

Residential Swimming Pool, Spa, and Hot Tub Barrier Requirements

An outdoor swimming pool, including an in-ground, above ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the 2006 IRC, Appendix G, Section AG 105. It is intended to provide protection against potential and near drowning by restricting access to the swimming pool, spas and hot tubs.

Barriers shall comply with the following:

- The top of the barrier must be at least 48 inches above grade measured on the exterior side of the fence opposite the pool.
- The maximum allowable vertical clearance between grade and the bottom of the barrier shall be 2 inches measured on the exterior side of the fence opposite the pool.
- Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches.
- The barrier shall be constructed so that a 4 inch sphere cannot pass through at any point.
- Solid barriers such as masonry or stone walls shall not contain indentations or protrusions beyond tooled joints.
- Where the barrier is composed of horizontal (top, middle and bottom rails) and vertical members (posts and pickets) and the distance between the tops of the horizontal members is at less than 45 inches, the horizontal members shall be located on the pool side of the barrier. Spacing between vertical members shall not exceed 1¾ inches in width. Where there are decorative cutouts with in vertical members, spacing within the cutouts shall not exceed 1 ¾ inches.
- Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches or more, spacing between vertical members shall not exceed 4 inches. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1¾ inches in width.
- Maximum mesh size for chain link fences shall be 2¼ inch square. Larger mesh size may be used as long as slats are fastened at the top or bottom and reduce the opening to not more than 1¾ inches. Unclimbable field fencing is allowed as long as it meets these requirements.
- Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1¾ inches.

Gates shall comply with the following:

- All access gates are part of the barrier and shall comply with all the barrier requirements.

- Pedestrian access gates shall open outward away from the pool.
- Where the self-latching release mechanism is less than 54 inches from the bottom of the gate the following shall apply:
 - The release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate.
 - The gate and barrier shall have no opening larger than ½ inch within 18 inches of the release mechanism.

Dwelling walls used as a barrier:

When dwelling wall(s) serve as part of the barrier, one of the following conditions shall be met:

- The pool is equipped with a powered safety cover in compliance with ASTM F 1346.
- Doors with direct access to the pool from the dwelling are equipped with an alarm which produces an audible warning when the door and/or its screen, if present are opened. The alarm shall be:
 - Listed in accordance with UL 2017
 - The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the door and/or screen are opened.
 - The audible alarm is capable of being heard throughout the house during normal household activities.
 - The alarm shall automatically reset under all conditions.
 - The alarm shall be equipped with a manual means, such as a touch pad or switch, to temporarily deactivate the alarm for a single opening. The deactivation shall last for not more than 15 seconds and the deactivation switch(es) shall be located at least 54 inches above the door threshold.
- Other means of protection such as self-closing doors with self-latching devices that afford the same protection as the alarm or cover may be accepted upon the Building Officials approval.

When an above ground pool is used as a barrier it shall comply with the following:

- Pool walls shall be a minimum of 48 inches or have a barrier mounted on top of the pool structure.
- Access ladder or steps shall:
 - Be capable of being secured, locked or removed to prevent access.
 - Be surrounded by a barrier meeting the barrier requirements listed above.

Barrier exceptions:

- Spas or hot tubs with a safety cover complying with ASTM F 1346 shall be exempt from the barrier requirements listed above.