



## SWIMMING POOLS • SPAS • HOT TUBS Plan Submittal Checklist

### Planning and Building Department

#### Building Division

2200 Huntinton Drive, San Marino, CA 91108

(626) 300-0700

[www.cityofsanmarino.org](http://www.cityofsanmarino.org)

### Purpose

This handout summarizes the requirements for a complete plan review submittal for private residential swimming pools and spas in single-family homes. In-ground swimming pools will require a normal plan review submittal. Permits for above-ground hot tubs or spas may be issued over-the-counter provided all the code regulations and plan criteria are met. The following guideline shall be reviewed before commencing any work.

### Permits Required

A swimming pool permit is required for all indoor and outdoor swimming pools, and in-ground and above-ground spas or hot tubs.

### Additional Approvals

Planning Division                      Ph: (626) 300-0713

Contact Staff for verification of setback distances to property lines.

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### Plan Submittal for Construction

#### Plans for In-Ground Swimming Pools

- Site plan. Two (2) sets to include lot dimensions; setback distances from property lines and from other accessory building structures to the swimming pool. Location of all existing utility easements, existing/proposed retaining walls, and drainage. Locations of pool equipment, disconnects, breaker size, electrical panel, and gas meter. Location of electrical outlets within 20-ft of the pool; depth of pool.
- Structural Plans. Two (2) sets of stamped and wet-signed engineered calculations and steel schedule prepared by a CA Licensed Engineer.

#### Plans for Self-contained , Above-Ground (Portable) Spas or Hot Tubs

- Site plan. Two (2) sets to include lot dimensions; setback distances from property lines and building structures to the spa/hot tub. Location of all existing utility easements; disconnects, and breaker size. Receptacle outlets within 20-ft of the hot tub/spa; type of conduit; existing service panel and amperage.

*Please Note: Set back dimensions must be approved by the Planning Division prior to permit application submittal.*

### Plumbing, Mechanical & Energy Plans

#### Electrical Requirements (2019 CEC)

- Location and type of electrical service (underground or overhead).
- At least one 125 volt, 15 or 20 amp receptacle shall be located not closer than 6-

ft and not farther than 20-ft from the inside wall of the pool. (CEC Art. 680.22)

- Wiring for a single-family dwelling pool or spa shall be copper or aluminum.
- Underground wiring must be installed in Rigid Metallic Conduit or other approved method. (CEC Art. 680.21 (A)(1))
- All 15 and 20 amp, single phase receptacles located within 20-ft shall be GFCI. (CEC Art. 680.22(4))
- Overhead electrical conductors, clearances above water, steps, platforms, etc., must be per Figure & Table 680.9(A).

#### Plumbing Requirements (2019 CPC)

- Gas line sized per CPC Table 1215.2.
- 12-in minimum burial for underground gas lines.
- Gas lines within garage or house, exposed but protected from elements, may be black iron or galvanized piping.
- A gas shut-off valve within 6-ft of the heater.
- Hose bibs within 20-ft of water line must have an anti-siphon device.

#### Anti-Entrapment Requirements

##### New Swimming Pools & Spas

- At least two circulation drains per pump shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings, and are separated by a distance of at least 3-ft in any dimension between the drains.
- Suction outlets that are less than 12-in across shall be covered with anti-entrapment grates as specified in the ASME/ANSI Standard A112.19.8, which 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 & Spas

Suction outlet of the pool or spa shall be upgraded so as to be equipped with an anti-entrapment cover meeting current standards of the ASME (American Society of Mechanical Engineers).

#### Enclosures Requirements (2019 CBC, SB 442)

##### I. Barriers for Outdoor Swimming Pools, In-Ground Spas or Hot Tubs

The swimming pool or spa area, or the entire property or yard area on which it is located, shall be equipped with a perimeter yard barrier meeting the following: (CBC Section 3109.2 115923)

- 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.
- A minimum height of 60 inches.
- A maximum vertical clearance from the ground to the bottom of the enclosure of two inches.
- Gaps or voids, if any, do not allow passage of a sphere equal to or greater than four inches in diameter.
- An outside surface free of protrusions, cavities, or other physical characteristics that would serve as hand holds or footholds that could enable a child below the age of five to climb over.

##### II. Barriers for Self-contained Spas or Hot Tubs

Provided the self-contained spa or hot tub is equipped with a **listed safety cover**, it shall be exempted from the barrier requirements. If no cover information is available, follow the same barrier protections as for a swimming pool.

##### III. Safety Features

The swimming pool or spa shall be equipped with at least **two of seven** drowning prevention safety features required by SB-442 and CBC Section 3109.2 and Section 3109.2.1.

1. The pool shall be isolated from access by an enclosure that meets all of the following:
  - Have a minimum height of 60-in.
  - Have a maximum vertical clearance from the ground to the bottom of the enclosure of 2-in.

- Gaps or voids, if any, do not allow passage of a sphere equal to or greater than 4-in in diameter.
  - 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.
  - Access gates through the enclosure shall open outward away from the pool and shall be self-closing and have a self-latching device placed no lower than 60-in above the ground.
2. The pool shall incorporate removable mesh pool fencing that meets ASTM Specifications F2286 in conjunction with a gate that is self-closing and self-latching that can accommodate with a key lockable device.
  3. The pool shall be equipped with an approved safety pool cover that meets all of the requirements of the ASTM Specifications F1346 and hot tubs or spas shall have a locking safety cover that complies with ASTM Emergency Performance Specification ES 13-89.
  4. The residence shall be equipped with exit alarms on those doors providing direct access to the pool.
  5. 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.
  6. Have 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 F2208 "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 the items 1-4 above, and have been independently verified by

an approved testing laboratory as meeting standards for those devices established by the ASTM or the ASME.

## Inspection Guidelines

### Indoor or Outdoor Swimming Pools

1. **Pre-Permitting Site Inspection.** Required prior to the issuance of a permit. The applicant shall schedule the site inspection after being notified that the plans have been approved by all the Departments. The inspection will ensure there are no concerns with slope, access to pool, existing easement locations, etc.
2. **Pre-Gunite.** Steel (rebar) placement; plumbing under pressure test. A minimum pressure test of 50 PSI for 15 minutes for water line and 10 PSI for 15 minutes for gas line will be performed. Electric installed; bonding of pool and spa steel.
3. **Pre-deck.** Steel (grid structure), all plumbing and electric must be installed.
4. **Pre-plaster.** Prior to filling the pool with water, verify barrier installation (e.g., fence, gates, door alarms).
5. **Final.** Final grading; location of all equipment is in operation; pool must be filled.

*Please Note: Fiberglass swimming pools must have all barriers and safety features in place prior to filling in with water.*

### Spas and Hot Tubs

1. **Underground Electrical & Plumbing .** Required if plumbing lines or electric lines are placed underground.
2. **Final.** Approved safety cover or other barrier installation; all equipment operational.

## Questions

Contact the **Building Division** at (626) 300-0712 for inquiries on plan check submittal and fees.

## OVERHEAD CONDUCTOR CLEARANCES

- Service-drop conductors, overhead service conductors, and open overhead wiring, shall comply with the minimum clearances given in Table 680.9(A) and illustrated in Figure 680.9(A).

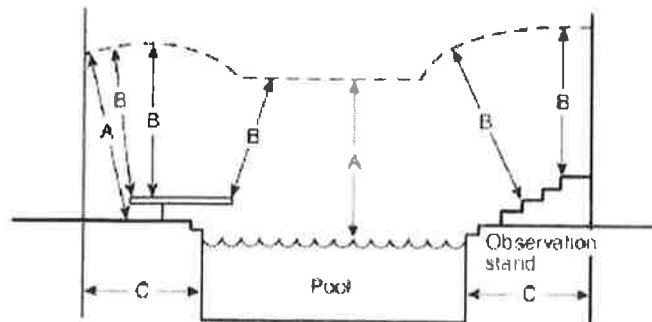


Figure 680.9(A) Clearances from Pool Structures.

Table 680.9(A) Overhead Conductor Clearances

Clearance Parameters	Insulated Cables, 0-750 Volts to Ground, Supported on and Cabled Together with a Solidly Grounded Bare Messenger or Solidly Grounded Neutral Conductor		All Other Conductors Voltage to Ground			
			0 through 15 Kv		Over 15 through 50 kV	
	m	ft	m	ft	m	ft
A Clearance in any direction to the water level, edge of water surface, base of diving platform, or permanently anchored raft	6.9	22.5	7.5	25	8.0	27
B Clearance in any direction to the observation stand, tower, or diving platform	4.4	14.5	5.2	17	5.5	18
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 <b>not less</b> than 3 m (10 ft)					