

## Residential Swimming Pool Enclosure Requirements and Safety Features

### 1. Definitions:

**Approved Safety Pool Cover.** Means a manually or power-operated safety pool cover that meets the performance standards of the American Society for Testing and Materials (ASTM), in compliance with Standard F1346-91.

**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.

**Note:** Burglar alarm systems do not meet these requirements.

**Suction Outlet.** Means a fitting or fixture typically located at the bottom or on the sides of a swimming pool that conducts water to a recirculating pump.

**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 non-portable wading pools. Aboveground prefabricated pools less than 24" deep are exempt from permit requirements.

### 2. General:

For the purposes of these requirements, all swimming or similar pools shall be considered as structures and all the provisions, conditions and requirements of this code applying to structures shall apply to such pools.

### 3. Pool and pool equipment location.

1. Site plan shall be included to indicate lot dimensions, location of all existing buildings, public utility easements, any existing/proposed retaining walls and site drainage.
2. Setback distances from all property lines and building structures to the swimming pool; include any glazing surfaces (provide tempered/safety glazing for windows and doors less than 60-in above the pool side and within 5-ft to water's edge of pool).
3. Enclosure information such as fences, gates, doors exiting to pool area - including garage doors - and exit alarm mechanism.
4. Location of pool equipment disconnects and breaker size; receptacle outlets within 20-ft of the pool; type of conduit (metal or plastic); existing service panel and amperage (underground or overhead); location, size and material type for any gas piping systems
5. Location of A/C or other mechanical equipment within proximity of pool location (Equipment bonding if within 5 feet of water's edge.)
6. Location of hose bibs within 20-ft of the pool.
7. Structural plans, construction details and steel schedule stamped and signed by a licensed engineer.

#### **4. Damage to public property.**

Damage to public property such as sidewalks, curb and gutter within city landscaping easements must be repaired to the specifications and satisfaction of the Development Engineering division prior to final inspection.

#### **5. Safety glazing.**

Glazing in walls and fences used as part of the enclosure for an indoor or outdoor swimming pools and spas shall require safety glazing when the following conditions are present:

1. The bottom edge of the glazing is less than sixty (60) inches above the pool and the glazing is within five (5) feet of a swimming pool or spa water's edge.

#### **6. Construction Permit Safety Features Required**

As per the City Municipal Code Title 16 section 16.10 "Swimming Pool Safety Act, Appendix V" All swimming pools and spas are required to be provided with an enclosure which prevents access to the pool from the dwelling. The fence or enclosure must be installed and comply with the requirements of section 7 of this form. **In addition to the enclosure, the pool or spa shall be equipped with at least (2) two of the following (6) six drowning prevention features:**

Exception: Hot tubs or Spas equipped with locking safety covers that comply with the American Society for Testing Materials (ASTM F1346).

1. The pool or spa shall incorporate removable mesh pool fencing that meets American Society for Testing and Materials (ASTM) Specifications F2286 standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
2. The pool shall be equipped with an approved, automatic or manual safety pool cover that meets all requirements of the ASTM Specifications F1346-91.
3. The residence, or building providing access, shall be equipped with exit alarms on those doors providing direct access to the pool or spa.
4. All doors providing direct access from the home to the swimming pool or spa shall be equipped with a self-latching, self-closing device with a release mechanism placed no lower than fifty-four (54) inches above the floor.
5. 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 Specifications for Pool Alarms" which includes surface motion, pressure, sonar, laser and infrared type alarms. For purposes of this code, "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.
6. Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the features set for the above, and have been independently verified by an approved, nationally recognized testing laboratory as meeting standards for those devices established by the ASTM or the American Society of Testing Mechanical Engineers (ASME).

Prior to the issuance of any final approval for the completion of permitted construction or remodeling work, the Building Official shall inspect the drowning safety prevention devices required by code and if no violations are found, shall give final approval.

#### **7. Enclosure; required characteristics.**

An enclosure shall have all the following characteristics:

1. Any access gates through the enclosure shall open away from the swimming pool or spa and must be a minimum sixty (60) inches tall with a gate that is self-closing including a self-latching device placed no lower than sixty (54) inches above the ground.
2. A maximum vertical clearance from the ground to the bottom of the enclosure of two (2) inches. Gaps or voids, if any, do not allow passage of a sphere equal to or greater than four (4) inches in diameter.

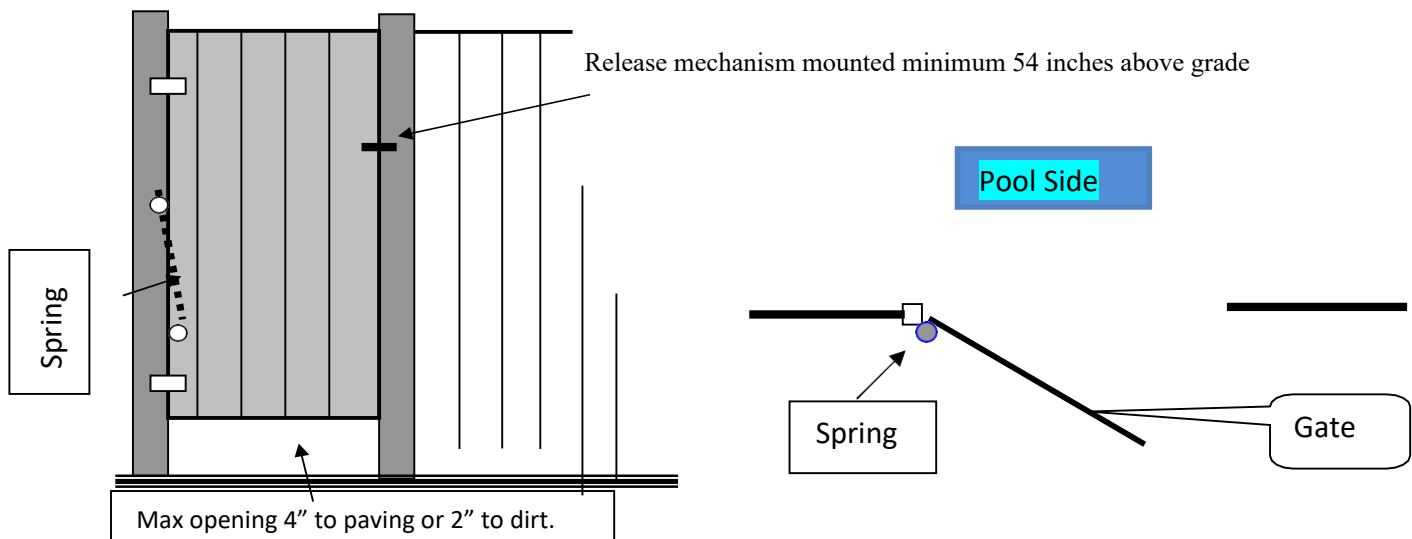
3. An outside surface free of protrusions, cavities or other physical characteristics that would serve as handholds or footholds that could enable a child below the age of five (5) years old to climb over.

### 8. Construction requirements for building a pool or spa.

Whenever a building permit is issued for the construction a new swimming pool or spa, the pool or spa shall meet all the following requirements:

1. The swimming pool or spa shall either have at least two circulation suction outlets 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 suction outlets, or be designed to use alternatives to suction outlets including, but not limited to, skimmers or perimeter overflow systems to conduct water to the recirculation pump.
2. Suction outlets shall be covered with anti-entrapment grates, as specified in the ANSI/APSP-16 performance standard or successor standard designated by the Federal Consumer Product Safety Commission, that cannot be removed except with the use of tools. Slots of 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.
3. Any backup safety system that an owner of a new swimming pool or spa may choose to install in addition to the requirements set forth in items one through four above shall meet the standards as published in the document, "Guidelines for Entrapment Hazards: Making Pools and Spas Safer," Publication Number 363, March 2005, United States Consumer Products Safety Commission.
4. Whenever a building permit is for the remodel or modification of any existing swimming pool, toddler pool, or spa, the permit shall require that the suction outlet or suction outlets of the existing swimming pool, toddler pool, or spa be upgraded so as to be equipped with anti-entrapment grates, as specified in the ANSI/APSP-16 performance standard or a successor standard designated by the federal Consumer Product Safety Commission.

### 9. Self-Closing, Self-Latching Gates Regulations: Swing Gate Away from Pool



# Swimming Pools, Hot Tubs and Spas Checklist

## Plans Submittal Requirements

- A complete set of plans stamped and signed by a California licensed engineer. The plans can be wet-stamped/signed or electronic stamped/signed. Include construction details, steel schedule with a Site Plan attached. Construction details, steel schedule must be appropriately highlighted.

## Site Information

Site Plan to include the following items:

- Dimensions of all property lines; north arrow; distance between the pool/spa and the property lines.
- All fixed metal parts (Patio covers, Metal fences, A/C condenser, etc.) within **5-ft** proximity of the pool shall be separated by a permanent barrier or bonded. CEC 680-26 (B)(7)
- Type of electrical service, (underground or overhead).
- Location of electrical panel and gas meter.
- Distance between pool and house as well as any glazing surfaces, including windows and doors of residence (**tempered** glazing required for windows and doors less than 60-in above the pool side and within 5-ft to water's edge of pool).
- Location of electrical panel and gas meter.
- **Exit alarms** for any doors leading from the dwelling or direct access to the pool area, including garage doors.
- Pool fencing indicating height of fence (60"), height of gate with a locking latch (54") above grade, direction of gate swing (must swing **away** from pool) and indication that fence gate is **self-closing** and **self-latching** (vehicle gates leading to pool area must also be self-closing/self-locking). If fencing is other than a wood-fence, it must be no more than 2-in from the adjacent ground and have rails spaced no more than 4-in apart, per section 7.
- Show (2) additional safety features per section 7.
- Show **depth** of the pool and/or spa on the plans

## 2019 California Energy Code Requirements per 150 (p):

- **Pool and/or Spa Size in Gallons:** The pool and/or spa size, in gallons, must be on the plans.

## 2019 California Electrical Code Requirements:

- **Equipotential Bonding Grid:** Information regarding bonding must be on the plans. Note: Perimeter Surfaces shall extend (3 ft) horizontally beyond the inside walls of the pool and shall include **unpaved surfaces** as well as poured concrete and other types of paving *Note:* reinforcing steel and copper conductor grids are required to be attached to the pool structure at minimum of (4) points uniformly spaced around the perimeter of the pool