



City of Fullerton
Building Division
303 W. Commonwealth Ave.
Fullerton, CA 92832

Swimming Pool and Spa Guide

This information is furnished as a Procedural Guide to assist homeowners, applicants, and contractors with code requirements related to the installation of swimming pools and/or spas.

A. General Requirements:

1. Apply for a Swimming Pool and/or Spa Permit by providing **FOUR** sets of engineered pool plans and plot plans and paying a plan check fee.
 - The engineered structural plan must carry the wet signature of the engineer.
 - The plot plan must clearly show the location of the security fence and protection devices. Refer to “Residential Swimming Pool Protection Devices” document for more information related to requirements.
2. A pre-pool and/or spa inspection will be made to determine:
 - Proximity of pool to slopes, loose fill, adjacent structures, retaining walls, required side yards, location of pool equipment, etc. Determination of special reinforcing required must be made.
 - Any accessory structure, over 6' above grade to be 5' from property line, and may require separate planning approval.
 - Existing site conditions of yard grading and drainage. Status to be noted on plot plans by Pool Inspector.
 - Electric Service Drops: (P.U.C. General Order 95)
 - Responsibility of Contractor to check with Edison Planner.
3. A plan check will be made to review engineered design and conditions pertinent to pool location as revealed by pre-pool inspection (deck, deck details and pool and/or spa depth required on plot plan). Wet signature of engineer is required on all pneumatically placed concrete pools, and some other types of pools. to review engineered design and conditions pertinent to pool location as revealed by pre-pool inspection (deck, deck details and pool and/or spa depth required on plot plan). Wet signature of engineer is required on all pneumatically placed concrete pools, and some other types of pools.

4. Provide a \$500.00 cash bond and obtain Swimming Pool Permits prior to starting construction.

B. Swimming Pool and/or Spa Inspections and Installation Procedure:

(These specifications are a part of the approved plans.)

Inspections shall be called for in the following order to ascertain that requirements below each category have been met. Inspections are to be requested the day prior to the inspection by calling 738-6543.

1. Pre-Gunite and/or Excavation Inspection Requirements:

- Location and excavation is per the approved site plan.
- Reinforcing steel is in place and bonded with minimum of #8 copper wire. A minimum clearance of 1" from steel to earth is required at all locations.
- Approved PVC piping (Sched. 40 minimum) may be used except at heater and laid on a bed of select material.
- Light niche and conduit installed and bonded. Bond wires for ladders, diving boards, etc., in place.
- Heater vent must be located a minimum of 4' from openable windows, doors, vents or property lines. Clearances of heater to combustible or solid surfaces shall be per the listing.
- All underground systems that will be concealed by gunite must be inspected prior to covering main drain installation.
- Provide a dump ticket or other documentation of where the dirt and waste was disposed of. Failure to have dump ticket on site at time of pre-gunite inspection will result in a re-inspection fee being charged.

NOTE: Gunite placement to be continuously inspected by an ICBO-certified concrete inspector or similar type inspector, with prior approval by the Building Official. Gunite report to be filed with City of Fullerton Building Department by said inspector, showing compliance with code, and compression strength of the test specimens.

2. Plumbing Inspection:

- A permanent drain line, minimum 1-1/5" connected with 3" air gap to a 3" minimum P-trap, to a 3" minimum waste line.
- Gas line in place with pressure test of 10 psi for 15 minutes for metallic piping systems or at the pressure test required for the material used.

- Gas line may be P.E, marked "for natural gas only," at 18" below grade, with transition fitting in horizontal position steel piping to be primed and wrapped to 6" above grade. A #18 minimum copper tracer wire with yellow insulation required full length of gas line, attached securely above grade on both ends.
- Gas line of black iron pipe, with approved factory wrap or coating, may be used 12" below grade. (All joints, fittings, and damaged coating, to be primed and wrapped with minimum 40 mil. Approved tape.)

3. Electrical Inspection:

- Pool and spa to be installed per Article 680 of California Electrical Code.
- Rigid metallic conduit to be 6" below grade or protected by 4" of concrete.
- PVC conduit (Sched. 40/80) marked "rigid nonmetallic conduit" to be 18" below grade or protected by 2" of concrete. A GFCI protected circuit at not over 120V or 20 amps may be 12" below grade.
- Approved conduit from pool light to approved J-Box.
- All wires in and properly terminated to qualify for rough electrical inspection. A ground wire to the forming shell of the pool light must be covered or encapsulated with a listed potting compound.
- A ground fault circuit interrupter required for all pool and spa lights Wiring shall be in separate conduit downstream from G.F.D.I.
- Provide 36" clear space in front of time clocks and subpanels.
- Unbroken ground wire (#12) from main service panel to pool light J-Box required. Installed without a joint or splice.
- Fiberglass spa requires all metal parts to be bonded and installed per N.E.C. Article 680.
- For bonding, a minimum #8 ground wire is required to all other equipment.
- Lighting fixtures and lighting outlets shall be located and protected per Chapter 680 of National Electric Code. Lighting fixtures within 5' of the pool edge and less than 12' above grade, or directly over the pool are generally prohibited.

- At least one GFCI receptacle shall be installed a minimum of 10' from and not more than 20' from the inside wall of permanent installed swim pool. No receptacle outlets within 10' of pool.

4. Pre-Deck Inspection:

- Forms for the deck shall be in place and footings, where required by the approved plan, shall be trenched.
- Minimum of a 3-1/2 inch thick concrete deck required. Deck shall drain away from the pool to an approved drainage system.
- Mechanical bonding clamps to slides, diving supports, grab rails and any metal within 5' of pool edge in place and bonded (min. #8 wire). Any ferrous metal over 6 square inches to be bonded. Deck steel and steel for rock structures to be bonded.
- Gunite inspection report must have been filed with City Building Department.
- If brick expansion joints are used details must be submitted. Joint material shall prevent water intrusion in expansive soil.

5. Pre-Plaster Inspection or Prior to Filling Pool or Spa with Water:

- Subcontractor's list turned in to City Business License Department and approved.
- Fence and gates must be installed and approved per Chapter 14.
- Yard area to be graded, drainage established to street or approved drainage course, and all debris disposed of. (Removed from job site.)
- Electrical equipment to have proper connection and rating.
- Anti-siphon devices installed on supply hose bib in pool/spa area.

6. Final Inspection:

- To review all above requirements.
- Pool completed and all equipment in functioning status.
- Pool lights in place and bonded to J-box grounding screw. Light entry cord to be sealed with approved sealant where entering pool light junction box.

- Gates, latches and fences per City code. Refer to “Residential Swimming Pool Protection Devices” document for more information related to requirements.
- Joints between deck and pool, coping and deck and expansion joints in deck area are to be caulked with approved sealer (silicone equivalent).
- Outdoor pools equipped with a fossil fuel heater shall be equipped with a pool cover plus directional inlets.
- Label all pool circuits on panels and disconnects.
- A re-inspection fee may be required if contractor fails to meet first correction notice or if work is not ready for inspection at time inspection is first made.
- Prior to release of bond, the location will be check for any damage to public property, removal of all dirt and debris from the public right of way.

NOTE: Wood or chain link fencing, under 6' high does not require a permit. Concrete or masonry fences will require a separate permit. Walking decks, cabanas, patio covers, etc., may or may not require separate permits depending on the nature of the structures involved.

C. Swimming Pool Heating:

All new or replacement fossil fueled swimming pool heater systems to residential buildings shall be equipped with the following features.

1. On-Off Switch:

The heating system must have an ON-OFF switch mounted on the outside of the heater for easy access to allow shutting off the heater without adjusting the thermostat setting, and allow restarting without relighting pilot light.

2. Permanent Weatherproof Plate or Card:

The pool heating system must be equipped with a permanent, weatherproof plate or card that provides instructions for efficient operation of the pool and its heating system and instructions for proper care of the pool water when a swimming pool cover is used.

3. Plumbing:

A length of plumbing, with a minimum length of 36" must be located between the filter and the fossil fuel heater to allow for the future addition of solar water heating equipment.

4. Swimming Pool Heater Efficiency:

Any new or replacement fossil swimming pool heater must have a thermal efficiency of at least 75 percent. The efficiency of the heater shall be identified on the heater and building plans.

5. Pool Covers:

Outdoor pools equipped with a fossil fuel or electric heater must also be equipped with a pool cover.

6. Time Clocks:

New and replacement pool circulation pumps must be installed with time clocks so the pump can be set to run in off-peak electric demand periods and be set for the minimum time necessary to maintain the water in clear and sanitary conditions according to applicable public health standards. Time clocks are not required where public health standards require 24-hour operation.

7. Directional Inlets:

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 pool water.