



Planning & Development Services

BUILDING DIVISION POLICY

12-18-2023

REQUIREMENT FOR SWIMMING POOL ENCLOSURE AND SAFETY FEATURES

The CITY OF SANTEE'S Building Division policy for minimum swimming pool barrier requirements to help prevent accidental drowning. These requirements apply to any new or modified swimming pool or spa built in the incorporated area of the city and associated with a one- or two-family dwelling. (Note: Public pools and pools associated with multi-family facilities are subject to pool enclosure and safety feature provisions regulated by the Department of Environmental Health)

In accordance with Santee's Municipal Code, California Residential Code and California Building Code, swimming pools and spas require the following protection measures against drowning and injury:

Measures:

1. A Residential Pool Enclosure separating the pool or spa from neighboring properties.
2. At least one safety feature accepted by the City of Santee.
3. At least one nonredundant safety feature accepted by the State of California.
4. Entrapment avoidance.

This guidance document is intended to inform owners and contractors of the various options available when considering the appropriate enclosure, safety features, and entrapment avoidance measures. All elements of the enclosure, safety features, and entrapment avoidance measures shall be installed, inspected, and approved prior to plastering or filling the pool with water. Alarms associated with pool water motion shall be demonstrated to the inspector at the time of this inspection. Pool enclosures also shall meet setback requirements.

PROTECTION MEASURE #1: **RESIDENTIAL POOL ENCLOSURE**

Swimming pools and spas shall be separated from neighboring properties by a permanent enclosure – i.e., removable fencing or barriers not acceptable – with all of the following characteristics:

- Any pedestrian **access gates** through the RESIDENTIAL POOL enclosure shall meet the following requirements:
 - Gates shall open away from the swimming pool.
 - Gates shall be self-closing with a self-latching device located a minimum of 54 inches from the bottom of the gate.

- Where the release mechanism of the self-latching device is located less than 54 inches from the bottom of the gate, the release mechanism shall be located on the pool side of the enclosure at least 3 inches below the top of the gate and the gate and enclosure shall have no opening greater than 1/2 inch within 18 inches of the release mechanism.
 - Any gates other than pedestrian access gates shall be equipped with lockable hardware or padlocks and shall always remain locked when not in use.
- **RESIDENTIAL POOL ENCLOSURES** shall be a minimum height of 60 inches measured on the side of the enclosure that faces away from the swimming pool.
 - Maximum vertical clearance from the ground to the bottom of the enclosure shall be 2 inches. The maximum vertical clearance at the bottom of the enclosure may be increased to 4 inches when the grade is a solid surface such as a concrete deck or when the enclosure is mounted on the top of the above-ground pool structure.
 - Gaps or voids, if any, shall not allow passage of a sphere equal to or greater than 1-3/4 inches in diameter. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to four inches when the distance between the tops of horizontal members is 45 inches or more.
 - **RESIDENTIAL POOL ENCLOSURES** shall have an outside surface free of protrusions, cavities or other physical characteristics that would serve as handholds or footholds that could enable a child below the age of five years to climb over.
 - Chain link fences used to separate the swimming pool from the home shall not be less than 11.5 gauge and the mesh size shall not be larger than 1-3/4-inch square.

PROTECTION MEASURE #2:

SAFETY FEATURE ACCEPTED BY CITY OF SANTEE

Select at **least one** of the following safety features:

- **A POOL ENCLOSURE** shall be isolated from access to the home and other habitable buildings on the lot by an enclosure meeting the requirements listed under protection measure #1 above.
- The pool shall be equipped with an electrically operated approved safety pool cover that can be opened or closed with a single switch placed at least 54 inches above the ground.
- The residence shall be equipped with an exit alarm on each door providing direct access to the pool. The alarm system shall:
 - Sound continuously for a minimum of 30 seconds, within seven seconds after the door and its screen, if present, are opened.
 - Be capable of providing a sound pressure level of not less than 85 B when measured indoors at a distance of 10 feet from the alarm.
 - Automatically reset under all conditions.
 - Be equipped with a manual means, such as a touchpad or switch, placed no lower than 54 inches above the floor, to temporarily deactivate the alarm for a single opening, but the alarm shall not be equipped with an on/off switch and deactivation shall be for no more than 15 seconds.

- All doors providing direct access from the home to the swimming pool shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor. The home shall also have a minimum of one exit door that does not provide direct access to the swimming pool and that complies with exit door regulations of the California Building Code as amended and adopted by the City of Santee.
- Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the features set forth in the four items above, as determined by the building official.

PROTECTION MEASURE #3:

SAFETY FEATURE ACCEPTED BY STATE OF CALIFORNIA

Select at **least one** of the following safety features nonredundant with the safety feature(s) selected for protection measure #2 above:

- The pool shall incorporate removable mesh pool fencing that meets ASTM F 2286 standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
- The pool shall be equipped with a manually or electrically operated approved safety pool cover that meets all requirements of ASTM F 1346.
- The residence shall be equipped with exit alarms on those doors providing direct access to the pool.
- All doors providing direct access from the home to the swimming pool shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
- Swimming pool alarms that, when placed in pools, will sound upon detection of accidental or unauthorized entrance into the water. These pool alarms shall meet and be independently certified to the ASTM F 2208, which covers surface motion, pressure, sonar, laser, and infrared type alarms. For purposes of this provision, “swimming pool alarms” shall not include swimming protection alarm devices designed for individual use, such as an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water.
- Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the devices set forth in the six items above, as determined by the building official and independently verified by an approved testing laboratory as meeting standards for those devices established by the ASTM or the American Society of Testing Mechanical Engineers (ASME).

**PROTECTION MEASURE #4:
ENTRAPMENT AVOIDANCE**

Suction outlets shall be designed to produce circulation throughout the pool or spa. Single-outlet systems, such as automatic vacuum cleaner systems, and multiple suction outlets, whether isolated by valves or otherwise, shall be protected against user entrapment per the following requirements:

- Suction fittings: All pool and spa suction outlets shall be provided with a cover that conforms to ASME A112.19.8M, a 12-inch by 12-inch drain grate or larger, or an approved channel drain system (except surface skimmers).
- Atmospheric vacuum relief system required: All pool and spa single- or multiple-outlet circulation systems shall be equipped with an atmospheric vacuum relief should grate covers located therein become missing or broken. Such vacuum relief systems shall include at least one approved or engineered method of the following types:
 - Safety vacuum release systems conforming to ASME A112.19.17
 - Approved gravity drainage system
- Dual drain separation: Single- or multiple-pump circulation systems shall be provided with a minimum of two suction outlets of the approved type. A minimum horizontal or vertical distance of 3 feet shall separate such outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum-relief-protected line to the pump or pumps.
- Pool cleaner fittings: Where provided, vacuum or pressure cleaner fittings shall be located in accessible positions minimum 6 inches and maximum 12 inches below the minimum operational water level or as an attachment to the skimmers.

Note: Fence gates shall provide access for emergency personnel. Contact your local fire agency for requirements.

DEFINITIONS

APPROVED SAFETY POOL COVER means a safety pool cover that meets all of the performance standards of the American Society for Testing and Materials (ASTM), in compliance with Standard F 1346.

POOL ENCLOSURE means a fence, wall, or other barrier that prevents access to a swimming pool or spa from neighboring properties, from the home and from other habitable buildings on the same lot.

RESIDENTIAL POOL ENCLOSURE means a fence, wall, or other barrier that prevents access to a swimming pool or spa from neighboring properties and may or may not prevent access from the home or other habitable buildings on the same lot.

SWIMMING POOL means any structure intended for swimming or recreational bathing that contains waters over 18 inches deep, including in-ground, above-ground, and on-ground swimming pools and fixed-in-place wading pools. Note: Spas and hot tubs must comply with these requirements except for self-contained hot tubs or spas equipped with a locking safety cover that is listed to comply with ASTM F 1346.

Swimming Pool Inspections

Steel and Bonding –

Made when the pool is ready for gunite placement. All steel reinforcement and deck steel bonding is to be completed, including pool light shells, diving board or pool cover apparatus, metal window frames and patio cover hardware within 5 feet of the water's edge. Pool plumbing should be under a 35 pound pressure test.

Underground electric and gas pressure test –

Made when all electrical conduit and gas piping has been installed and is prepared for cover. Gas piping must be observed under test prior to covering with soil at any point. The pressure test is to be maintained until final inspection or re-tested.

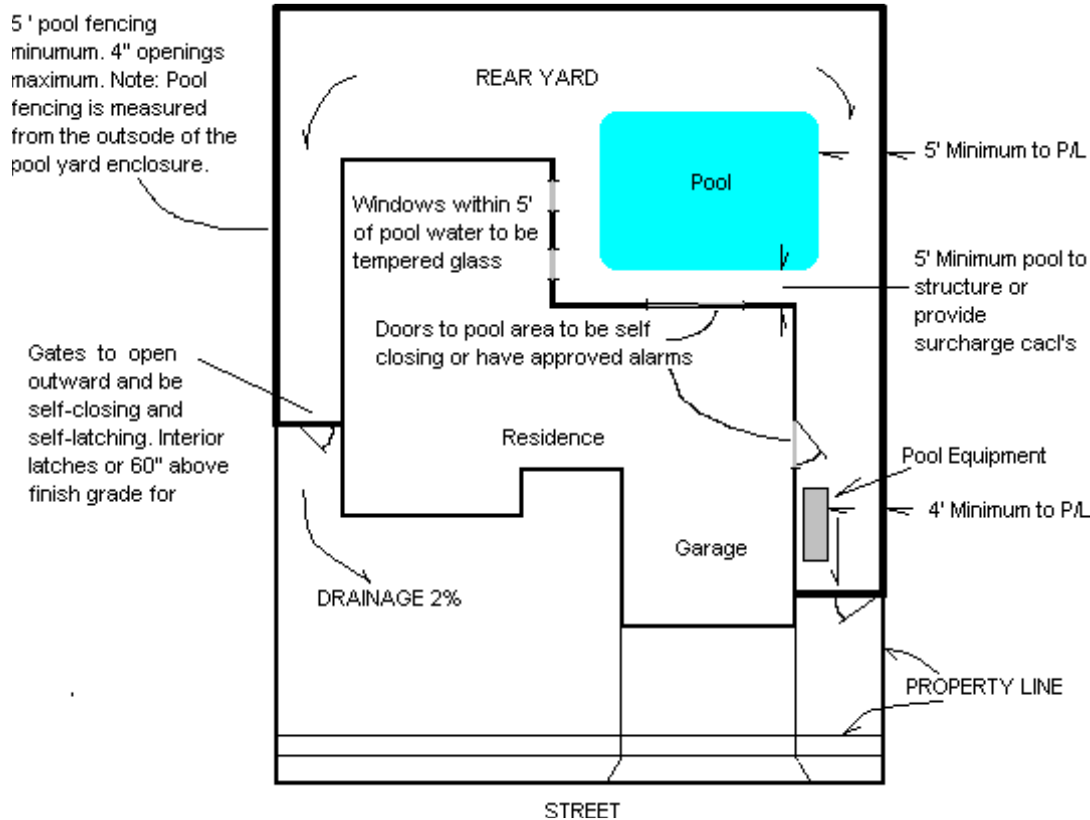
Pre-plaster –

A pre-plaster inspection occurs when the pool is ready to be plastered and water to be added to the pool vessel. This inspection requires the pool barrier and safety features to be installed and inspected. This includes fencing, gates and latches and door alarms from the home or habitable buildings. If one of the features is a water motion pool safety device the contractor or homeowner must demonstrate those systems to be install after fill to the inspector at this time.

Final –

A final inspection occurs when the pool and its hardscape are complete. Inspection of drainage course(s) on site is to determine all water and runoff is directed to onsite retention areas and then to existing stormwater course(s). The existing drainage across the property line is not to be changed in velocity, volume, or location. Drainage courses are to maintain a sheet flow design to avoid erosion and any effect to the adjoining property. All electrical and plumbing work must be finished and accessible for testing and inspection. Additional pool safety device(s) must be installed for testing and inspection. Building address on the building viewable for the R.O.W. per R319.1.

(Continue for plan submittal requirements)



Site Plan Layout

1. All windows within 5 feet of the water's edge are required to be tempered glass if the bottom edge of the window is within 60 inches of the pool deck.
2. Pool fencing should be detailed on the site plan along with a call out for the additional safety protective features into the pool yard enclosure.
3. Structural details for the construction of any new pool are required to be stamped and wet signed by a licensed engineer. Photocopies of signed engineered plans are not acceptable. The plans should assume expansive soil conditions unless a current soils report is submitted with the application for a pool permit.

PLAN SUBMITTAL

Plans notes and drawing to scale showing:

- Legal description, address, and location.
- Indicate location of utilities and size of meter capacity.
- Indicate all easements.
- Identify manufacturer of equipment and spas for approval.
- Indicate existing drainage course and its modifications to absorb pool drainage.
- Indicate method of cleaning filters or location of back flushing of filters.
- Indicate all hardscape in place at time of inspection.
- Indicate location of water and method to be use to fill (autofill with backflow device or air gap)
- A fence that is 60" minimum height with self-closing, self-latching gates, latches to be at least five (5) feet above grade, bottom of gate shall be no more than four (4) inches above grade, and no

openings in the fence shall be larger than four (4) inches. Any fence which exceeds six (6) feet in height requires a building permit. Pool fences are measured out 36" from the side of the fence opposite the yard where the pool is located.

- Location of heater.
 - a. Heaters shall comply with all governing codes and manufacturer's recommendations. May not terminate closer than four (4) feet horizontally to any operable window.
 - b. May not be under roof overhangs.
 - c. Must be four (4) feet clear of property lines.
- Provide gas line sizing per California Plumbing Code section 1215.
- Show drainage of surface water and pool run off.
- Identify manufacturer of equipment and spas for approval.
- Show method of disposal of pool flushing water.
- Call out the location for disposal of earth removed.
- Expansive soil details are to be used unless a soils report for pool site is submitted.

Swimming Pool Setback to slopes

Figures 9, 10, 11, and 12 show how the standard setback can be provided for pools adjacent to a slope steeper than 3 horizontal to 1 vertical but less than 1 horizontal to 1 vertical. Where the slope is steeper than 1:1, the setback shall be measured from an imaginary plane projected at an angle of 45 degrees and tangent to the slope. **In addition to the footing setback, any portion of the pool wall within 7 feet of the top of the slope shall be designed for a freestanding condition, without soil support (see Figure 10).** soil support (see Figure 10).

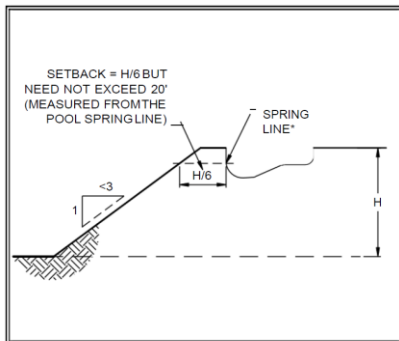


Figure 9 (Section 1808.7.3)

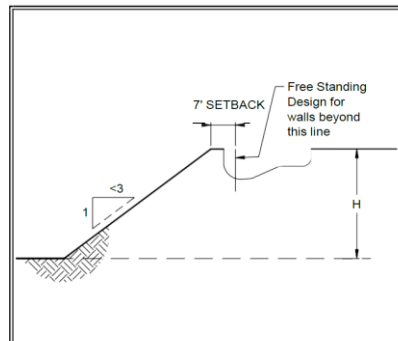


Figure 10 (Section 1808.7.3)

* The spring line is defined as the location on the pool shell where it changes curvature away from the adjacent slope. In addition, the pool clearance dimension is measured to the outside of the pool shell not the inside finished surface.

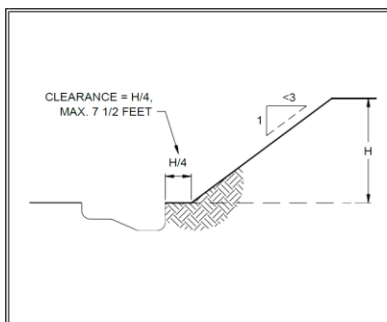


Figure 11 (Section 1808.7.3)

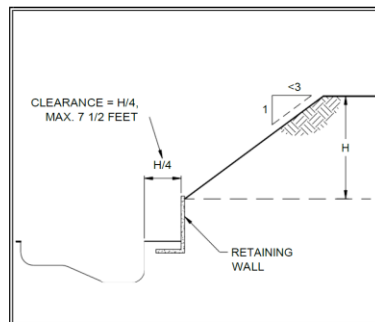


Figure 12 (Section 1808.7.3)