



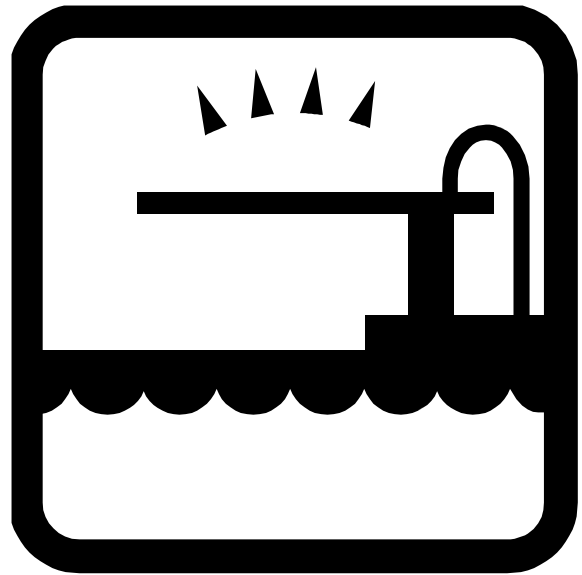
Building Department

"Preserving Our Past, Enriching Our Present, Building Our Future"

33 Broadway, Jackson, CA 95642-2301
(209) 223-1646 / Fax (209) 223-3141
e-mail: building@ci.jackson.ca.us

Construction Requirements for

Swimming Pools and Spas



Construction Requirements for Swimming Pools and Spa

1. Introduction

This booklet was prepared in order to assemble the major regulations affecting swimming pools or spas in a single package. It is primarily oriented toward installations at private residences. Health and Safety Code Section 18942(b)

Swimming Pool

Any structure intended for swimming, recreational bathing or human immersion that contains water over 18 inches deep. This includes in-ground, above ground, and on-ground swimming pools; hot tubs; portable and non-portable spas; and fixed in-place wading pools. CBC-AV100.1

Swimming Pool, Indoor

A swimming pool that is totally contained within a residential structure and surrounded on all four sides by walls of said structure.

Swimming Pool, Outdoor

Any swimming pool that is not an indoor pool.

Swimming Pool, Specialty

Such as vinyl liner or fiber glass.

Pool Re-plaster

Permits are required for modification or repair of the components of the pool, i.e. re-plaster, new pumps, alteration to the piping system, changing the shape of the pool, or adding an anti-entrapment device.

Enclosure

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

2. Barriers – Group R, Division 3 Occupancies

An outdoor swimming pool shall be provided with a barrier that, once installed, shall be inspected and approved by a Building Inspection official prior to filling the swimming pool with water. Perimeter fencing may be approved as a barrier.* The barrier shall comply with each of the following:

- a. The top of the barrier shall be at least 60 inches 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 measured on the side of the barrier that faces away from the swimming pool. (See Figure 1) 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. (See Figure 2 and Figure 3) When barriers have horizontal members spaced less than 45 inches apart between the tops of the horizontal members, the horizontal members shall be placed on the pool side of the barrier (See Figure 4). Any decorative design work on the side away from the swimming pool, such as protrusions, indentations, or cutouts that render the barrier easily climbable, is prohibited.

- b. Openings in the barrier shall not allow passage of a 1 ¾ inches or greater diameter sphere. (See Figure 4)
 - a. Exception: For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased to a maximum 4 inches when the distance between the tops of the horizontal members is 45 inches or more. (See Figure “5”)

* “No-climb fencing” is not acceptable as a barrier.

- c. The maximum opening formed by a chain link fence shall not be more than 1 ¾ inches. Where the fence is provided with slats fastened at the top and bottom which reduces the openings, such openings shall be not more than 1 ¾ inches.
- d. Diagonal members: Where the barrier is composed of a diagonal member the maximum opening formed by the diagonal members shall be no more than 1.75 inches.
- e. Solid barriers that do not have openings, such as masonry or stone walls, shall not contain indentations or protrusions except for tooled masonry joints.
- f. Gates. Access gates shall comply with the requirements of subdivisions (a) thru (e) above and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and the gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

Door operations. Except as specifically permitted by this section egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

Exception: Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock.

- g. Dwelling wall as a barrier. Where a wall of a dwelling serves as part of the barrier, one of the following shall apply:
 - 1. Doors with direct access to the pool through that wall shall be equipped with an alarm that produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm shall be equipped with a manual means, such as touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivations shall last for not more than 15 seconds.

2. The pool shall be equipped with a power safety cover that complies with ASTM F 1346.
 3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the administrative authority, shall be accepted so long as the degree of protection afforded is not less than the protection afforded by Item 1 or 2 above.
- h. Any other alternate barrier product maybe approved on a case by case basis by the Chief Building Official.

Residential swimming pools shall comply with sections (a) thru (h) above.

Exception: Power safety covers for pools meeting ASTM F1346 standards may also be used.

- i. Where an above ground pool structure is used as a barrier or where the barrier is mounted on the top of the pool structure and the means of access is a ladder or steps, either (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 subdivisions (a) through (f) above. When the ladder or steps are secured, locked, or removed, any opening created shall be protected by a barrier complying with subdivisions (a) through (f) above.
 - a. Pool Alarms meeting UL standard 2017.

3. Pool Drain – Anti-entrapment Cover

New swimming pools or spas shall meet all of the following requirements:

1. They shall have at least two circulation drains per pump that shall be hydraulically balanced and symmetrically plumbed through one or more “T” fittings, and that are separated by a distance of at least three feet in any dimension between the drains.
2. Suction outlets that are less than 12 inches across shall be covered with anti-entrapment grates, as specified in the ASME/ANSI Standard A112.19.8, that cannot be removed except with the use of tools. Slots or openings in the grates or similar protective devices shall be of a shape, area and arrangement that would prevent physical entrapment and would not pose any suction hazard to bathers.

Existing swimming pools or spas that are remodeled or modified shall require that the suction outlet of the pool or spa be upgraded so as to be equipped with an anti-entrapment cover meeting current standards of the American Society of Mechanical Engineers (ASME).

4. Safety Features required.

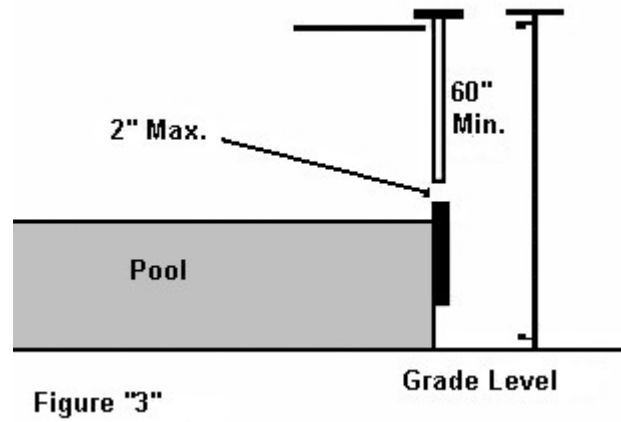
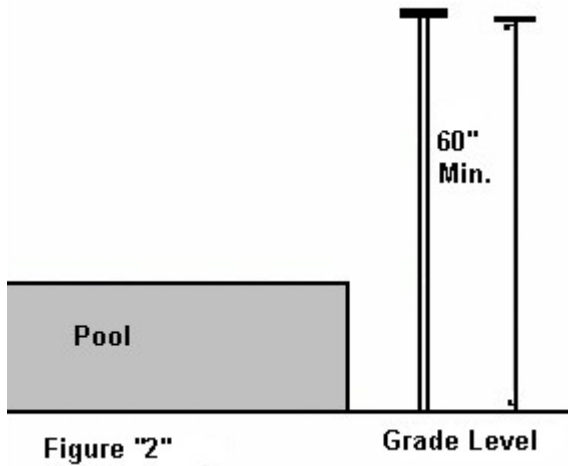
Construction permit; Health and Safety Code features required. Commencing January 1, 1998, whenever a construction permit is issued for construction of a new swimming pool at a private, single-family home, it shall be equipped with at least one of the following safety features:

1. The pool shall be isolated from access to a home by an enclosure that meets the requirements of subdivisions (a) thru (e) above.

2. The pool shall be equipped with an approved power safety pool cover that complies with ASTM F1346.
3. The residence shall be equipped with exit alarms on those doors providing direct access to the pool. The alarm shall be listed in accordance with UL 2017.
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 (1372 mm) above the floor.
5. The pool shall incorporate removable mesh pool fencing that meets American Society for Testing and Materials (ASTM) Specifications F 2286 standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
6. 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 Standard F 2208 "Standards Specification for Pool Alarms" which includes surface motion, pressure, sonar, laser, and infrared type alarms. For purposes of this article, "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.
7. 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 1-6, inclusive.

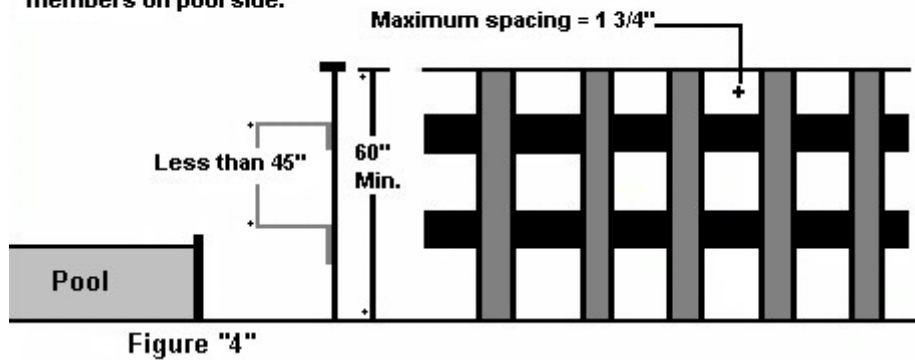
Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115922
AB 3305, Statutes 1996, C.925



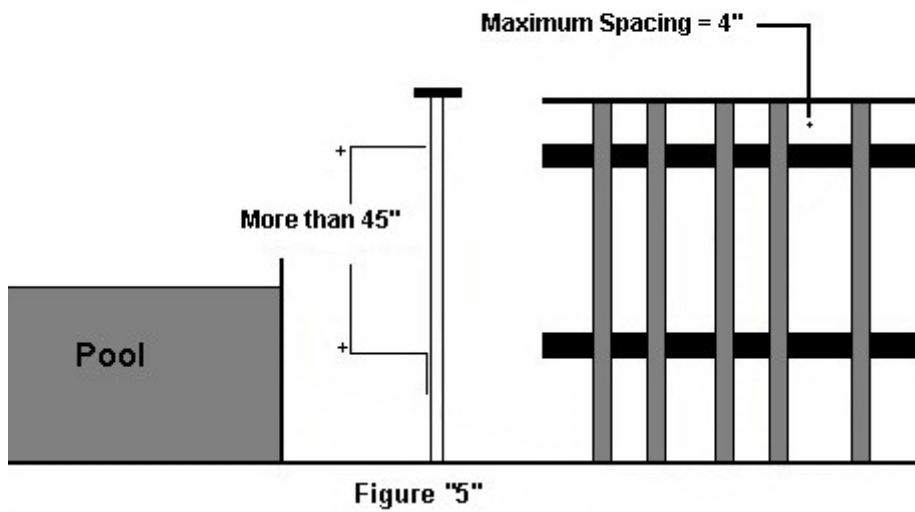
Horizontal Members
If less than 45" between members, install members on pool side.

Vertical Members



Horizontal Members
If more than 45" between members members may be installed either side.

Vertical Members



For gates other than pedestrian access gates, where latch is less than 54" from bottom of gate.

No opening greater than 1/2" within 18" of release mechanism

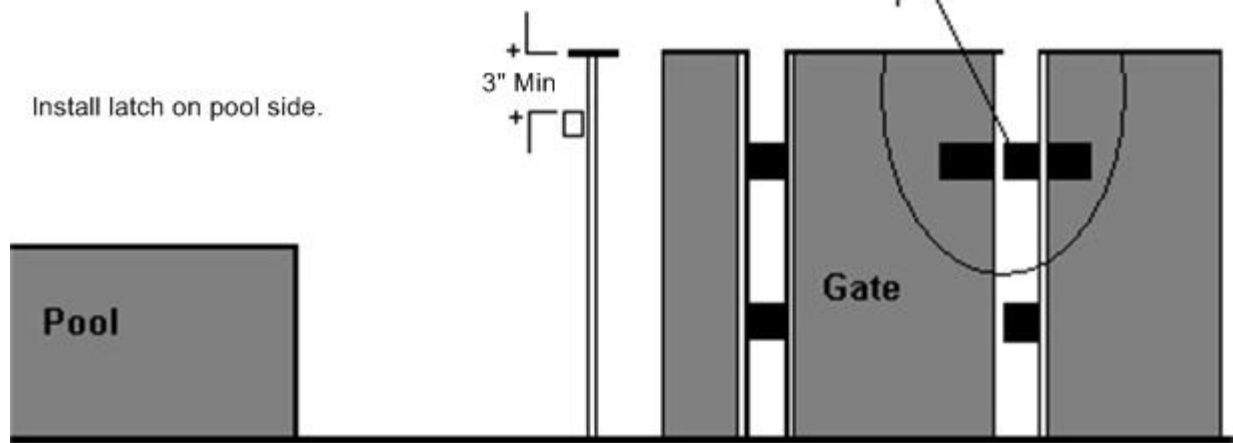


Figure 6

Gate to swing outward

Indoor Swimming Pool

For an indoor swimming pool, protection shall comply with the requirements of subsection (g) above.

Spas and Hot Tubs

A spa or hot tub with a locking safety cover that complies with ASTM (American Society for Testing and Materials) Standard F 1346-91 shall not be required to provide other barriers. Where a locking safety cover is not provided, the spa or hot tub shall comply with the requirements of subsection (a) through (g) above.

5. Electrical

a. CEC Article 680.8

The following parts of pools shall not be placed under existing service-drop conductors or any other open overhead wiring; nor shall such wiring be installed above the following:

1. Pools and the area extending 10 ft (3.05 m) horizontally from the inside of the walls of the pool,
2. Diving structures
3. Observation stands, towers, or platforms unless the installations provide the clearances in Table 680.8

| | | | |
|---|---|---|-------------------------|
| | Insulated supply or service drop cables, 0-750 volts to ground, supported on and cabled together with an effectively grounded bare messenger or effectively grounded neutral conductor. | All other supply or service drop conductors voltage to ground | |
| | | 0-15kV | Greater than 15 to 50kV |
| A. Clearance in any direction to the water level, edge of water service, base of diving platform, or permanently anchored raft. | 22.5 ft (6.9 m) | 25 ft (7.5 m) | 27 ft (8.0 m) |
| B. Clearance in any direction to the diving platform or tower. | 14.5 ft (4.4 m) | 17 ft (5.2 m) | 18 ft (5.5 m) |
| C. Horizontal limit of clearance measured from inside wall of the pool. | This limit shall extend to the outer edge of the structures listed in A and B of this table but not less than 10 feet (3.05 m) | | |
| See Figure 7 Below | | | |

Electrical Guidelines for Swimming Pools

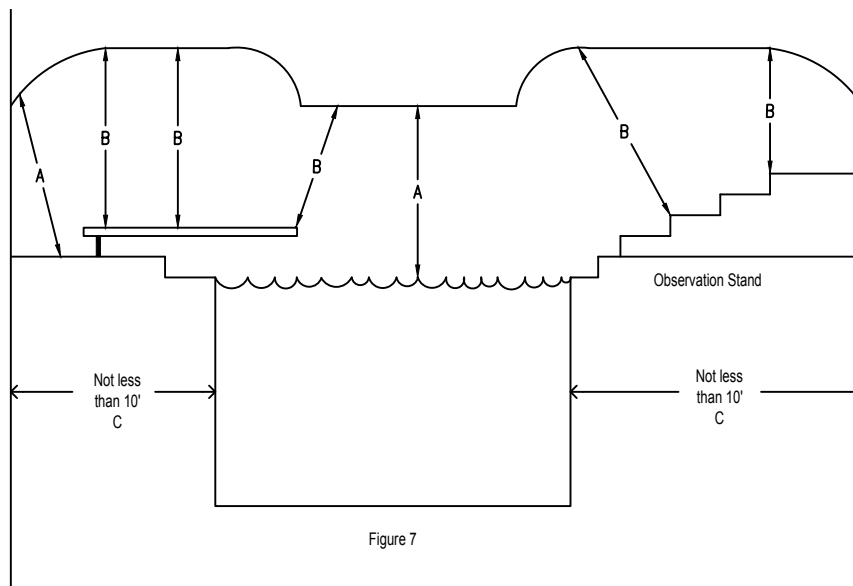
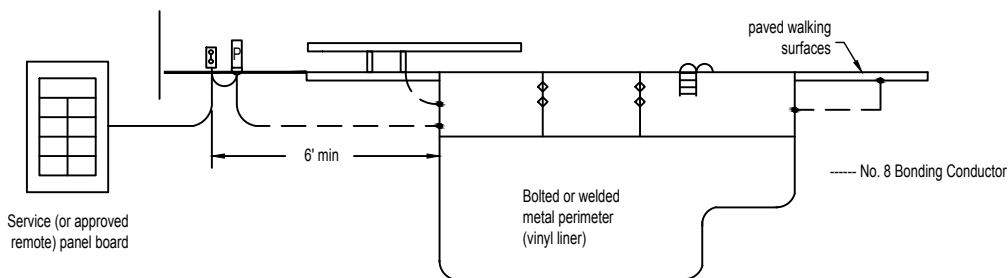
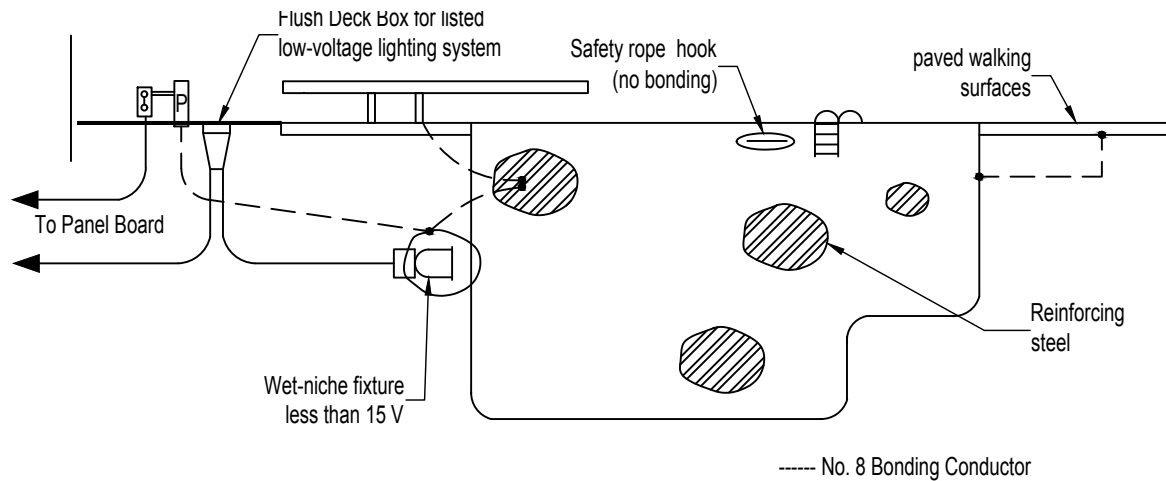


Figure 7



Equipotential Bonding Grid
Figure 8

Illustrated in Figure 8 is a metal perimeter pool with (e.g. steel or aluminum) bolted or welded sections. The metal perimeter serves as the common bonding grid to which the metal ladder, metal diving board and pump motor are connected. A receptacle that provides power for a water-pump motor shall be located at least 10 feet from the inside walls of the pool per CEC Article 680.22(A)(1), or not less than 6 feet if all conditions of CEC Article 680.22(A)(1)(1) thru (4) are followed.



Equipotential Bonding Grid
Figure 8A

- a. Equipotential bonding is required to be attached (bonded) to all metallic parts of the pool system by a conductor not smaller than 8 AWG to eliminate voltage gradients in the pool area which would include:
- 1) All reinforcing metal of the pool shell per CEC Article 680.26(B)(1).
 - 2) The equipotential bonding grid shall extend under paved walking surfaces for 3 feet horizontally beyond the inside walls of the pool per CEC Article 680.26(B)(2).
 - 3) All metallic parts of the pool structure, not addressed in 680.26(B)(1)(a)
 - 4) All Metal forming shells and mounting brackets of no-niche lighting fixture unless a listed low-voltage lighting system with nonmetallic forming shell not requiring bonding is used per CEC Article 680.26(B)(4).
 - 5) All metal fittings within or attached to the pool structure, isolated parts that are not over 4 inches in any dimension and do not penetrate into the pool structure more than 1 inch shall not require bonding per CEC Article 680.26(B)(5).
 - 6) Metal parts of electrical equipment associated with the pool water circulating system, including pump motors and metal parts of equipment associated with pool covers, including electric motors per CEC Article 680.26(B)(6).
 - 7) Metal wiring methods and equipment within 5 feet horizontally of the inside walls or within 12 feet vertically above the maximum water level of the pool or any observation stand, tower, platform or diving structure per CEC Article 680.26(B)(7).
- b. CEC Article 680.22(A)(3).
At least one receptacle shall be installed between 6 feet and 20 feet of a pool or spa and shall be protected by a ground-fault circuit-interrupter. See Figure 8.
- c. CEC Article 680.22(C).
Swimming pool and spa lighting outlets over and alongside pools and spas shall be protected by a GFCI.
- d. CEC Article 680.22(D).
Switching devices on the property shall be located at least 5 feet from the inside surface of pool or spa walls, unless separated by a solid fence or wall.
- e. CEC Article 680.26(B)(1).
All metallic parts of the pool structure, including the reinforcing metal of the pool shell, coping stones, and deck, shall be bonded. The usual steel tie wires shall be considered suitable for bonding the reinforcing steel together, and welding or special clamping shall not be required. This tie wires shall be made tight. If reinforcing steel is effectively insulated by an encapsulating nonconductive compound at the time of manufacture and installation, it shall not be required to be bonded.

- f. CEC Article 680.26(B)(5)
Metal conduit, metal-sheathed cables, metal piping, and all fixed metal parts that are within 5 feet of the inside walls of the pool or spa and that are not separated from the pool by a permanent barrier shall be bonded together to the common bonding grid.
- g. CEC Article 680.27(B)
Electrically operated pool covers.
 - 1) CEC Article 680.27(B) (1)
The electric motors, controllers, and wiring shall be located at least 5 feet from the inside wall of the pool unless separated from the pool or spa by a wall, cover, or other permanent barrier.
 - 2) CEC Article 680.27(B)(2)
The electric motor and controller shall be connected to a GFCI protected circuit.
- h. CEC Article 680.6.
The following equipment shall be grounded:
 - 1) Through-wall lighting assemblies and underwater lighting fixtures, other than those low-voltage systems listed for the application without a grounding conductor.
 - 2) All electrical equipment located within 1.5m (5ft) of the inside wall of the specified body of water.
 - 3) All electrical equipment associated with the recirculating system of the specified body of water.
 - 4) Junction boxes.
 - 5) Transformer enclosures.
 - 6) Ground-fault circuit interrupters.
 - 7) Panel boards that are not part of the service equipment and that supply any electrical equipment associated with the specified body of water.
- i. Approved Pool Alarms, where a wall of a dwelling serves as part of the barrier.
There are currently 4 different pool alarms approved by the County.
 - Pool Guard, Model DAPT, UL tested and listed, UL 2017
 - Techko or Telco, Model S087 SAFE POOL, ETL tested and listed, UL 2017
 - Yard Guard by Smart Pool, ETL tested and listed, UL 2017
 - Pool Alert by Doberman Security Products, UL 2017

6. Mechanical and Plumbing.

SCC (Sacramento County Code)
USPC (Uniform Swimming Pool and Spa Code)

- a. Wastewater Disposal USPC Section 313.0
No direct or indirect connection shall be made to any storm drain, sewer, drainage system, seepage pit, underground leaching pit, or subsoil drainage line from any line connected to a swimming pool unless approved by the administrative authority.
- b. USPC Section 312.1.8

- Listed plastic pressure water piping and socket fittings shall be not less than Schedule 40.
 - Listed plastic threaded circulating pipe and fittings shall be not less than Schedule 80.
- c. USPC Section 312.2
All transitions from metallic to plastic piping shall be by the use of plastic female to metallic male fittings or by the use of listed stainless steel mechanical compression coupling using a synthetic rubber electrometric-sealing sleeve.
- d. Turnover Time USPC Section 303
The entire design of matched components shall have sufficient capacity to provide a complete turnover of pool water in:
- Private pools 12 hours or less
 - Wading pools 2 hours or less
 - Private spas and hot tubs 1 hour or less
- e. USPC Section 412.7.3
Vent termination for fuel burning heaters shall be not less than 4 feet below or 4 feet horizontally from, nor less than 1 foot above any door, window, or gravity air inlet into any building.
- f. USPC Section 408.6
When swimming pool, spa, or hot tub heating equipment is installed with a shut off valve between the outlet of the heater and the pool, spa, or hot tub, a pressure relief valve shall be installed on the discharge side of the water heating equipment.
- g. USPC Section 412.1
Venting materials and methods are dependent on the operational characteristics of the gas utilization equipment. See the installation instruction of the equipment for clearance to buildings, openings in buildings and property lines.
- h. SCC 16.36.335 USPC Section 322.1
All pool, spa, and hot tub piping shall be inspected and approved before being covered or concealed. It shall be tested and proved tight to the satisfaction of the Chief Building Inspector under a static water or hydro-static air pressure test of not less than 35 psi. for 15 minutes.

Note: Do not air test PVC piping. Fill the system with water prior to adding air to 35 psi.

Exceptions:

- (1) All exposed equipment need not be tested as required in this section.
- (2) Pool and/or spa solar systems and their related above ground piping shall be tested under actual operating conditions.

7. 2013 Building Energy Efficiency Standards – Section 110.4 Mandatory Requirements for Pool and Spa Heating Systems and Equipment.

- a. Certification by Manufacturers.
Any pool or spa heating system or equipment may be installed only if the manufacturer has certified that the system or equipment has all of the following:
- (1) Efficiency.
A thermal efficiency that complies with the appliance efficiency regulations.

(2) On-Off Switch.

A readily accessible on-off switch mounted on the outside of the heater that allows shutting off the heater without adjusting the thermostat setting.

(3) Instructions.

A permanent, easily readable, and weatherproof plate or card that gives instructions for the energy efficient operation of the pool or spa and for the proper care of pool or spa water when a cover is used.

(4) Electric Resistance Heating.

Electric resistance heating shall not be installed unless meeting the exceptions below.

Exception No. 1.

Listed package units with fully insulated enclosures and with tight fitting covers that are insulated to at least R-6.

Exception No. 2.

Pools or spas deriving at least 60 percent of the annual heating energy from site solar energy or recovered energy.

(5) Pilot Light.

No pilot light shall be permitted.

b. Installation.

Any pool or spa heating system or equipment shall be installed with all the following:

(1) Piping.

At least 36 inches of pipe between the filter and the heater to allow for the future addition of solar heating equipment.

(2) Covers.

A cover for outdoor spas that have a heat pump or gas heater.

(3) Directional Inlets and Time Switches for Pools.

If the system or equipment is for a pool:

a. The pool shall have directional inlets that adequately mix the pool water.

b. The circulation pump shall have a time switch that allows the pump to be set to run in the off-peak electric demand period and for the minimum time necessary to maintain the water in the condition required by applicable public health standards.

Exception.

Where applicable public health standards require on-peak operation.

8. Solar Pool and Spa Heaters.

Uniform Solar Energy Code

All domestic solar water systems are required to have a tempering valve.

9. Allowed Pool and Spa Locations.

a. Sacramento County Zoning Code Section 305-85.

Location of Swimming Pools and Spas.

Swimming pools and spas shall not be located:

- Within a recorded setback except rear yards of through lots unless otherwise prohibited by a recorded subdivision map.
- Within a public utility easement or public easement.
Note: No excavation or structural portion of the pool may be located within the easement.
- Within the required front or side street yards.
- Within 3 feet of side or rear property lines except that the Chief of Building Official, may approve setbacks less than 3 feet from side or rear property lines as provided for the Swimming Pool Code, County Code 16.36.250. For the purpose of this section, setback shall be from the right-of-way line or property line to the water line.
- The provisions herein shall not affect codes of the Special Planning Areas as applicable.

b. Sacramento County Zoning Code Section 305-86.

Location of Swimming Pool and Spa Equipment.

Swimming pool and spa equipment may encroach into a front or side street yard not to exceed 5 feet providing said equipment is within a solid fenced yard or enclosure. This Zoning Code section permits such equipment to be a minimum of one foot from any side or rear property line.

c. Sacramento County Zoning Code Section 305-87.

Location of Mechanical Equipment other than Swimming Pool, Air Conditioning Equipment, and Spa Equipment.

Mechanical equipment other than swimming pool, air conditioning, and spa mechanical equipment may encroach into any yard not to exceed 5 feet and in no case shall the equipment be closer than 2 feet from any property line. However, the Environmental Health Division (EHD) reinforces noise standards in the unincorporated area of the County. These noise standards require that no mechanical equipment shall be located between the front and rear of the building where the equipment is within 12 feet of the interior side lot line. Exceptions granted by EHD are to be documented on the plot plan, with the exclusion of pool or spa pumps located 5 or more feet from the side property line.

d. Building Inspection Policies and Procedures document # CO-32. Miscellaneous Structures in Easements.

Swimming pool equipment, water, gas, return lines, and a deck that is not a structural part of a pool requires approval from Building Official.

e. Safety Glazing.

Provide safety glazing for glazing within 5 feet of the water line as per CBC Section 2406.4(9). and CRC Section R308.4(6).

10. Foundation Surcharges

The water line of any swimming pool or spa shall be a minimum of 3 feet from any structure that would cause a surcharge load on the pool or spa walls. If closer than 4 feet, the pool or spa plan shall include a surcharge schedule. See Figure 9.

The water line of a preformed fiberglass or vinyl liner swimming pool or spa shall be a minimum of 5 feet from any structure that would cause a surcharge load on the pool or spa walls. If located closer than 5 feet from a structure or affected by a surcharge because of pool depth, the plan shall include an engineered surcharge schedule.

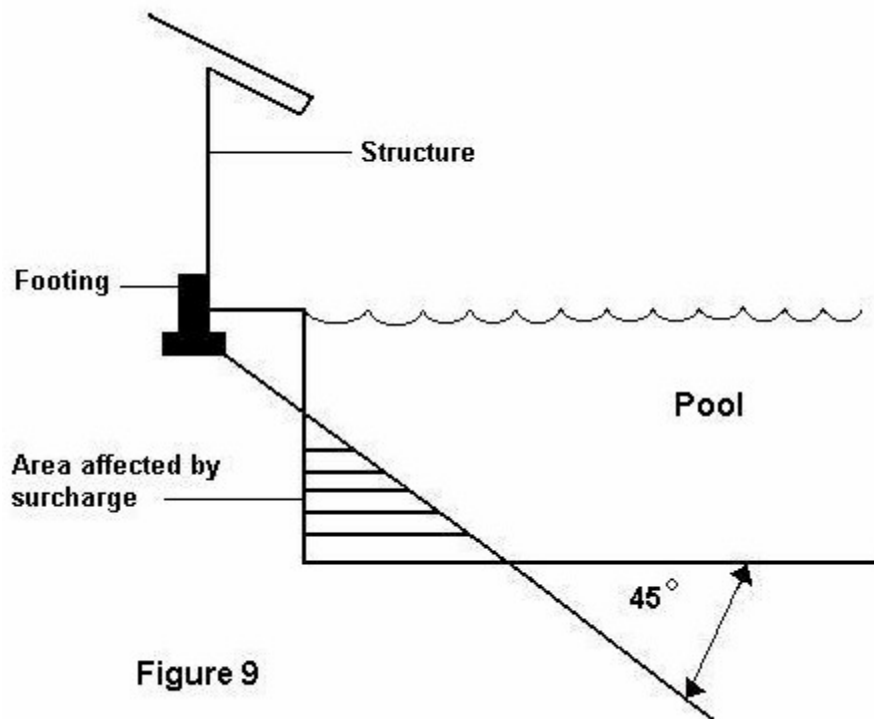


Figure 9

11. Checklist for Swimming Pool and Spa Inspections.

A. Pregunite.

(1) Structural Check::

- Location, excavation, and steel placement.
- Location of equipment pad.
- Grading and removal of excess soil to comply with Storm Water Pollution Prevention Program requirements.

(2) Plumbing Check:

- Return line, fill line, and all other piping (minimum 35lb pressure test).
- Gas piping installation and test (minimum 3lb with approved gauge).
- Any sewer or water line reroute will require a retest.
- All plumbing is required to be under test, full assembly.

(3) Electrical Check:

- Service drop clearance requirements. 22.5 feet above the pool if within 10 feet horizontal. (See Figure 7)
- Bonding of pool or spa steel, underwater light fixture forming shells, diving board, slide, fill line, equipment, and metallic objects located within 5 feet of the inside walls of a pool or spa.
- Electrical conduit for burial depth and CEC Standards.

- Check for approved listings for underwater light fixtures forming shells and that they are installed with the top of the fixture at least 18 inches below normal water level unless identified at a depth not less than 4 inches.
- Bonding Grid.
- Provide gate requirements to the owner.
- Specialty Pools such as vinyl liners or fiberglass must have alarms or barriers installed at this time.

B. Predeck.

Electrical Check

- Final bonding of diving board, grab rails and slides, disabled access inserts, and rope ties.
- Bonding Grid.

C. Preplaster (Fences, Gates or barriers alternates required to be installed at this time).

(1) Structural Check.

- The enclosure fence must be a minimum of 5 feet high and all gates must be self-closing and self-latching or padlocked and swing outward.
- * **“No-climb fencing” is not an acceptable barrier material.**

(2) Alarms

- Alarms meeting UL 2017 Standard are required at this time in conjunction with barrier requirements.

(3) Electrical Check

- For an underwater light fixture forming a shell, check for proper grounding, listed potting compound, and encapsulating and covering requirements.
- The required GFCI's must be installed.
- If fiber-optics are used and equipment is set, the pool can be finalized at this time.
- Light Niche Cord shall be long enough to service outside of the pool.

THE ABOVE IS TO BE SIGNED OFF PRIOR TO PLASTERING OF THE POOL OR SPA.

D. Final.

(1) Structural Check.

- Sidewalks.
- Final grading.
- Location of equipment in conjunction with property lines, structures, and windows.
- General appearance of the pool, spa, and decks.
- Solar.
- Required Barriers

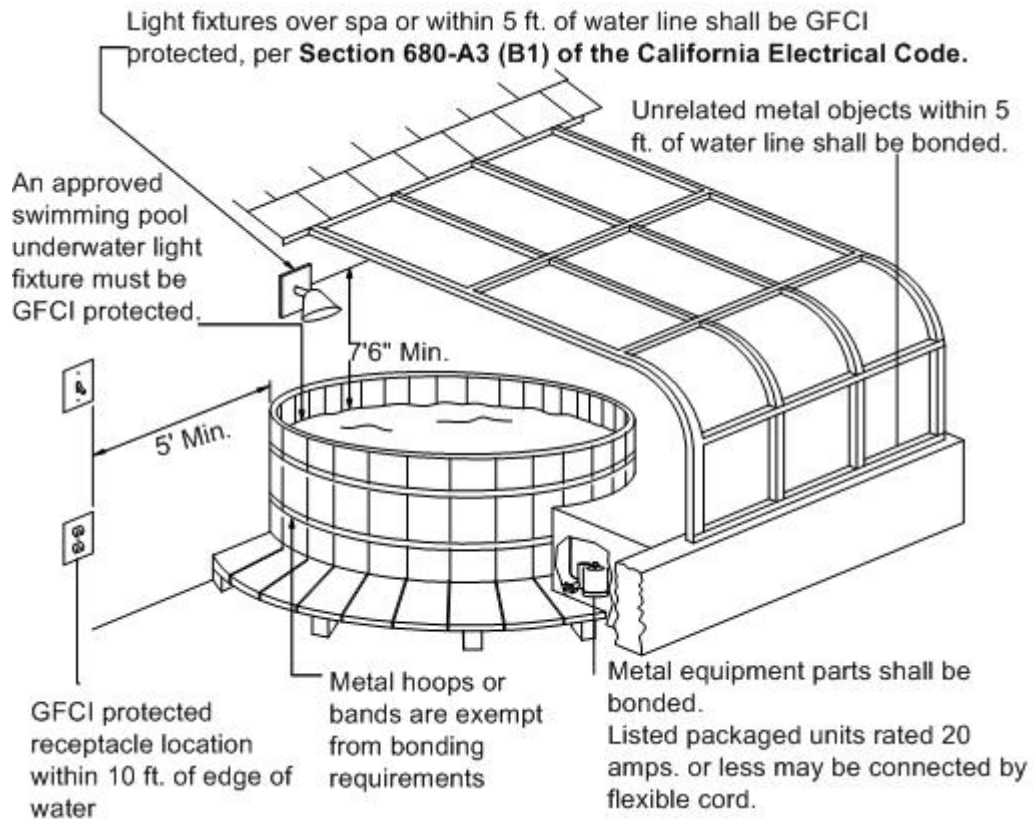
(2) Plumbing Check.

- Inspect all exposed piping for leaks.
- Approved gas valve.
- T & P relief valve on the heater (if required) and termination of the drain.
- Equipment secured to the equipment pad.
- Pool Cover Compliance with State energy laws.
- Proper gas connector.

- Prepare the PG&E utility tag. (If needed)
- Paint all PVC plumbing lines exposed to sunlight.

(3) Electrical Check.

- Service Drop Clearance requirements.
- Grounding and bonding complete.
- Main panel indexed at breakers.
- Proper operation of switches and receptacles.
- Installation of time clocks.
- Proper wire and breaker sizing.
- Required circuits GFCI protected.
- Pool light has low water cutoff.
- Pool or spa light properly GFCI Protected.



b. Lighting Fixtures, Lighting Outlets, and Ceiling Fans.

- (1) Lighting fixtures, lighting outlets and ceiling fans located over the spa or hot tub or within 5 feet (1.5 m) from the inside walls of the spa or hot tub shall be a minimum of 7 feet 6 inches (2.29 m) above the maximum water level and shall be protected by a ground-fault circuit-interrupter.

Exceptions:

- (1) Lighting fixtures, lighting outlets, and ceiling fans located 12 feet (3.66 m) or more above the maximum water level shall not require protection by a ground-fault circuit-interrupter.

- (2) Lighting fixtures meeting the requirements of items (a) or (b) below and protected by ground-fault circuit-interrupters shall be permitted to be installed less than 7 feet 6 inches (2.29 m) over a spa or hot tub.
 - a. Recessed fixtures with a glass or plastic lens and nonmetallic or electrically isolated metal trim, suitable for use in damp locations.
 - b. Surface-mounted fixtures with a glass or plastic globe and a nonmetallic body or a metallic body isolated from contact. Such fixtures shall be suitable for use in damp locations.

SACRAMENTO COUNTY CODE
Chapter 16.36 SWIMMING POOL CODE

16.36.010 Title.

This chapter shall be known and cited as the Sacramento County Code, Chapter 16.36, Swimming Pool Code (hereinafter referred to as "Pool Code"). (SCC 1475 § 15, 2011.)

16.36.020 Purpose.

The purpose of this Code is to provide minimum system standards to safeguard life, limb, health, property, and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation, and maintenance or use of swimming pools, spas and related equipment and appurtenances located within this jurisdiction. (SCC 1475 § 15, 2011.)

16.36.030 Definitions.

"Swimming Pool" or "Pool" means any structure intended for swimming, recreational bathing or wading that contains water 18 inches (457.2 mm) deep. This includes in-ground and above-ground structures and includes, but is not limited to, hot tubs, spas, portable spas and non-portable wading pools. (SCC 1475 § 15, 2011.)

16.36.040 Conflicts with Other Laws Or Ordinances.

In the event of any conflict between this Code and any law, rule or regulation of the State of California, that requirement which establishes the higher standard of safety shall govern. (SCC 1475 § 15, 2011.)

16.36.050 Adoption of the Uniform Swimming Pool, Spa and Hot Tub Code.

The 2009 Uniform Swimming Pool, Spa and Hot Tub Code as published by the International Association of Plumbing and Mechanical Officials, hereinafter referred to as "Swimming Pool Code," is hereby adopted and incorporated by reference herein. (SCC 1475 § 15, 2011.)

16.36.060 References.

Public, commercial and residential swimming pools shall comply with Health and Safety Code Sections 115920 through 115929.

Authority: Health and Safety Code Section 115920 et seq., AB3305, Statutes 1996, C.925.

Public and/or commercial swimming pools shall comply with the requirements of Section 3109 of the Building Code.

Public and residential swimming pools shall comply with the requirements of Article 680 of the Electrical Code. (SCC 1475 § 15, 2011.)