

CITY OF CYPRESS
GENERAL GUIDELINES
POOL & SPA INSTALLATION

THIS INFORMATION IS FURNISHED AS A PROCEDURAL GUIDE AND IS NOT INTENDED TO COVER ALL CODE REQUIREMENTS FOR INSTALLATION OF SWIMMING POOLS AND/OR SPAS.

- A. APPLY FOR SWIMMING POOL AND/OR SPA PERMIT BY FILING 2 COPIES OF ENGINEERED POOL PLANS AND 3 COPIES OF PLOT PLANS AND PAYING A PLAN CHECK FEE.
1. The engineered structural plans must carry the wet signature of the engineer.
 2. The plot plans must clearly show all dimensions of pool & setbacks; equipment, fence & gate locations.
- B. A PRE-POOL AND/OR SPA INSPECTION WILL BE MADE TO DETERMINE:
1. Proximity of pool to slopes, loose fill, adjacent structures, retaining walls, required side yards, location of pool equipment, etc.
 2. Check elevations shown on plot plan of top of pool in relationship to finish floor of dwelling.
 3. Existing site conditions of yard grading & drainage. Status to be noted on plot plans by Inspector.
 4. Electrical Service Drops: (P.U.C. General Order 95)
 - a. 1. Vertical clearances above the highest water level of the pool surface and radial clearances from the top edge of the pool wall shall be:
 - (A) 16 feet for public and commercially operated pools.
 - (B) 12 feet for residential pools.
 2. No service drop may be installed less than 16 feet vertically above the horizontal plane through a diving board or platform, such plane being the area within 8 feet radially of the diving board or platform that is over the water surface of the pool.
 3. No service drop may be installed less than 12 feet vertically above the horizontal plane through a diving board or platform, such plane being the area within 3 feet radially of the diving board or platform that is not over the water surface of the pool.

- b. Ungrounded portions of guys:
 - 1. Shall have radial clearances from the edge of the swimming pool wall of not less than 18 feet.
 - 2. Shall have verticle clearances above the highest water level of not less than 18 feet.
- C. 1. 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 plans. Wet signature of engineer is required on all pneumatically placed concrete pools, and some other types of pools.
- D. 1. Provide a \$500.00 cash bond and obtain a \$30.00 Street Permit, & a Swimming Pool Permit prior to starting of construction.

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 714-229-6730.

- 1. PRE-GUNITE AND/OR EXCAVATION INSPECTION REQUIREMENTS.
 - a. Location and excavation is per the approved site plan.
 - b. Reinforcing steel is in place and bonded with minimum #8 copper wire. A minimum clearance of 3" from steel to earth is required at all locations.
 - c. Approved PVC piping (Sched. 40 minimum) may be used except at heater and laid in a select material.
 - d. Light niche and conduit installed and bonded. Bond wires for post supports, ladders, etc., IN PLACE.
 - e. Heater must be located a minimum of 4' from openable windows, doors, vents and 1' from property line walls and/or clearances of heater to combustibile or solid surfaces shall be as per the manufacturer's listing.
 - f. All underground systems that will be concealed by the gunite, must be inspected prior to covering main drain installation. Hydrostatic valve with 2'X 2'X 2' rock pack must be installed at this time.
 - g. Temporary fencing shall be installed at time of excavation.

Note: Gunite placement to be continuously inspected by an ICBO-certified concrete inspector or similar type certified inspector. Special inspector to complete City's Spec. Insp. Form and provide proof of certification. Gunite report to be filed with City of Cypress Bldg. Div. by said inspector, showing compliance with code.

2. PLUMBING INSPECTION

- a. A permanent drain line, minimum 1 1/4" connected with a 3" air gap to a 3" minimum P-trap, to a 3" minimum waste line. P-trap is to be cast iron, when above grade or ABS when below grade or mechanically protected.
- b. 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.
- c. Gas line may be Polyethylene, marked "for natural gas only", with 18" of earth cover. Risers shall be metallic & coated to a point 6" above finished grade. Metal risers attaching to plastic pipe; the underground horizontal metallic portion shall extend 30" before connecting to the plastic pipe by means of an approved transition fitting or adaptor. A #18 copper tracer wire shall be attached to the non-metallic gas piping (full length) and terminate 6" above finished grade at each end.
- d. Gas line of black iron pipe, with approved factory wrap, may be used with 12" of earth cover. All joints, fittings, and damaged coatings, to be primed and wrapped with minimum 40 mil approved tape.
- e. Inlet and outlet piping between the check valve and the heater shall be copper, or listed materials as per manufacturer's specifications.

3. ELECTRICAL INSPECTION

- a. Pool and spa to be installed per Article 680 of the National Electric Code.
- b. Rigid metallic conduit to have 6" of earth cover. PVC, non-metallic conduit to have 18" of earth cover.
- c. Approved conduit from pool light to approved J-Box. All wires installed and properly terminated to qualify for rough electrical inspection. The ground wire to the forming shell of the pool light must be covered or encapsulated with a listed potting compound. If non-metallic conduit is used, ground wire must be #8 insulated copper. A ground fault circuit interrupter required for all pool and spa lights. Wiring shall be in separate conduit downstream from G.F.C.I. Unbroken ground wire (#12) from main panel to pool light J-Box required.

Installed without a joint or splice.

- d. For bonding, a minimum #8 wire is required to all other equipment. Installed without a joint or splice.
- e. Provide 36" clear space in front of time clocks and subpanels.
- f. Lighting fixtures and lighting outlets shall be located and protected per Chapter 680 of the 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.
- g. At least one GFCI receptacle shall be installed a minimum of 10' from and not more than 20' from the inside wall of permanent swimming pool. No receptacle outlets within 10' of pool.
- h. Fiberglass spa requires all metal parts to be bonded and installed per Article 680 of the N.E.C.

4. PRE-DECK INSPECTION

- a. Forms for the deck shall be in place and footings, where required by the approved plan, shall be trenched.
- b. MINIMUM OF A 3 1/2 INCH CONCRETE DECK REQUIRED. Deck shall drain away from pool to an approved drainage system.
- c. Mechanical bonding to slides, ladders, grab bars, and any metal within 5' of edge of pool in place and bonded (min. #8 wire).
- d. Gunite inspection report must have been filed with City Building Division.

5 PRE-PLASTER INSPECTION

- a. Subcontractor's list filed with City Business License Department and approved.
- b. Doors that have direct access from house and garage to the pool and/or in -ground spa, must have alarms installed and operational at time of pre-plaster inspection. Per 1994 Uniform Building Code Appendix, Chapter 4, Division I, Section 421.1 Fence and gates must be installed per Chapter 19, Sec. 19-10, 19-11, and 19-12 of the Cypress City Code as follows: No person shall maintain a swimming pool/spa in the city unless he shall at all times maintain, on the lot or premises upon which such pool/spa is situated, an enclosure as provided in this article. Upon commencement of excavation for a new pool/spa, temporary fencing shall be installed. The

enclosure required by this article shall consist of a wall, fence or other substantial structure not less than 5' in height above the highest grade adjacent thereto and with no opening therein (other than doors or gates) larger than 4" in a perpendicular plane with at least 5' between any horizontal members. A gate no more than 4' in width shall be permitted as part of the pool/spa enclosure. Double gates shall not be permitted as part of the pool/spa enclosure. Neither a chain link fence nor a combination masonry and wrought iron wall shall be used as a pool enclosure. The enclosure shall completely surround the pool/spa or premises upon which the pool/spa is located and shall be constructed only of such materials as will make it nonclimbable. All gates and doors opening through an enclosure required by this article shall be equipped with a self-closing and self-latching device designed to keep, and capable of keeping, such gate or door securely closed at all times when not in actual use. The latch shall be located a minimum of 4' 6" above grade.

- c. 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. (UBC Appendix Chapter 4, Div. I, Sec. 421.1)
- d. Yard area to have drainage established to street or approved drainage course and all debris removed.
- e. Electrical equipment to have proper connection and rating.
- f. Anti-syphon devices installed on supply hose bibb in pool/spa area.

6. FINAL INSPECTION

- a. Pool completed and all equipment in functioning status. Location checked for damage to Public Property.
- b. Gates, latches and fences per City Code.
- c. All joints caulked with approved sealer.
- d. Outdoor pool with heater; pool cover required at site.
- e. All pool circuit disconnects labeled at panel.

NOTE: Reinspection fees; Required when work is not ready for called for inspections and/or correction notice item/s not corrected.

Additional Permits Required; Masonry Fencing, Cabanas, Patio covers, etc...

7. ENERGY REQUIREMENTS FOR POOL/SPA. (Effective July 13, 1983)

a. Swimming Pool Heating;

1. ON-OFF Switch mounted outside heater for easy access that will not interfere with thermostat setting or pilot light.
2. Permanently mounted operating instructions for pool, heater, and pool cover.
3. An extra length of pipe (36") between filter and heater for future add of solar heating.
4. New or replacement heater must have 75 percent efficiency identification mounted on heater.
5. Heated pool/spa must have covers.
6. Must have time clocks set to run in electrical off-peak periods with minimum operation to maintain water sanitation.
7. Must have directional inlets which mix pool water with heated water to prevent stratification.