

Fence Guidelines

These guidelines are for information purposes only. The contractor is obligated to comply with all adopted codes and ordinances.

Fence permits must be submitted online at cityofsouthlake.com/online permits. Permits are required for any of the following:

- over 7 feet high
- used for a pool barrier
- have brick/stone columns
- are masonry and are 48 inches or more from the bottom of the footing
- all retaining walls 48 inches or more from the bottom of the footing
- are commercial
- Fences surrounding a subdivision must conform to the zoning requirements including material.
- ➤ Pool Barriers must meet all requirements shown in Pool Barrier Guidelines. (See below)
- Retaining walls and masonry fences or columns 48 inches or more from bottom of footing require a sealed engineered design.
- Perimeter fences over 8 feet in height require a variance from the Zoning Board of Adjustment. Fences in the rear yard at least 10 feet inside the property line may be up to 14 feet before a variance is required.

FENCE/BARRIER REQUIREMENTS FOR SWIMMING POOLS

2021 International Swimming Pool and Spa Code

- **305.1 General.** The provisions of this section shall apply to the design of barriers for restriction entry into areas having pools and spas. <u>In one-and two-family dwellings and townhouses</u>, 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.
- **305.1.1 Construction fencing required.** The construction sites for in-ground swimming pools and spas shall be provided with construction fencing to surround the site from the time that any excavation occurs up to the time that the permanent barrier is completed. The fencing shall be not less than 4 feet in height.
- **305.2 Outdoor swimming pool.** Outdoor pools and spas and indoor swimming pools shall be surrounded by a barrier that complies with Sections 305.2 through 305.7.

305.2.1 Barrier height and clearances.

Carrier 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 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 measured horizontally from the outside of the required 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 I s 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 don 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 barrier 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, or 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 fa 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 attachment 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.

305.2.4.1 Setbacks for mesh fences.

The inside of a mesh fence shall not be closer than 20 inches to the nearest edge of the water of a pool or spa.

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 \(\frac{3}{4} \) inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 \(^3\)4 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 3/4 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.

305.2.7.1 Chain link fencing prohibited.

Chain link fencing is not permitted as a barrier in public pools built after January 1, 1994.

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 3/4 inches. The angle of diagonal members shall be not greater than 45 degrees from vertical.

305.2.9 Clear zone.

Where equipment, including pool equipment such as pumps, filters and heaters, is on the same lot as a pool or spa and such equipment is located

305.3 Doors and gates.

Doors and gates in barriers 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 doors and gates shall open outward away from the pool or spa.

305.3.1 Utility or service doors and gates.

Doors and gates not intended for pedestrian use, such as utility or service doors and gates, shall remain locked when not in use.

305.3.2 Double or multiple doors and gates.

Double doors and gates or multiple doors and gates shall not have fewer than one leaf secured in place and the adjacent leaf shall be secured with a self-latching device.

305.3.3 Latch release.

For doors and gates in barriers, the door and gate latch release mechanisms shall be in accordance with the following:

- 1. Where door and gate latch release mechanisms are accessed from the outside of the barrier and are not of te self-locking type, such mechanism shall be located above the finish floor or ground surface in accordance with the following:
 - 1.1. At public pools and spas, not less than 52 inches and not greater than 54 inches.
 - 1.2. At residential pools and spas, not less than 54 inches.
- 2. Where door and gate latch release mechanisms are of the self-locking type such as where the lock is operated by means of a key, an electronic opener or the entry of a combination into an integral combination lock, the lock operation control and the latch release mechanism shall be located above the finished floor or ground surface in accordance with the following:
 - 2.1. At public pools and spas, not less than 34 inches and not greater than 48 inches.
 - 2.2. At residential pools and spas, at not greater than 54 inches.
- 3. At private pools, where the only latch release mechanism of a self-latching devise for a gate is located on the pool side of the barrier, the release mechanism shall be located at a point that is a least 3 inches.

305.3.4 Barriers adjacent to latch release mechanisms.

Where a latch release mechanism is located on the inside of a barrier, openings in the door, gate and barrier within 18 inches of the latch shall not be greater than ½ inch in any dimension.

305.4 Structure wall as a barrier.

Where a wall of a one- and two-family dwelling or townhouse or it's accessory structure serves as part of the barrier and where doors, gates or window 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, doors and gates shall have an alarm that produces and 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 217.
- 2. In dwellings not required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located at not less than 54 inches above the finished floor.
- 3. In dwellings that are 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.
- 4. In structures other than dwellings, 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
- 5. A safety cover that is listed and labeled in accordance with ASTM F1346 is installed for the pools and spas.
- 6. An approved mans 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.

305.5 Onground residential pool structure as a barrier.

An onground residential pool wall structure or 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 serves 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 a 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 requirement of Section 305.
- 4. Openings created by the securing, locking or removal of ladders and steps do not allow the passage of a 4inche diameter sphere.
- 5. Barriers that are mounted on top of onground residential pool walls are installed in accordance with the pool manufacturer's instructions.

305.6 Natural barriers used in a one- and two-family dwelling or townhouse

In the case where the pool or spa area abuts the edge of a lake or other natural body of water, public access is not permitted or allowed along the shoreline, and required barriers extend to and beyond the water's edge not less than 18 inches, a barrier is not required between the natural body of water shoreline and the pool or spa.

305.7 Natural topography.

Natural topography that prevents direct access to the pool or spa area shall include but not be limited to mountains or natural rock formations. A natural barrier approved by the governing body shall be acceptable provided that the degree of protection is not less than the protection afforded by the requirements of Sections 305.2 through 305.5

305.8 Means of Egress.

Outdoor public pools provided with barriers shall have means of egress as required by Chapter 10 of the International Building Code.

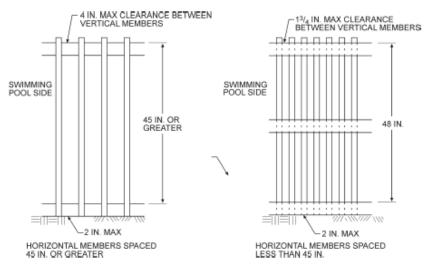
Automatic Vehicle Entry Gate as Pool Barrier Component:

Where an automatic vehicle entry gate is incorporated as a component of a pool barrier, the gate shall open and close within two minutes of opening with a single activation of the switch in order to prevent a gap in the barrier once a vehicle has passed through the entry.

FENCE/BARRIER INSPECTIONS

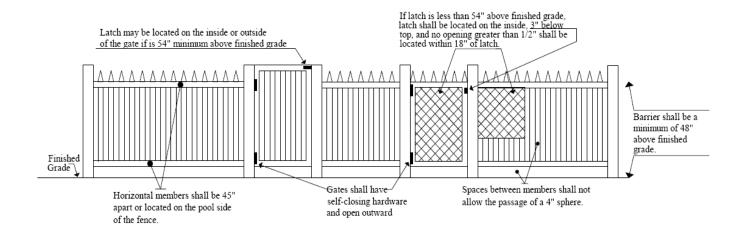
- 1. <u>Misc. Fence Final Inspection</u> Fences, Retaining Walls and Pool Barriers to be inspected for Final construction and documents of approved permit.
- 2. <u>Misc. Footing Inspection Retaining walls over 4 feet from bottom of footing to top of wall.</u> (Requires engineering) Masonry fence or column over 4 feet including footings. (Requires engineering)
- 3. <u>Planning Final Inspection</u> Commercial permits: must schedule for inspection prior to requesting a Fence Final.
- 4. <u>Residential Footing Inspection</u> Retaining walls over 4 feet from bottom of footing to top of wall. (Requires engineering) Masonry fence or column over 4 feet including footings. (Requires engineering)
- 5. <u>Self-Certified Engineer Letter Inspection Engineer approval letter for the piers and foundation shall be uploaded to the permit software.</u>

1. DIAGRAM IS FOR ILLUSTRATION PURPOSES. SEE CODE TEXT FOR COMPLETE INSTALLATION REQUIREMENTS.



For SI: 1 inch = 25.4 mm.

Figure AG105.2(2)
PRIVATE SWIMMING POOL BARRIER CONSTRUCTION



Phone: 817-748-8237 or 8236 May 2022