



# *Swimming Pool, Spas and Hot Tub Barrier and Alarm requirements per the 2018 International Swimming Pool and Spa Code (ISPSC)*

## **General Barrier Requirements (Section 305):**

- Required around all residential swimming pools/spas/hot tubs that contain more than 24-inches of water (R108.2 #8 VRC)
- May be a fence, a wall, a building wall, part of the pool structure or a combination of these
- Must completely surround and obstruct access to the pool
- New or existing barrier locations must be indicated on the plot plan
- *A separate building permit is required for the barrier before issuance of a pool permit if the barrier is not included as part of the pool permit*
- *If an existing barrier is proposed to be used, then a barrier inspection is required prior to issuance of a barrier/pool permit.* Not all existing barriers will meet the requirements of the code and alterations may be required to bring them into compliance
- Barriers are not required for swimming pools equipped with a powered safety cover, or spas and hot tubs equipped with a lockable safety cover complying with ASTM F1346. Manufacturer's specifications for safety cover's to be submitted for review.
- Equipment, including pool equipment such as pumps, filters and heaters shall not be installed within 36-inches of the exterior of the barrier when located on the same property (R326.1.1 VRC/ISPSC 305.2.9)
- Openings in the barrier shall not allow passage of a 4-inch diameter sphere (ISPSC 305.2.2)
- An electrical permit and inspection is also required

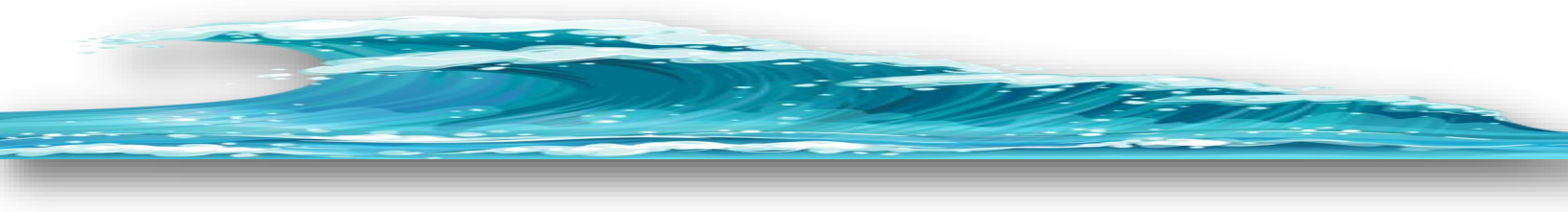
## **Above-Ground Pool & Spa Barrier height and clearances (ISPSC 305.5):**

The wall structure of an above-ground pool may be used as a barrier, if allowed by the pool manufacturer, as follows:

- The top of the pool wall is 48-inches (min.) above grade for the entire perimeter of the pool measured on the side of the barrier facing away from the pool for a distance of 3-feet measured horizontally from the outside of the barrier.
- The top of the barrier is 48-inches (min.) above grade for the entire perimeter of the pool for barriers *mounted on top* of the pool wall and the vertical clearance between the top of the pool/spa and bottom of the barrier shall not exceed 4-inches
- If means of access to the pool is via a ladder or steps, then these have to be capable of being secured, locked or removed or must be surrounded by a barrier. Openings created when securing, locking or removing ladders/steps shall not allow the passage of a 4-inch sphere

## **In-Ground Pool & Spa Barrier height and clearances (ISPSC 305.2):**

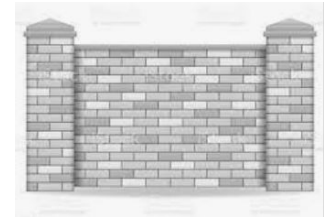
- The top of the barrier is 48-inches (min.) above grade for the entire perimeter of the pool measured on the side of the barrier facing away from the pool for a distance of 3-feet measured horizontally from the outside of the barrier
- Vertical clearance between grade surfaces that are not solid (grass or gravel) and the bottom of the barrier shall not exceed 2-inches, measured on the side of the barrier that faces away from the pool/spa; between a solid surface (concrete) and the bottom of the barrier shall not exceed 4-inches, measured on the side of the barrier that faces away from the pool/spa



# **Barrier Types and Requirements**

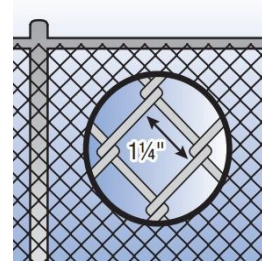
## **Solid Barrier (ISPSC 305.2.3):**

- Solid barriers without openings shall not have indentations or protrusions forming handholds/footholds except for normal construction tolerances and tooled masonry joints

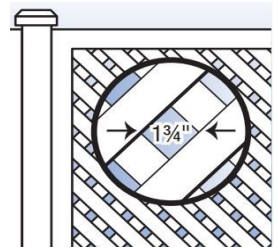


## **Chain-link, Mesh or Diagonal Member (Lattice) Fence Barrier (ISPSC 305.2.4 & 305.2.7):**

- Maximum openings formed by chain links or diagonal members shall not be more than 1 3/4-inches
- Where the fence is provided with slats fastened at the top and bottom that reduce the openings, such openings shall not be greater than 1 3/4-inches
- Vertical clearance from the bottom of the *mesh fence* to the deck or installed surface or grade to be 1-inch (max.)
- 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 from grade or decking
- The fence shall be designed and constructed to prevent passage of a 4-inch sphere



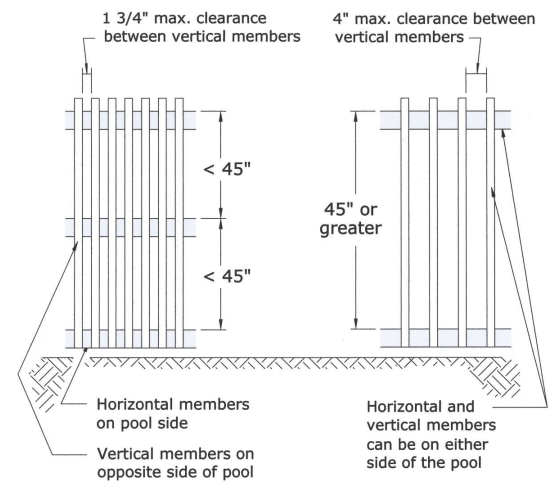
**Chain Link**



**Lattice**

## **Barriers composed of horizontal and vertical members (ISPSC 305.2.5 & 305.2.6):**

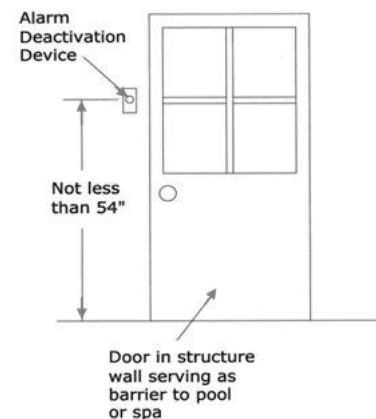
- Where the distance between the tops of horizontal members is *less than 45-inches*, the horizontal members shall be located on the pool side of the fence. Vertical member spacing shall not exceed 1 3/4-inches in width
- Where the distance between the tops of horizontal members is 45-inches or more, the horizontal members can be located on either side of the pool. Vertical member spacing shall not exceed 4-inches in width
- Decorative cutouts within vertical members shall not exceed 1 3/4-inches in interior width of the cutout



## **Structure wall used as a barrier (ISPSC 305.4):**

Where a wall of a dwelling or structure serves as part of the barrier and where doors or windows provide direct access to the pool through that wall, **one** of the following shall be required:

1. Operable windows with a sill height less than 48-inches above the indoor finished floor and doors shall have an alarm that produces an audible warning when the window, door or their screens are opened. **The alarm shall be listed and labeled as a water hazard entrance alarm in accordance with UL2017.** Deactivation switches shall be located 54-inches (min.) above the finished floor. Whole house alarm systems are not designed or intended to meet the code requirements for audible warning.
2. A power safety cover that is listed and labeled in accordance with ASTM F1346 is installed for the pool
3. An approved means of protection, such as self-closing doors with self-latching devices, is provided.



## **Access Gates (ISPSC 305.3.3):**

- Pedestrian access gates shall open outward away from the pool, be self-closing and have a self-latching device
- Where the release mechanism of the self-latching device is located less than 54-inches from grade, the release mechanism shall be located on the pool side of the gate not less than 3-inches below the top of the gate, and the gate and barrier shall not have openings greater than 1/2-inch within 18-inches of the release mechanism

