



SWIMMING POOL BARRIER REGULATIONS

2018 International Swimming Pool and Spa Code (with City amendments)

(Reference A.R.S. § 36-68)

DEFINITIONS: for the purposes of this document

Swimming Pool (pool): Any structure intended for swimming, recreational bathing or wading capable of holding water 18 inches or more in depth. This includes in-ground, above-ground and on-ground pools, hot tubs, spas and fixed-in-place wading pools. Any structure defined as a splash pad regardless of depth.

Residential: A pool intended for use that is accessory to a single-family residential setting and available only to the household and its guests. All other pools shall be considered to be Public for the purposes of this document.

Public: A pool other than a Residential pool. Public pools are further categorized and defined in the 2018 International Swimming Pool and Spa Code. Public pools are subject to additional permitting requirements of the Arizona Department of Environmental Quality (ADEQ).

Splash Pad: A man made structure constructed from materials other than natural earth or soil, with sprinklers, fountains, nozzles, and other devices or structures that sprays potable water, with drainage so there is no standing water, with a recirculation and filtration system.

Storable: A temporary pool accessory to a residential occupancy, constructed on or above the ground, capable of holding water with a maximum depth of 42 inches, or a pool with nonmetallic, molded polymeric walls or inflatable fabric walls regardless of dimension intended for residential use. Typically, this would be a single-family residential above-ground swimming pool that has a cord-connected pool filter, is hose filled and is taken down in the winter.

Exempt: A prefabricated pool capable of holding water with a maximum depth of less than 18 inches and is less than 8 feet in width at any point, whether below-ground or above-ground. A permit is not required for an exempt swimming pool.

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 whether belowground or aboveground. Where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346 and swimming pools are protected by a motorized safety pool cover that complies with ASTM F1346 that requires the operation of a key switch which meets the ASTM emergency standards 13-89 and which does not require manual operation other than the use of the key switch, the areas where those spas, hot tubs or pools are located shall not be required to comply with amended Sections 305.2 through 305.5.

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 305.5.

Public Locations: An interior barrier fence between the buildings and the pool / spa is required.

Residential Locations: Where the barrier requirements of Sections 305.2.1 through 305.5 can not be achieved an inner barrier fence around the entire pool / spa is required.

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 60 inches 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 48 inches of the barrier and for a distance of 48 inches measured horizontally from the outside of the required barrier from any natural or man-made object that would effectively reduce the 60 inch non-climbable height of the barrier.
2. The vertical clearance between grade and the bottom of the barrier shall not exceed 2 inches 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 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.

305.2.2 Openings. Openings in the barrier shall not allow passage of a 4 inch diameter sphere.

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.

305.2.4 Mesh fence as a barrier. Mesh fences, other than chain link fences in accordance with Section 305.2.7, shall be installed in accordance with the manufacturer's instructions and shall comply with the following:

1. The bottom of the mesh fence shall be not more than 1 inch above the deck or installed surface or grade.
2. The 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.
3. The fence shall be designed and constructed so that it does not allow passage of a 4 inch sphere under any mesh panel. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall be not greater than 4 inches from grade or decking.
4. An attachment device shall attach each barrier section at a height not lower than 45 inches above grade. Common attachments devices include, but are not limited to, devices that provide the security equal to or greater than that of a hook-and-eye-type latch incorporating a spring-actuated retaining lever such as a safety gate hook.
5. Where a hinged gate is used with a mesh fence, the gate shall comply with Section 305.3.
6. Patio deck sleeves such as vertical post receptacles that are placed inside the patio surface shall be of a nonconductive material.
7. Mesh fences shall not be installed on top of onground residential pools.

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, the horizontal members shall be located on the pool or spa side of the fence. Spacing between vertical members shall not exceed 1 ¾ inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 ¾ inches 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 or more, spacing between vertical members shall not exceed 4 inches. Where there are decorative cutouts within vertical members, the interior width of the cutouts shall not exceed 1 ¾ inches.

305.2.7 Chain link dimensions. The maximum opening formed by a chain link fence shall be not more than 1 ¾ inches. Where the fence is provided with slats fastened at the top and bottom that reduce the openings, such openings shall be not greater than 1 ¾ inches.

305.2.8 Diagonal members. Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be not greater than 1 ¾ inches. The angle of diagonal members shall be not greater than 45 degrees from vertical.

305.2.9 Clear zone. There shall be a clear zone of not less than 48 inches 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.

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

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 no fewer than 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 ½ inch within 24 inches of the latch release mechanism. The self-latching device shall comply with the requirements of Section 305.3.3. Gates shall remain locked when not in use.

305.3.3 Latches. 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 or spa side of the gate not less than 5 inches below the top of the gate, and the gate and barrier shall not have openings greater than ½ inch within 24 inches 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 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. In dwellings or structures not required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located 54 inches or more above the finished floor. In dwellings or structures required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located not greater than 54 inches and not less than 48 inches 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-closing doors 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.
4. All ground level doors or other doors with direct access to the swimming pool or other contained body of water shall be equipped with a self-latching device that meets the requirements of 305.3.3 amended. Emergency escape or rescue windows from sleeping rooms with access to the swimming pool or other contained body of water shall be equipped with a latching device not less than 54 inches above the floor. All other openable dwelling unit or guest room windows with similar access shall be equipped with a screwed in place wire mesh screen, or a keyed lock that prevents opening the window more than 4 inches, or a latching device located not less than 54 inches above the floor.
5. Between the swimming pool or other contained body of water and the residence or living area, a minimum four-foot wall, fence or barrier to the pool area which meets all of the requirements of amended Sections 305.2 through 305.3.

305.5 Onground residential pool structure as a barrier. On onground residential pool wall structure or a barrier mounted on top of an onground residential pool wall structure shall serve as a barrier where all of the following conditions are present.

1. Where only the pool wall service as the barrier, the bottom of the wall is on grade, the top of the wall is not less than 48 inches 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.
2. Where a barrier is mounted on top of the pool wall, the top of the barrier is not less than 48 inches 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.
3. Ladders or steps used as a means of access to the pool area 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 diameter sphere.
5. Barriers that are mounted on top of onground residential pool walls are installed in accordance with the pool manufacturer's instructions.