



# Pool and Spa Construction and Inspection Guide

# BI-21

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CBC 2007

## LOCATION:

1. Pool and equipment shall be not less than 5 ft. from property line. Requires 5 ft. fence.
  - a. *(The five (5) feet distance from the property line may be reduced when the equipment is soundproofed to the satisfaction of the City Building Official and the degree of soundproofing is demonstrated in an acoustical report approved by the City Building Official)*
2. Pool and Spa equipment shall be placed in sound barrier enclosure such as a solid grouted block wall.
3. Overhead wires shall not be within 20 ft. of pool.
4. Provide 120V receptacle between 10 ft. and 20 ft. from water with G.F.C.I.

## SHOTCRETE (PRE-GUNITE):

1. Use expansive soil schedule for steel reinforcement of the pool/spa.
2. Uniform clearance of steel (minimum  $2\frac{1}{2}$  inches from earth). Steel held firmly in place. See 2007 CBC, Section 1913.4.2.
3. If ramp is at deep end, extra steel required.
4. If pool is in angle of repose of building or wall, extra steel required per engineering plans.
5. Is main drain line recessed for uniform steel clearance and uniform concrete dimension?
6. Pressure test pool/spa piping system (35 p.s.i. for 15 minutes).

## PRE-DECK INSPECTION

1. Use K copper and plastic pipe. Copper-depth of lines to be 12 inches under concrete.
2. Water pipe shall be copper within 5 ft. of pool heater.
3. Electric wiring shall be in plastic conduit. Steel risers wrapped.
4. Use tracer wire (Minimum #18 copper plastic covered) with polyethylene (PE) gas line for natural gas only. Transition risers shall be metallic and shall be wrapped at 6" above grade.
5. Pressure test gas line (10 p.s.i. for 15 minutes). Underground PE gas line, 15 p.s.i. for 15 minutes.
6. P-trap and back wash required and must drain into sewer.

## FINAL INSPECTION:

1. Pool enclosure/barrier shall be 5 ft. high with maximum 4 in. clear between vertical spacing; self-closing and latching gates with inside latch at least  $4\frac{1}{2}$  ft. high from surface.
2. Provide electrical receptacle no closer than 10 ft. or no farther than 20 ft. from pool for use as a service receptacle. Provide G.F.C.I. protection. Motors, heaters to be bonded to copper pipe.

3. Health Department requirements shall be met on semi-public and public pools.
4. Provide waterproof switches and plugs, if exposed.
5. Decks shall drain to pool property only, **or** to street via non-erodible drains or ducts.
6. Metal equipment within 5 ft. of pool shall be bonded.

**NEW STATE ENERGY REGULATIONS FOR SWIMMING POOLS**

SOURCE: California Administrative Code, Title 24, Part 6, Article 1,  
Energy Conservation Standards for New Residential Buildings

**SWIMMING POOL HEATING**

All new or replacement gas or electric swimming pool heating systems must meet the following requirements:

The pool heating system must be equipped with:

1. An easily accessible on/off switch mounted on the outside of the heater that turns the heater on and off without the need to re-light the pilot light or change the thermostat setting;
2. A permanent weatherproof plate or card that provides instructions for the energy efficient operation of the swimming pool and for the proper care of swimming pool water when a swimming pool cover is used; and,
3. A length of plumbing (36 inch minimum) between the filter and the gas or electric heater to allow for the possible future addition of solar heating equipment.
4. Any new or replacement gas or electric heater must have a thermal efficiency of at least 75% and must be so identified on the plans and the heater.
5. Outdoor pools equipped with a gas or electric heater must also be equipped with a pool cover. The pool cover must be one that was manufactured for use as a pool cover.
6. Time clocks must be installed on any new or replacement pool circulation pump so that the pump can be set to run in the off-peak electric demand period (unless required to operate an active solar pool heating system) and for the minimum time necessary to maintain the water in a clear and sanitary condition in keeping with applicable public health standards.
7. Time clocks are not required where public health standards require 24-hour operation.
8. All new pools must be equipped with directional inlets which adequately mix the pool water to prevent stratification of the heated supply water and the colder existing water.

**THESE REQUIREMENTS DO NOT APPLY TO HOT TUBS OR SPAS.**