COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION

PURPOSE

This user guide describes the City of Buena Park's requirements for the construction and installation or remodeling of residential swimming pools, spas and hot tubs. The guide is also designed to help you anticipate the procedures you will need to follow when you decide to build or install a swimming pool, spa or hot tub at your home.

BUILDING PERMIT PLAN SUBMITTAL AND DESIGN REVIEW REQUIREMENTS

As part of the plan check process for obtaining a building permit, planning staff will complete a design review of your project concurrent with the building division plan check. The following plans and information are required:

1. A permit application with required fees.

2. Three sets of plans of fully dimensioned plans providing the following information:

    a. Name of property owner.

    b. Street address and county assessor's parcel number (A.P.N.) of the property involved.

    c. Lot dimensions, property lines and any easements on the property.

    d. Yard setbacks, dimensions and location of proposed pool and necessary mechanical equipment.

    e. The location, height, design and materials of required fencing, gates, and mechanical equipment.

    f. The location height, type and intensity of exterior lighting, if any.

    g. Show the location of all overhead power lines and their clearances in accordance with Table 680.8 of Article 680 of the California Electrical Code. Public Utilities Commission General Order 95 power line clearances **DO NOT** apply to the construction of new swimming pools below existing utility-owned power lines. General Order 95 is written for public utilities and it applies only when they relocate power lines and no other options are available.

h. Footprint of the building showing the location of all windows and door openings into the pool enclosure. Additionally, show the location of all windows, doors, and patios (onside and offsite) within ten (10') feet of the pool pump and heater.

j. Foundation and pool construction plans and specifications, as required (i.e.: footing details, reinforced and engineering calculations), stamped and signed by a California Registered Engineer or Architect.

3. Homeowners association (HOA) approval (if applicable).

4. A soils report prepared by a qualified soils engineer is required for all public pools and may be required for pools proposed in expansive soils areas.

5. Clean-Up Bond – Prior to obtaining a permit for a pool, spa or hot tub you will be required to provide a bond to ensure that any public property is left clean and undamaged.

6. Public Works approval is required. Please contact them at (714) 562-3671

GENERAL REQUIREMENTS

The following is a general summary of the usual requirements for pools, spas and hot tubs. Additional requirements are found in the California Building, Plumbing and Mechanical Codes.

1. Setback Requirements

   Pools, spas or hot tubs must maintain a minimum of five (5') feet from the edge of water to any side or rear property line and shall maintain the same front yard setback as specified in the Zoning Ordinance for the principal building on the lot. Pools, spas and hot tubs must be surrounded by a (5') foot tall barrier; therefore they shall be located in an area that the zoning ordinance will allow (5') foot fencing.

2. Slope Setbacks

   Unless by approved soils report and engineering design, pools shall be constructed not less than seven (7') feet from the top of a slope and not less than five (5') feet from the toe (bottom) of a slope

3. Enclosures/Barriers

   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, above-ground and on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

a. The top of the barrier shall be at least sixty (60) inches above grade measured on the side of the barrier which faces away from the swimming pool.

b. The maximum vertical clearance between grade and the bottom of the barrier shall be two (2) inches measured on the side of the barrier which 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 (4) inches.

c. Openings in the barrier shall not allow passage of a four-inch diameter (4”) sphere.

d. Solid barriers which do not have openings, such as masonry or stone walls, shall not contain indentations or protrusions except for tooled masonry joints.

e. Where the barrier is composed of horizontal members (cross rails) and the horizontal spacing is less than forty five (45) inches, 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 (1-3/4”) inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed one and three fourths (1-3/4”) inches in width.

f. 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 (45”) inches or more, spacing between vertical members shall not exceed four (4”) inches. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed three fourths (3/4”) inches in width.

g. Maximum mesh size for chain link fences shall be a one and one quarter inch (1-1/4”) square unless the fence is provided with slats fastened at the top or the bottom, which reduce the openings to no more than one and three fourths (1-3/4”) inches. The wire shall not be less than eleven (11) gage.

h. Where the barrier is composed of diagonal members, openings shall be no more than one and three fourths (1-3/4”) inches.

i. Access gates shall comply with the above requirements 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 fourths (54") inches from the bottom of the gate, the release mechanism shall be located on the pool side of the gate at least three (3") inches below the top of the gate and the gate and barrier shall have no opening greater than one half (1/2) inches within eighteen (18") of the release mechanism.

j. Where a wall of a dwelling serves as a 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 15 seconds. The deactivation switch shall be located at least fifty four (54) inches above the threshold of the door.

k. Where an above ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure and the means of access is a ladder or steps, then the means of access or the ladder or steps shall be surrounded by a barrier which meets the above requirements. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passive of a four (4") inch diameter sphere.

l. Doors with direct access to an indoor swimming pool shall comply with (j.) above.

m. The pool shall be equipped with an approved safety pool cover that meets all the requirements of ASTM Specifications F1346.

n. Refer to 2016 California Building Code section 3109 for complete requirements.

4. Withholding Approval to Plaster or Fill Pool

Plaster inspection or approval to fill a pool or spa with water shall be withheld by the Building Official until there has been compliance with all fencing and other requirements of this section.

NEW REGULATIONS AS OF 1/1/2018 (CA Health and Safety Code Sec 115922)

When a building permit is issued for the construction of a new swimming pool or spa or the remodeling of an existing swimming 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:

1. A complying enclosure that isolates the swimming pool or spa from the private single-family home. This is separate and in addition to property enclosure fencing. See Enclosure/Barrier requirements under General Requirements of this handout for enclosure requirements.

2. Removable mesh fencing that meets the standards of ASTM F2286 in conjunction with a self-closing and self-latching gate that can accommodate a key lockable device.

3. An approved safety pool cover. either manually or power-operated that meets all of the performance standards of ASTM F1346-91.

4. 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 noise or a verbal warning, such as a repeating notification that "the door to the pool is open."

5. 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.

6. An alarm 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 ASTM Standard F2208 "Standard Safety Specification 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 safety feature.

7. 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 ASTM or ASME.

8. Before the issuance of final approval for the completion of the permitted construction or remodeling work, inspection and approval of the drowning safety prevention features required by this section is mandatory.

Note: These requirements do not apply to public swimming pools, hot tubs or spas with approved locking safety covers, pools in apartment complexes or any setting other than a single-family home.

EQUIPMENT REQUIREMENTS

1. General

    a. All mechanical equipment shall be set on a concrete pad above grade.

    b. The manufacturer's installation instructions shall be available on the job site for inspection.

    c. Clearance to any building wall shall be per the manufacturer's installation instructions and listing, but not less than a minimum of 12 inches.

    d. All mechanical equipment shall be installed in accordance with manufacturer's installation requirements and the California Mechanical Code.

2. Screening

    Mechanical equipment shall be screened from the public view through the use of walls, fencing and/or landscape.

3. Setbacks

    Mechanical equipment may be located within a required side or rear yard, subject to the following limits:

    a. The heater shall be installed with clearance as listed by the American Gas Association or Underwriters' Laboratories.

    b. The pump/filter may be located in a side yard provided it is at least one (1') foot away from the dwelling exterior wall and at least ten (10') feet away from an existing dwelling window and/or enclosed patio located on the neighboring property. This provision is to attenuate noise to a reasonable level.

    c. The gas-fired heater may be located within the side yard setback, provided it is located at least one (1') foot away from an exterior wall of the dwelling, and ten (10') feet from an HVAC air intake, window, greenhouse or enclosed patio (on the neighboring property).

    d. A gas fuel fired water heater may be located within a rear yard area, provided that a minimum of one (1') foot is maintained to the property line.

    e. The minimum clearance is one (1') foot to any fence or wall.

OUTDOOR LIGHTING REQUIREMENTS

Any lighting used to illuminate the swimming pool area shall be designed and shielded to confine all direct light rays to the subject property, minimizing spill-over light onto adjacent properties.

GENERAL CONSTRUCTION REQUIREMENTS

1. Structural

    a. All pool construction shall be in conformance with the approved engineering design plans. In areas of known expansive soils, a soils report prepared by a registered soils engineer may be required.

2. Plumbing

    a. A three (3”) inch P-Trap that is connected to the house sewer line is required for other than cartridge filter backwash. Spas must have either a P-Trap, cartridge type filter or separation tank.

    b. A length of thirty six (36”) inches of copper plumbing from the heater output is required or manufacturer’s installation requirement, to allow for future addition of solar heating.

    c. PVC water and air lines must be painted or treated to protect them from ultraviolet rays.

    d. A time clock shall be installed on pool circulation pumps.

    e. No direct or indirect connection shall be made between any storm drain, sewer, drainage system, seepage pit, underground leaching pit, or subsoil drainage line, or any line connected to a swimming pool unless approved by the Building Official.

    f. Waste water from any filter, scum filter, scum gutter, overflow, pool emptying line or similar apparatus or appurtenance shall discharge into an approved type receptor by air gap and subsequently into public sewer. The flood level rim of such receptor shall be at least six (6”) inches above the flood level of the adjacent ground. Each such receptor, when permitted to be connected to any part of a drainage system shall be provided with an approved three (3”) inch gap.

    g. Suction outlets shall be covered with anti-entrapment grates in accordance with ANSI/APSP-16.

h. The circulation system shall have the capacity to provide a complete turnover of pool water, as specified in Section 3124B of Chapter 31B of the California Building Standards Code (Title 24 of the California Code of Regulations).

i. Swimming pool shall be equipped with directional inlets which provide for adequate mixing of the pool water.

j. The swimming pool or spa shall either have at least two circulation suction outlets per pump that shall be hydraulically balanced and symmetrically plumbed through one or more “T” fittings, and that are separated by a distance of at least three feet in any dimension between the suction outlets, or be designed to use alternatives to suction outlets, including, but not limited to, skimmers or perimeter overflow systems to conduct water to the recirculation pump.

k. Whenever a building permit is issued for the remodel or modification of an existing swimming pool, toddler pool, or spa, the permit shall require that the suction outlet or suction outlets of the existing swimming pool, toddler pool, or spa be upgraded so as to be equipped with anti-entrapment grates, as specified in the ANSI/APSP-16 performance standard or a successor standard designated by the federal Consumer Product Safety Commission.

3. Gas Lines

a. Buried PVC gas lines shall be at least eighteen (18”) inches below grade with a minimum #18 AWG copper tracer wire.

b. PVC gas piping shall be minimum schedule 40, including plastic fittings, with proper transition fittings to grade.

c. Before any appliances and valves are connected, and before burying any piping, an air pressure test of at least ten (10) psi for fifteen (15) minutes is required to be witnessed by the building inspector.

d. Gas shut-off valves shall be installed within thirty six (36”) inches of appliances.

4. Electrical (General)

a. A ground-fault circuit interrupter (GFCI) shall be installed in branch circuits supplying pool lights.

b. All 15- and 20-ampere single-phase, 125-volt receptacles located within twenty (20’) feet of the inside walls of a pool shall be protected by a ground-fault circuit interrupter.

c. For spas and hot tubs, all 15- and 20-ampere single-phase, 125-volt receptacles located within twenty (20') feet of the inside walls of a pool shall be protected by a ground-fault circuit interrupter.

d. At least one receptacle shall be installed a minimum of ten (10') feet from and not more than twenty (20') feet from the inside wall of a permanently installed pool.

e. For spas and hot tubs: At least one receptacle shall be installed a minimum of six (6') feet from and not more than ten (10') feet from the inside wall of a spa or hot tub.

f. Unless listed otherwise or separated by a wall, fence or permanent barrier, switching devices shall be located at least (5') five feet horizontally from the inside walls of a pool, spa or hot tub.

g. PVC electrical conduit shall be installed at least eighteen (18") inches below finish grade

5. Equipment Grounding

a. All through-wall lighting assemblies, wet-niche, dry-niche or no-niche underwater lighting fixtures shall be connected to an (min. No.12 AWG) insulated copper equipment grounding conductor.

6. Equipment Bonding

a. The following shall be electrically bonded together using solid copper conductors not smaller than 8 AWG attached using approved cast brass or bronze pressure connectors:

(a) All metallic parts of the pool structure, including the reinforcing metal of the pool shell, coping stones, and deck.

(b) All forming shells and metal screens.

(c) All metal fittings within or attached to the pool structure.

(d) Metal parts of electric equipment associated with the pool water circulating system, including pump motors.

(e) Metal parts of equipment associated with pool covers including electric motors.

(f) Metal-sheathed cables and raceways, metal piping, and all fixed metal parts that are within five (5') feet horizontally of the inside walls of the pool, and within twelve (12') feet above the maximum water leave of the pool, or any observation stands, towers or platforms, or from any diving structures, and that are not separated from the pool by a permanent barrier.

Electrical installations, equipment grounding and bonding shall conform to all of the applicable requirements located in Articles 250 and 680 of the California Electrical Code.

DEFINITIONS

Enclosure/Barrier – A fence, wall, building wall or a combination thereof, which completely surround the swimming pool, spa, or hot tub and obstructs access to the swimming pool, spa or hot tub.

Exit Alarms – Means devices that make audible, continuous alarm sounds when any door or window that permits access from the residence to the pool area, that is without any intervening enclosure, is opened or is left ajar. Exit alarms may be battery operated or may be connected to the electrical wiring of the building.

Front Yard – A yard extending across the full width of a lot, the depth of which is measured from the front property line of the lot to the nearest line of a structure.

Hot Tub – A large container of hot water, sometimes wooden and installed above ground, designed for soaking.

Mechanical Equipment – Any equipment necessary for the operation of heating and filtering systems.

Rear Yard – A yard extending across the full width of a lot and measured between the rear property line of the lot to the nearest line of a structure.

Side Yard – A yard between the side property line of the lot and the nearest side line of a structure, extending from the front yard setback line to the rear yard setback line.

Spa – A large container of water which may have forceful currents of water designed for therapeutic purposes.

Swimming Pool – Any structure intended for swimming or recreational bathing that contains water over 18 inches deep. This includes in-ground, above-ground, and on-ground swimming pools, hot tubs, spas, portable spas and non-portable wading pools.

Yard – An unoccupied open space unobstructed from the ground upward within which structures must not be located.

ADDITIONAL INFORMATION

1. If you are thinking about installing a pool, spa or hot tub, you should request verification from the Planning Department of all yard setbacks and building code requirements. Requests should be submitted to the department with a sketch of the boundary lines of the property and the proposed location of the pool, spa or hot tub and including dimensions of yard setbacks. The plan should also show location of proposed mechanical equipment along with its planned setback from property lines and adjacent walls.

2. Approval from the Public Works Department, located 6955 Aragon, Buena Park (714) 562-3705, is required, prior to submitting plans for a building permit.

3. Work in the public right-of-way will require approval from the Engineering Department, 6650 Beach Boulevard (714) 562-3670. If a contractor is doing the work; verify that a building permit was obtained; be sure the contractor has a current Contractors' State License, Workers Compensation Insurance and a City business license.

4. If you live in an area governed by a Homeowner's Association, the Association will require you to obtain their approval before you apply for a city building permit. Please submit plans to your HOA first for approval, then submit HOA approved plans to the City.

5. The full requirements of the Swimming Pool Safety Act (*California Health and Safety Code Sections 115920–115929)* and Section 3109 of the California Building Code are to be considered a part of this handout.

For additional information or staff assistance, we invite you to contact:

City of Buena Park
Building Division
6650 Beach Boulevard
Buena Park, CA 90621
(714) 562-3636