



## Pool & Spa Submittal Requirements

### I. Plan Design and Submittal Requirements

Provide two (2) sets of one sided fully dimensioned plans, drawn to scale, at a minimum of 11" x 17" size paper (*California Building Code 107.2.1*) and one (1) plot plan for the Assessor's Copy. Plans to include:

- Title Sheet
- Electrical Specifications
- Plumbing Specifications
- Plot/Site Plan
- Title 24 Energy Information
- Pool Structural Plan
- Accessory Structure Specification
- Manufacturer/Equipment Specifications

#### Required Clarity of Plans: (*California Building Code 107.2.1*)

- All submitted plans are required quality blue or black line drawings with uniform and light background color.
- No pencil or erasable media.
- Minimum lettering size of 1/8".
- All hand written and/or hand drawn plans require block print font precise drafting.
- All sticky back details must be produced prints without contrasting shades of background color.
- Please remove notes/information not applicable to the proposed scope of work.

Provide Planning Department Approval for this Project. Please contact the Planning Department directly to coordinate approval(s).

**[For Commercial Only]** Provide written evidence from Riverside County Health Department, approving the swimming pool and/or spa construction or alteration for this Project. Contact the Health Department directly at: (760) 863-7000.

Preparer's Signature. All construction documents (plans) shall bare the appropriate stamp and signature for architects/engineers for structural elements/other systems and/or contractor's license number and signature for non-structural pool/spa systems. Unlicensed individuals are prohibited from designing pools/spas and associated systems. (*Business and Professions Code §5537*)

## II. Title Sheet / Site Plan Requirements

- Please provide a complete site plan, include all property lines, easements, structures, pool equipment, equipment screen walls, overhead lines etc. (*California Building Code §107.2.5*)

Dimension all structures from the pool edge including overhangs and eaves. Site plan shall bear the name and wet signature of the plan preparer.

- Provide a note on the plans that the proposed construction will conform to the current codes:

## III. Pool Shell (Vessel) Construction

- The licensed professional must stamp and sign all structural plans.
- The Structural Engineer of Record and/or Contractor is required to strike-out all engineering details and tables not applicable to this project.

**Note:** *Any structural not included in the "boiler plate" engineering sheet must be specifically addressed by the Engineer/Architect of Record.*

- Identify pool depths within the footprint of the pool.
- All notes and details must be legible.

## IV. Electrical, Plumbing, and Mechanical Requirements:

### Electrical

- Provide sufficient general and specific electrical notes within the plan set to fully identify and demonstrate all electrical equipment, receptacle, lighting, grounding, and bonding per Article 680 of the 2013 California Electrical Code.
- Identify and demonstrate all outlets, receptacles, and lighting within the plan set (CEC §680.22).
- Identify and demonstrate all underwater lighting (CEC §680.23).
- Identify and demonstrate all equipotential bonding (CEC §680.26).
- Identify all conduit & conductor type/size serving pool/spa equipment.
- A single line diagram is required when adding a sub-panel. Provide location of the existing service panel and the new sub-panel.
- Provide 36" working clearances for the pool equipment disconnect and subpanel (California Electrical Code §110.26).
- Overhead utility/service lines must comply with California Electrical Code ~ Table 680.8 for Overhead Conductor Clearances. If none exist, please state clearly on the site plan.

### **Mechanical/Plumbing**

- Provide manufacturer's equipment specifications for all heaters and pumps.
- Provide gas isometric with type of material, length of pipe, BTU demand, etc. (California Plumbing Code ~ Table 12-8)
- For a proposed gas fire pit identify location and provide appliance/equipment shutoff valve approval listing number. (California Plumbing Code §1212.5)
- Please note on the plan, "All equipment shall be seismically anchored."

## **V. SAFETY BARRIER REQUIREMENTS**

- Indicate the method of providing a pool safety barrier (The Building Department will require applicants to declare on the permit which method of drowning prevention safety feature(s) will be provided, per Swimming Pool Safety Act 115920 of the California Health and Safety Code Effective 1-1-2007).
  1. Enclosure
  2. Removable Mesh Fencing
  3. Safety Cover
  4. Exit Alarms
  5. Self-closing, Self-latching doors
  6. Swimming Pool Alarms
  7. Other Means of Protection
- Provide location of anti-entrapment/vortex covers meeting current standards of the American Society for Testing and Materials (ASTM) or the American Society of Mechanical Engineers (ASME). Identify a minimum 3 foot separation between all drains and note hydraulically balanced.
- **SEE ADDITIONAL SHEET FOR FURTHER BARRIER REQUIREMENTS**

## **VI. Title 24 – Energy Requirements (2013 Energy Standards)**

All swimming pool and spas projects are required to conform to the 2013 California Energy Code.

- Identify and demonstrate within the plan set compliance with the 2013 California Energy Code and 2013 Energy Standards. Include all Mandatory Measures (MF-1R) for Pool and Spa Heating Systems and provide the required energy compliance forms:

The following links are being provided as a resource:

- California Energy Commission Website:

<http://www.energy.ca.gov/title24/2013standards/index.html>

- California Energy Commission Contacts:

<http://www.energy.ca.gov/efficiency/contacts.html>

- California Energy Swimming Pool and Spa Compliance Form

[http://www.energy.ca.gov/title24/2013standards/res\\_compliance\\_forms/CF2R/2013-CF2R-PLB-03-PoolAndSpaHeatingSystems.pdf](http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF2R/2013-CF2R-PLB-03-PoolAndSpaHeatingSystems.pdf)

- Pool Systems and Equipment

All residential pool systems and equipment shall comply with California Energy Code §150(p) for:

1. Pump sizing
2. Flow rate
3. System piping
4. Filters
5. Valves

## BARRIER REQUIREMENTS

**Drowning is the leading cause of accidental death for children under five (5) years of age in California. Over 4,600 drowning and near-drowning incidents occur nationwide each year in private swimming pools. The use of effective residential swimming pool barriers in conjunction with adult supervision is the best way to minimize these accidents.**

An outdoor swimming pool, including an in-ground or above-ground pool, hot tub or spa shall be provided with a barrier that shall comply with the following:

- The top of the barrier shall be at least sixty inches (60") 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 two inches (2") measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier may be at the ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be four inches (4").
- Openings in the barrier shall not allow passage of a four-inch (4") diameter sphere.
- Solid barriers which do not have openings, such as masonry or stone walls, shall not contain indentations or protrusions except for tooled masonry joints.
- Where the barrier is composed of horizontal members (cross rails) and the horizontal spacing is less than forty five inches (45"), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed one and three fourths (1 $\frac{3}{4}$ ") inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed one and three fourths (1 $\frac{3}{4}$ ") inches in width.
- Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members (cross rails) is forty five inches (45") or more, spacing between vertical members shall not exceed four inches (4"). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed three-fourths inches ( $\frac{3}{4}$ ") in width.
- Access gates shall comply with the requirements of Items 1 through 7 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 fifty four inches (54") from the bottom of the gate, the release mechanism shall be located on the pool side of the gate at least three inches (3") below the top of the gate and the gate and barrier shall have no opening greater than one half inch ( $\frac{1}{2}$ ") within eighteen inches (18") of the release mechanism.
- Where a wall of a dwelling serves as part of the barrier, doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and its screen, if present, are opened. The alarm shall sound continuously for a minimum of thirty (30) seconds immediately after the door is opened, and be capable of being heard throughout the house during normal household activities. 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 for no more than fifteen (15) seconds. The deactivation switch shall be located at least fifty four inches (54") above the threshold of the door. Other means of protection, such as self-closing doors with self-latching devices approved by the Building Official, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by the alarm system described above.