

Appendix G (IRC) and Section 3109 (IBC)

Applicability

The standards below apply to residential swimming pools, spas, and hot tubs.

Barrier Specifications

Outdoor swimming pools (including in-ground, above-ground or on-ground pools, and hot tubs/spas) must be completely surrounded by a barrier or fence that meets the following standards:

- The barrier must be at least 4 feet high (measured on the exterior side), with the bottom of the fence no more than 2 inches above the ground as measured from the outside. (If an above-ground pool has a barrier placed on top of the pool structure, the maximum space between the top of the pool and the bottom of the fence is 4 inches.)
- The barrier should not have any openings that allow the passage of a 4-inch-diameter sphere.
- Solid barriers without openings (i.e. masonry or stone walls) must not have any indentations or protrusions (except normal construction tolerances and tooled masonry joints).
- If the fence is made of horizontal and vertical members, the following apply:
 - If the tops of horizontal members are **less than 45 inches** apart:
 - Horizontal members must be located on the pool side of the fence.
 - Spacing between vertical members or within decorative cutouts must be 1.75 inches or less (in width).
 - If the tops of horizontal members are **more than 45 inches** apart:
 - Spacing between vertical members must be 4 inches or less.
 - Spacing within decorative cutouts must be 1.75 inches or less.
- Chain link mesh (if used) must be a 2.25 inch square (unless slats fastened at the top or the bottom of the fence reduce the openings to 1.75 inches or less).
- Any diagonal members (such as lattice fence) may not form openings greater than 1.75 inches.

Gate Requirements

- Any gates or doors must have a lock and comply with the general barrier requirements above.
- Gates used to access the pool must open outward (away from the pool) and be self-closing and self-latching. Other gates (such as service entrances) should be self-latching.
- If the latch release is less than 4.5 feet above the bottom of the gate, it must be located at least 3 inches below the top of the gate on the pool side, while the gate and barrier within 18 inches of the latch release should not have any openings larger than ½ inch.

Dwelling Walls

If a **dwelling wall serves as part of the pool barrier**, **one** of the following safety measures must be taken:

- The pool must be covered by a powered safety cover that complies to ASTM F 1346
- Doors that provide direct access to the pool must have an alarm (listed and labeled according to UL 2017 standards) that produces an audible warning when the door or its screen are opened. The alarm deactivation switch must be at least 4.5 feet above the door threshold.
- Other protections that are approved by the local governing body (self-closing and self-latching doors, for example) must provide protection equal to an alarm or power pool cover.

Above-Ground Pools

When a barrier mounted on top of an above-ground pool or the pool itself are used as barriers, the ladder or steps used to access the pool must be secured, locked, or removed to prevent access when the pool is not in use; the removal of the ladder/steps should not create any opening that would allow the passage of a sphere 4 inches in diameter. Alternatively, the ladder/steps must be surrounded by a barrier that meets the requirements outlined above.

Indoor Pools

Walls that surround indoor pools should comply with the standards for pool enclosures that incorporate a dwelling wall as part of the barrier.

Barrier Locations

Pool barriers should be located so that permanent structures, equipment, or similar objects cannot be used to climb the fence.

Exceptions

Spas or hot tubs with a safety cover that complies with ASTM F1346 are exempt from the barrier requirements described above.