section 309.2). The requirement for treatment and circulation equipment to be listed and labeled to NSF 50 provides for a level of quality suitable for the intended use.
- 5. General and Structural Design (ISPSC Section 307 & 802). These sections reference safety requirements for Munsell color values and the International Residential Code (IRC) for glazing in hazardous locations and for roofs and canopies over pools and spas.
- 6. Diving Board and Diving Water Envelopes (ISPSC Section 804). To avoid a traumatic diving injury from a designated diving board location, a minimum diving water envelope is required in accordance with ISPSC Table 804.1. Requirements for manufactured and fabricated diving equipment and its placement for residential pools are found in ISPSC Section 808.
- 7. Offset Safety Ledge (ISPSC Section 806). When offset ledges are provided in a pool for standing or walking along the walls of a pool, especially in the deep end for tiring swimmers, maximum widths are prescribed in ISPSC Section 806.
- **8.** Pool Floors and Slopes (ISPSC Section 807). Shallow end entry towards the deep end is required to be transitioned with a gradual slope to alert swimmers of entering deeper water.
- 9. Special Features (ISPSC Section 809). ISPSC Section 809 covers safe installation of pool slides, a means of exit from the deep end of a pool when the deep area of the pool exceeds 5 feet, and pool stair tread and riser dimensions.
- 10. Turnover Rate (ISPSC Section 810). The circulation system equipment is required to be sized to provide a turnover of the pool water not less than once every 12 hours plus the system needs to be designed to provide the required turnover rate based on the manufacturer's flow rate of the filter, with a clean media condition of the filter. Turnover at least once every 12 hours is essential to maintaining water clarity and healthy water.
- **11. Safety Features** (ISPSC Section 811). A rope and float assembly are required on the shallow side slope of a slope break to indicate approaching a significant change in slope which might create a slip hazard into deeper water.

## For more information please contact:



and Swimming Pool & Spa