

City of Santa Barbara Building & Safety Division **Residential Pool and Spa Plan Submittal & Barrier Requirements**

General Requirements:

- □ This handout is a <u>summary</u> of Private Swimming Pool and Spa building code requirements. Please review Section 3109 of the 2019 CBC (as referenced by Appendix V of the 2019 CRC) and SBMC Ordinance #5919 for detailed requirements. For Public Pool Barrier Requirements see Section 3109 of the 2019 CBC. Please note, Santa Barbara County Public Health Department must approve all <u>Public</u> Pools and Spas.
- □ Plans must be complete, accurate, and drawn to scale.
- Pools and Spas are subject to all applicable requirements in the Residential Plan Submittal Requirements handout. Please see that document for a more detailed list of the information required on plans and site plan requirements.

Barrier Requirements {CBC 3109}:

Where new fencing is required because of a pool or spa installation, the permit for that fencing shall be obtained prior to, or concurrently with, the building permit for the pool. No water shall be placed in any pool or spa prior to the installation of safeguards specified on this handout and the approval of all associated work. The protective fencing enclosure is required around the entire pool, built-in spa, portable spa or yard as described below.

- □ 115923. An enclosure shall have all the following characteristics:
 - (a) Any access gates through the enclosure open away from the swimming pool, and, are self-closing with a selflatching devices placed no lower than 60 inches above the ground.
 - (b) A minimum height of 60".
 - (c) A maximum vertical clearance from the ground to the bottom of the enclosure of two inches.
 - (d) Gaps or voids, if any, do not allow the passage of a sphere equal to or greater than four inches in diameter.
 - (e) 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.
- □ 115922. When a building permit is issued for the construction of a new swimming pool or spa or the remodeling of an existing pool or spa at a private single-family home, the respective swimming pool or spa shall be equipped with at least two of the following seven drowning prevention safety features:
 - □ An enclosure that meets the requirements of Section 115923 and isolates the swimming pool or spa from the private single family home.
 - □ Removable mesh 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.
 - □ An approved safety pool cover, as defined in subdivision (d) of Section 115921.
 - Exit alarms on the private single-family home's doors that provide direct access to the swimming pool or spa. The exit alarm may cause either an alarm or a verbal warning, such as a repeating notification that "the door to the pool is open."
 - □ A self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor on the private single-family home's doors providing direct access to the swimming pool or spa.
 - □ An alarms that, when placed in a swimming pool or spa, will sound upon detection of accidental or unauthorized entrance into the water. The alarm shall meet and be independently certified to the ASTM Standard F2208 "Standard Specifications for Residential Pool Alarms," which includes surface motion, pressure, sonar, laser, and infrared type alarms. A swimming protection alarm feature designed for individual use, including an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water, is not a qualifying drowning prevention feature.
 - Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the features set forth above and has been independently verified by an approved testing laboratory as meeting standards for those features established by the ASTM or the American Society of Mechanical Engineers (ASME).
- □ **Barrier Exception:** Per Section 115925, hot tubs and spas with locking safety covers that comply with the American Society of Testing and Materials (ASTM F1346) shall be exempt from the drowning prevention safety features shown above.

Plumbing Requirements:

- Provide pool piping schematic layout throughout site with all pipe sizes shown and types of material to be used. {CPC 103.3}
- □ Provide identification of the pool water piping fill line. {CPC 103.3}
- □ Provide anti-siphon devices on unprotected hose bibs on property. {CPC 603.5.7}
- Discharge and drainage water from pools and spas must drain into the community sewer system.
- □ Provide on the fill line or nearest adjacent hose bib a Reduced Pressure Principle Assembly per {CPC 603.5.20}
- □ Each outlet on a non-potable water line which may be mistakenly used for drinking or domestic purpose shall be posted: "CAUTION NONPOTABLE WATER, DO NOT DRINK" {CPC 601.3.2}
- Gas piping schematic shall be drawn with BTU demand, Max linear feet, size of piping, and point of connections. {CPC 1208.1}
- Provide California Energy Form CEC-CF2R-PLB-03-E filled out in entirety and scanned into plans. {CEnC & CBC 3109.4.4.8 (3)}
- Provide an approved method for draining the pool & spa into City sewer system. This can be by means of a 3" clean out and pool system drain with a 4" air gap to clean out.

Electrical Requirements:

- □ Indicate on the plot plan the location and amperage of any existing or proposed electrical service. Show the location of any utility pole(s) and service entrance conductors. {CEC 220, 680.8, 680.10}
- □ Indicate on plot plan any existing overhead wires and their height above the water. {CEC 680.8}
- □ Show required workspace in front of all electrical equipment. {CEC 110.26}
- □ Show feeder(s) to sub-panel(s). Indicate raceway and conductor sizes and types. {CEC 215 & 310}
- Provide a panel schedule or branch circuit diagram and show all over current devices for pumps, lights and controllers including relays and timers. {CEC 240, 310, 408.4 & 680.9}
- □ Provide an equipment schedule, including any underwater luminaires, with equipment voltages and amperages. {CEC 210, 220, 430 & 680.9}
- □ Indicate all items to be connected together with #8 AWG bare solid copper conductor to establish equipotential bonding including the reinforcing steel, handrails, ladders, motors, fixture shells, etc. Stipulate what element with minimum conductive surface area of 9 square inches will be in direct contact with the pool water. {CEC 210, 310, 430, 680.26 & 680.9}
- Provide an accessible means to disconnect power from the motors and controllers that is within sight from the pool, spa, or hot tub equipment, at least 5 feet horizontally from the inside walls of the pool, spa, or hot tub. {CEC 430.102 680.12 & 680.40}
- Provide and show the location on the plan of at least one GFCI protected receptacle outlet located between 6 and 20 feet from the inside wall of a pool, hot tub or spa installed outdoors and between 6 and 10 feet for a hot tub or spa installed indoors. {CEC 680.22, 680.43}
- □ Indicate the type of raceway(s) to be installed for any underwater luminaires. {CEC680.23}
- Show branch circuit conduit and wiring sizes and types to all pool related equipment, motors, lighting, receptacle outlets, lighting receptacle outlets, pool cover motors and controllers, etc. Show the quantity and size(s) of conductors in each conduit. {CEC 210, 310, 430, 680.2 &680.9}
- □ Note on the plans that branch circuitry shall be installed as shown on the approved plans and not be combined in larger conduits. {CEC 300.17, 310.15, 680.23(F)(3)}
- □ Show GFCI protection for the electrically operated pool cover and that its controller is within sight. {CEC 680.27(B)}
- □ GFCI protection is required for all single-phase pool pump motors connected by cord or hard-wired to 15 or 20 amp branch circuits operating at 120 volt through 240 volts. {CEC 680.21(C)}
- □ Show all exterior lighting fixtures within 10 feet of pool or spa. All lighting of the pool area shall be so hooded that the light does not shine towards adjacent properties and public right-of-ways. {CEC 411.4(B), 680.22(B)}
- □ Show the elevations(s) of any underwater luminaires in relation to normal water level. {CEC 680.23}
- Show the location(s) of any junction boxes for pool / spa lighting connected to underwater luminaires. Indicate distance from inside face of pool / spa and minimum elevation above ground level, pool deck or maximum water level. {CEC 680.23, 680.24}
- □ Show the location on the site plan of switch, timeclock or other device controlling pool / spa lighting. {CEC 680.22}
- □ Show GFCI protection for any branch circuit serving pool / spa lighting operating at more than 15 volts. {CEC 680.2}
- □ Note that all wet-niche luminaires shall be removable from the water for inspection, relamping, or other maintenance. The location of the forming shell and the length of cord in the forming shell shall permit personnel to place the luminaire in a dry location that is accessible without entering the water. {CEC 680.23(B)(6)}