

SPA Requirements

INFORMATION GUIDELINE

June 2004

City of Concord • Building & Neighborhood Services • 1950 Parkside Drive, MS/51 • Concord, CA 94519 • (925) 671-3107 • Fax (925) 680-4877

All Spas are required to be UL Labeled

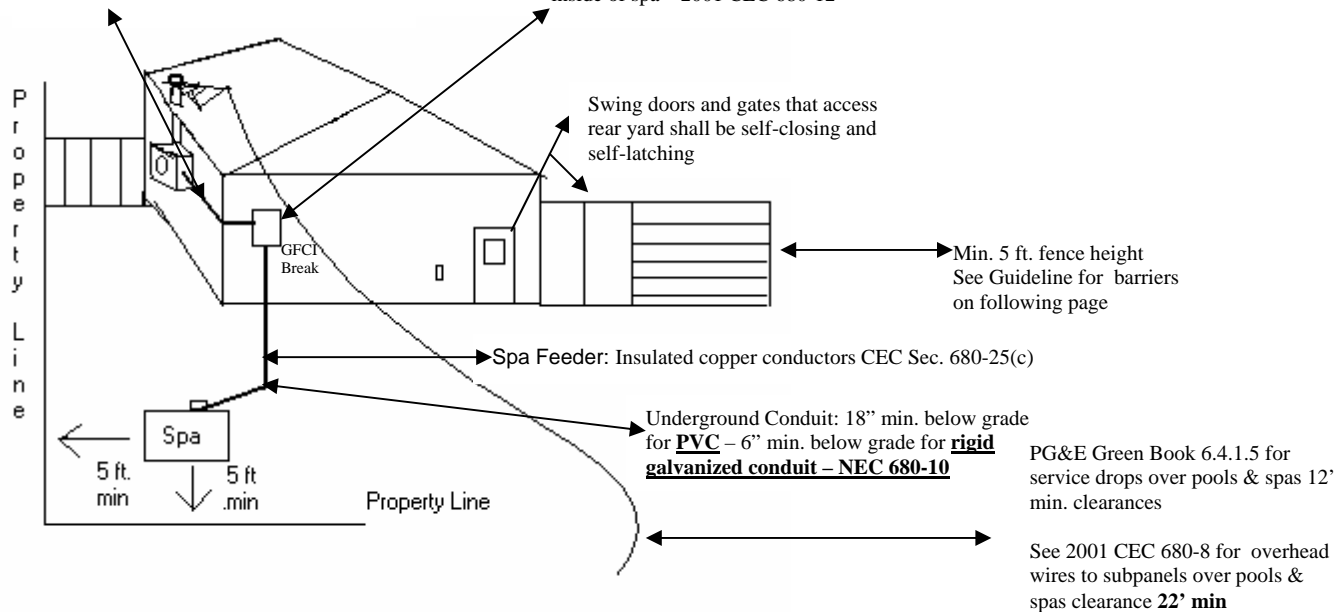
Note: Residential Elec. Load calculations may be required for existing main service.

Sec 680-25(d)

Note: aluminum feeder ok from house panel to spa disconnect. Provide insulated or covered equipment ground.

Conductors or approved cable assembly inside of house only (Insulated or covered equipment grounding conductor) 2001 CEC 310-16 60 degree table only

Disconnecting means shall be provided and accessible, located **within sight** from spa, and shall be located at least 5ft. from inside of spa – 2001 CEC 680-12



- ◆ All Hose Bibbs within 50 ft. of spa need to have anti-siphon devices installed
- ◆ Weatherproof GFCI protected receptacle required between 10 ft. to 20 ft. away from Spa.
- ◆ **Spa Feeders:**
 - ◆ Single conductors approved for damp or wet locations (W) sized per NEC 310-16, No Cable
 - ◆ Copper only
 - ◆ Grounding conductor to be continuous green
 - ◆ Neutral conductor to have continuous white insulation
 - ◆ See Manufacturers instructions for conductor lengths over 120 ft.
 - ◆ Gutters, Downspouts, metal window frames, etc., are required to be bonded to the pump assembly if within 5' of the spa.
- ◆ See Following Guidelines for Residential barriers for swimming pools, spas and hot tubs



Residential Barriers for Swimming Pools, Spas and Hot Tubs

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2001 CBC Division II – Private Swimming Pools (Statewide)

Section 3150 B – Definitions:

Approved Safety Pool Cover means a manually or power-operated safety pool cover that meets all of the performance standards of the American Society of Testing and Materials (ASTM), in compliance with Standard F 1346-91.

Enclosure means a fence, wall or other barrier that isolates a swimming pool from access to the home.

Exit Alarms means devices that make audible, continuous alarm sounds when any door or window that permits access from the residence to the pool area, that is without any intervening enclosure, is opened or is left ajar. Exit alarms may be battery operated or may be connected to the electrical wiring of the building.

Public Swimming Pool means a swimming pool operated for the use of the general public with or without charge, or for the use of the members and guests of a private club. Public swimming pool does not include a swimming pool located on the grounds of a private single-family home.

Swimming Pool or Pool means any structure intended for swimming or recreational bathing that contains water over 18 inches deep. "Swimming pool" includes in-ground and above-ground structures and includes, but is not limited to, hot tubs, spas, portable spas and nonportable wading pools.

Section 3151B – Construction Permit; Safety Features Required

Commencing January 1, 1998, except as provided in Section 3154B, whenever a construction permit is issued for construction of a new swimming pool at a private, single-family home, it shall be equipped with **at least one** of the following safety features:

1. The pool shall be isolated from access to a home by an enclosure that meets the requirements of Section 3152B.
2. The pool shall be equipped with an approved safety pool cover.
3. The residence shall be equipped with exit alarms on those doors providing direct access to the pool.
4. 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.
5. 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 Items 1-4, inclusive, as determined by the building official of the jurisdiction issuing the applicable building permit. Any ordinance governing child access to pools adopted by a political subdivision on or before January 1, 1997, is presumed to afford protection that is equal to or greater than that afforded by any of the devices set forth in Items 1-4, inclusive

Section 3152B – Enclosure; Required Characteristics

3152B.1 An enclosure shall have all of the following characteristics:

1. Any access gates through the enclosure open away from the swimming pool and are self-closing with a self-latching device placed no lower than 60 inches above the ground.
2. A minimum height of 60 inches
3. A maximum vertical clearance from the ground to the bottom of the enclosure of 2 inches
4. Gaps or voids, if any, do not allow passage of a sphere equal to or greater than 4 inches in diameter.
5. 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.

Appendix Chapter 4 – Special Use And Occupancy (Locally Adopted)

2001 CBC Division I – Barriers For Swimming Pools, Spas and Hot Tubs

Section 421 – Requirements

421.1 Outdoor Swimming Pool. An outdoor swimming pool shall be provided with a barrier that shall be installed, inspected and approved prior to plastering or filling with water. The barrier shall comply with the following:

1. The top of the barrier shall be at least 60 inches (2001 CBC Division II 3152B – more restrictive requirement) above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches between grade and the bottom of the barrier shall be 2 inches measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the above ground pool structure. When barriers have horizontal members spaced less than 45 inches apart, the horizontal

members shall be placed on the pool side of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.

2. Openings in the barrier shall not allow passage of a 1 ¾-inch-diameter sphere.
Exceptions: 1. When vertical spacing between such openings is 45 inches or more, the opening size may be increased such that the passage of a 4-inch-diameter sphere is not allowed.

2. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to 4 inches when the distance between the tops of horizontal members is 45 inches or more.
3. Chain link fences used as the barrier shall not be less than 11 gage.
4. Access gates shall comply with the requirements of Items 1 through 3. Pedestrian access gates shall be self-closing and have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches from the bottom of the gate, (1) the release mechanism shall be located on the pool side of the barrier at least 3 inches below the top of the gate, and (2) the gate and barrier shall have no opening greater than ½ inch within 18 inches of the release mechanism. Pedestrian gates shall swing away from pool. Any gates other than pedestrian access gates shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use.
5. Where a wall of a Group R, Division 3 Occupancy dwelling unit serves as part of the barrier and contains door openings between the dwelling unit and the outdoor swimming pool that provide direct access to the pool, a separation fence meeting the requirements of items 1, 2, 3 and 4 of Section 421.1 shall be provided.

Exception: When approved by the building official, one of the following may be used:

1. Self-closing and self-latching devices installed on all doors with direct access to the pool with the release mechanism located a minimum of 54 inches above the floor
2. An alarm installed on all doors with direct access to the pool. The alarm shall sound continuously for a minimum of 30 seconds within seven seconds after the door and its screen, if present, are opened, and be capable of providing a sound pressure level of not less than 85 dBA when measured indoors at 10 feet. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last no longer than 15 seconds. The deactivation switch shall be located at least 54 inches above the threshold of the door.
3. Other means of protection may be acceptable so long as the degree of protection afforded is not less than that afforded by any of the devices described above.
6. Where an above ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then (1) the ladder or steps shall be capable of being secured, locked or removed to prevent access or (2) the ladder or steps shall be surrounded by a barrier that meets the requirements of Items 1 through 5. When the ladder or steps are secured, locked or removed, any opening created shall be protected by a barrier complying with Items 1 through 5.

421.2 Indoor Swimming Pool. For an indoor swimming pool, protection shall comply with the requirements of Section 421.1, Item 5.

421.3 Spas and Hot Tubs. For a nonself-contained and self-contained spa or hot tub, protection shall comply with the requirements of Section 421.1.

Exception: A self-contained spa or hot tub equipped with a listed safety cover shall be exempt from the requirements of Section 421.1.