International Swimming Pool and Spa Code







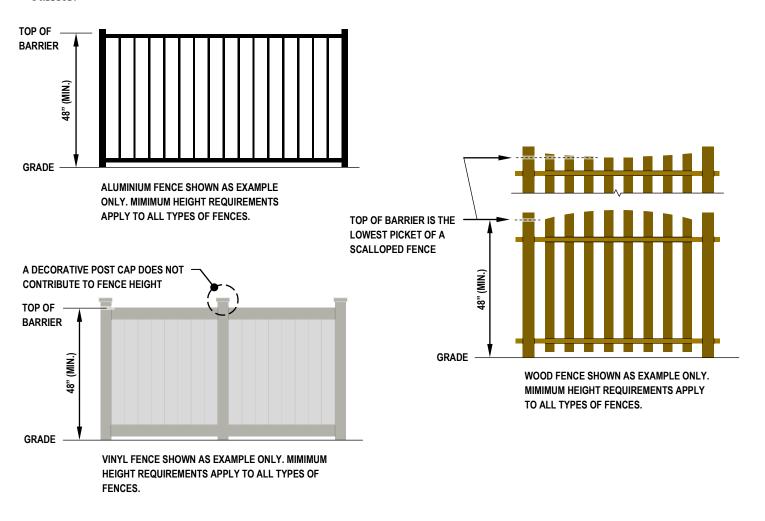


BARRIER REQUIREMENTS FOR SWIMMING POOLS, SPAS, AND HOT TUBS

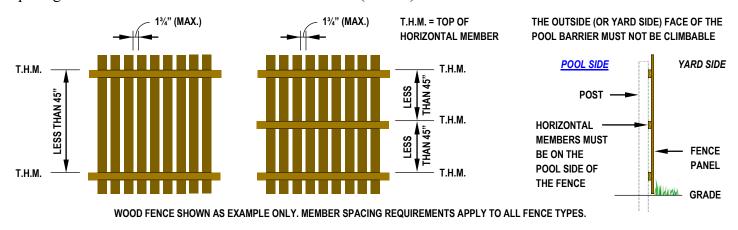
SECTION 305

BARRIER REQUIREMENTS

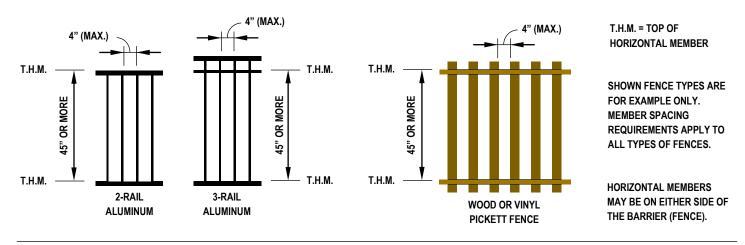
- **305.1 General.** The provisions of this section shall apply to the design of barriers for restricting entry into areas having pools and spas. Where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346 and swimming pools are equipped with a powered safety cover that complies with ASTM F1346, the areas where those spas, hot tubs or pools are located shall not be required to comply with Sections 305.2 through 305.7.
- **305.2 Outdoor swimming pools and spas.** Outdoor pools and spas and indoor swimming pools shall be surrounded by a barrier that complies with Sections 305.2.1 through 305.7.
- **305.2.1 Barrier height and clearances.** Barrier heights and clearances shall be in accordance with all of the following:
 - 1. The top of the barrier shall be not less than 48 inches (1219 mm) above grade where measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier.



305.2.5 Closely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the pool or spa side of the fence. Spacing between vertical members shall not exceed 1¾ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1¾ inches (44 mm) in width.



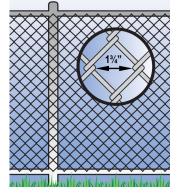
305.2.6 Widely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, the interior width of the cutouts shall not exceed 13/4 inches (44 mm).

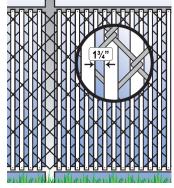


305.2.7 Chain link dimensions. The maximum opening formed by a chain link fence shall be not more than 1³/₄ inches (44 mm). Where the fence is provided with slats fastened at the top and bottom which

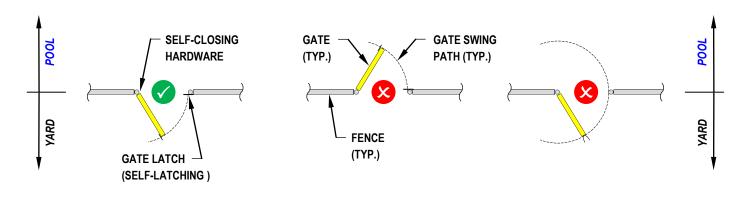
reduce the openings, such openings shall be not more than $1\frac{3}{4}$ inches (44 mm).

To modify an existing chain link fence which features the standard 2½ inches mesh, you can install vertical slats to reduce the gap within the links to 1½ inches (maximum).



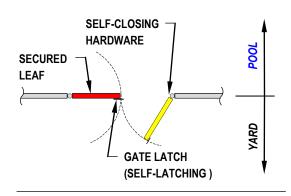


305.3 Gates. Access gates shall comply with the requirements of Sections 305.3.1 through 305.3.3 and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool or spa, shall be self-closing and shall have a self-latching device.

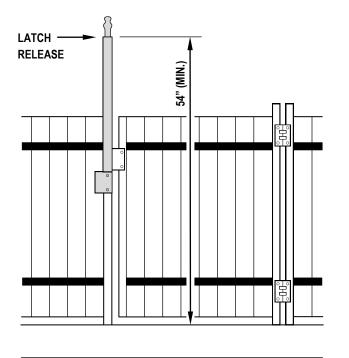


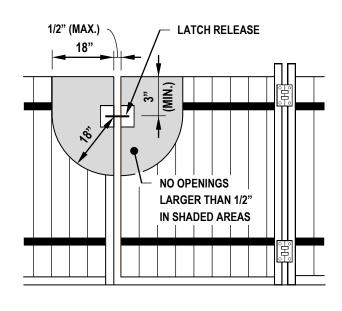
305.3.1 Utility or service gates. Gates not intended for pedestrian use, such as utility or service gates, shall remain locked when not in use.

305.3.2 Double or multiple gates. Double gates or multiple gates shall have at least one leaf secured in place and the adjacent leaf shall be secured with a self-latching device. The gate and barrier shall not have openings larger than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the latch release mechanism. The self-latching device shall comply with the requirements of Section 305.3.3. (Figure 305.3.2)

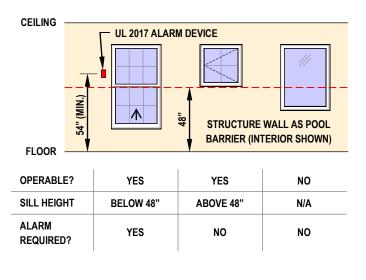


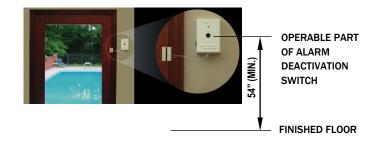
305.3.3 Latches. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from grade, the release mechanism shall be located on the pool or spa side of the gate not less than 3 inches (76 mm) below the top of the gate, and the gate and barrier shall not have openings greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.





- **305.4 Structure wall as a barrier.** 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 or spa through that wall, one of the following shall be required:
 - 1. Operable windows having a sill height of less than 48 inches (1219 mm) 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 UL 2017. The operable parts of the alarm deactivation switches shall be located 54 inches (1372 mm) or more above the finished floor.
 - 2. A safety cover that is listed and labeled in accordance with ASTM F1346 is installed for the pools and spas.
 - 3. An approved means of protection, such as self-closing doors with self-latching devices, is provided. Such means of protection shall provide a degree of protection that is not less than the protection afforded by Item 1 or 2.



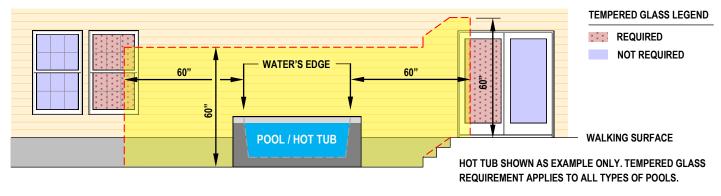


WINDOWS ON A POOL BARRIER WALL MUST BE ALARMED UNLESS AT LEAST ONE OF THE FOLLOWING CONDITIONS IS MET:

- 1.) THE WINDOW'S SILL HEIGHT IS MORE THAN 48 INCHES ABOVE THE FINISHED FLOOR
- 2.) THE WINDOW IS FIXED (NOT OPERABLE)

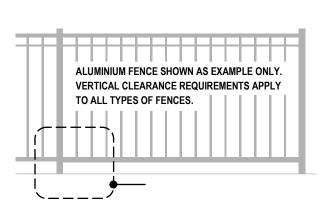
IRC R308.4.5 Glazing and wet surfaces. Glazing (glass) in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, . . . and indoor or outdoor swimming pools where the bottom exposed edge is less than 60 inches (1524 mm) measured vertically above any standing or walking surface shall be considered to be a hazardous location. This shall apply to single glazing and each pane in multiple glazing.

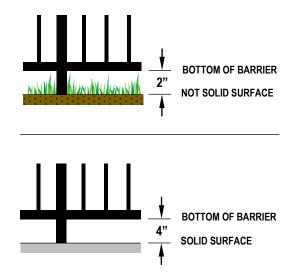
Exception: Glazing that is more than 60 inches (1524 mm), measured horizontally and in a straight line, from the water's edge of a . . . hot tub, spa, whirlpool or swimming pool.



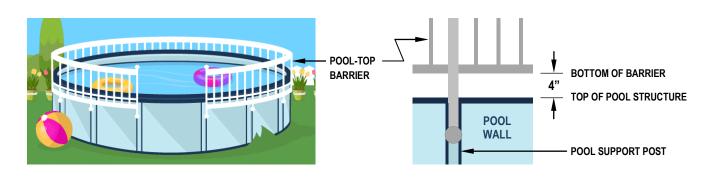
305.2.1 Barrier height and clearances. (continued)

- 2. The vertical clearance between grade and the bottom of the barrier shall not exceed 2 inches (51 mm) for grade surfaces that are not solid, such as grass or gravel, where measured on the side of the barrier that faces away from the pool or spa.
- 3. The vertical clearance between a surface below the barrier to a solid surface, such as concrete, and the bottom of the required barrier shall not exceed 4 inches (102 mm) where measured on the side of the required barrier that faces away from the pool or spa.



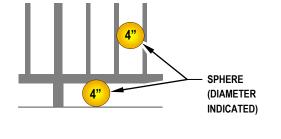


4. Where the top of the pool or spa structure is above grade, the barrier shall be installed on grade or shall be mounted on top of the pool or spa structure. Where the barrier is mounted on the top of the pool or spa, the vertical clearance between the top of the pool or spa and the bottom of the barrier shall not exceed 4 inches (102 mm).



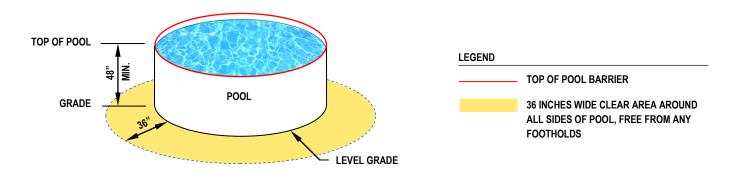
305.2.2 Openings. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere. (Figure 305.2.2)

305.2.3 Solid barrier surfaces. Solid barriers that do not have openings shall not contain indentations or protrusions that form handholds and footholds, except for normal construction tolerances and tooled masonry joints.

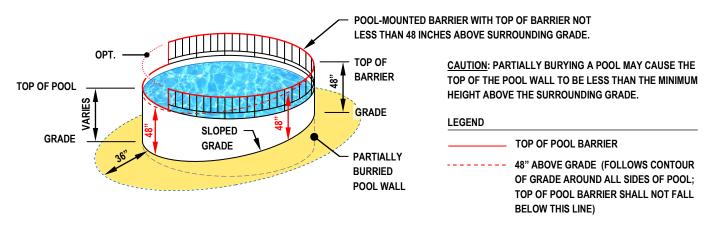


305.5 Onground residential pool structure as a barrier. An onground (afterward referred to herein to as above ground) residential pool wall structure or a barrier mounted on top of an above ground residential pool wall structure shall serve as a barrier where all of the following conditions are present:

1. Where only the pool wall serves as the barrier, the bottom of the wall is on grade, the top of the wall is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, the wall complies with the requirements of Section 305.2 and the pool manufacturer allows the wall to serve as a barrier. (Figure 305.5.1)

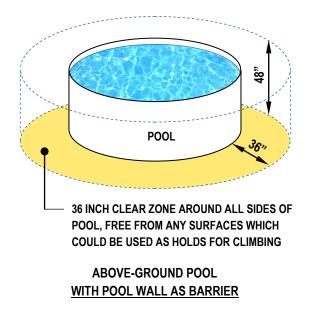


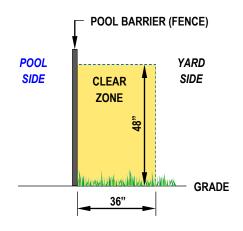
2. Where a barrier is mounted on top of the pool wall, the top of the barrier is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, and the wall and the barrier on top of the wall comply with the requirements of Section 305.2. (Figure 305.5.2)



- 3. Ladders or steps used as means of access to the pool are capable of being secured, locked or removed to prevent access except where the ladder or steps are surrounded by a barrier that meets the requirements of Section 305.
- 4. Openings created by the securing, locking or removal of ladders and steps do not allow the passage of a 4-inch (102 mm) diameter sphere. See Figure 305.2.1.4 on page 3.
- 5. Barriers that are mounted on top of above ground residential pool walls are installed in accordance with the pool manufacturer's instructions.

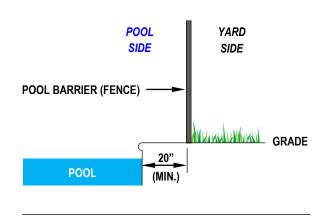
305.2.9 Clear zone. There shall be a clear zone of not less than 36 inches (914 mm) between the exterior of the barrier and any permanent structures or equipment such as pumps, filters and heaters that can be used to climb the barrier.





IN-GROUND OR ABOVE-GROUND POOLS WITH A FENCE AS THE BARRIER

305.2.10 Poolside barrier setbacks. The pool or spa side of the required barrier shall be not less than 20 inches (508 mm) from the water's edge. (Figure 305.2.10)



This document represents several common misunderstood barrier codes that apply to pools; other codes do apply to pool projects.