

## BUILDING CODE MANUAL COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUILDING AND SAFETY DIVISION Based on the 2011 LACBC

# SWIMMING POOLS, SPAS AND HOT TUBS, ENCLOSURES AND SAFETY DEVICES

- I. Identify all the code requirements
  - A. LACBC Section 3109.4.4 Based on State Statues: AB 3305 (1996), AB 2977 (2006), AB 382 (2007). This section applies to Pools for Single Family Dwellings constructed or alteration after January 1, 2007
  - B. LACBC Chapter 31B Based on *Department of Public Health (DPH)* requirements. These provisions applies to all Public Pools, including residential (more than 3 dwelling units) pools and all commercial pools
  - C. Chapter 11.50 of the County of Los Angeles Health and Safety Code (Title 11). These provisions apply to all swimming pools, fish ponds, and other outdoor bodies of water.
  - D. Chapter 11.51 of the County of Los Angeles Health and Safety Code (Title 11). These provisions apply to indoor and outdoor swimming pools, spas, hot tubs and other bodies of water located on the premises of a Single Family Dwelling.
- II. Clarification of terms (Definitions)
  - A. **POOL.** All outdoor swimming pools, spas, hot tubs, wading pool, fish ponds or other body of water greater than 18 inches deep.
  - B. **POOL ENCLOSURE.** Pool enclosure shall encompass all references to fences, barriers and separation fence.
  - C. **TEMPORARY BARRIER.** A temporary pool enclosure which is used to prevent the public from injuries due to excavations during construction of a pool.
- III. Protection of Excavation During Construction

Every excavation for the construction of a pool located 5 feet or less from a street lot line shall be enclosed with a *temporary barrier* not less than 6 feet high per Building Code Section 3306.9. Where the excavation is located more than 5 feet from street lot line a *temporary barrier* not less than 6 feet high shall be erected when required by the building official. When required, all *temporary barriers* shall be maintained until the permanent pool enclosures and safety devices have been installed and approved by the building official.

- IV. Location of pool enclosure
  - A. The pool enclosure shall be constructed around the pool, except when approved by building official.
  - B. Stairways, ramps, and landings for slides or similar pool features shall have handrails and/or guardrails when they are 30" above adjacent grade.
- V. Height of pool enclosure and other construction requirements
  - A. The top of the pool enclosure shall be at least 60 inches above grade. The height shall be measured from the side away from the pool as depicted in Figure 31B-4 and 31B-5 of the LACBC.
  - B. Maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches above earth

- C. Maximum vertical clearance between solid surface (concrete deck) and the bottom of the barrier shall not allow a passage of a sphere 4 inches in diameter.
- D. Any decorative design work on the side away from the pool, such as protrusions, indentations, or cutouts, which render the pool enclosure easily climbable, is prohibited.
- E. Gaps or voids, if any, shall not allow passage of a sphere 4 inches in diameter.
- F. Horizontal members that create a "ladder" affect are prohibited unless stated otherwise below.
- VI. Construction material for the pool enclosure
  - A. <u>Chain Link.</u>
    - 1. The wire for the chain link shall not be less than 11-gauge.
    - 2. The posts shall be galvanized pipe at least 1-1/4 inch in diameter and spaced not more than 10 feet apart.
    - 3. The posts shall be set not less than 12 inches into concrete. The concrete shall be poured into a hole minimum 6 inches in diameter and minimum 18 inches deep.
    - 4. Openings in the chain link shall not be greater than 1-3/4 inches measured horizontally.
  - B. <u>Solid Wood.</u>
    - 1. Redwood or pressure treated posts shall be no less than 3 inches by 3 inches, set no more than 10 feet apart, and embedded at least 18 inches in the ground.
    - 2. The vertical boards at least 1/2-inch thick shall be placed side-by-side without any gaps or spaces.
    - 3. The vertical boards shall be securely fastened to no less than two horizontal rails that are at least 2 inches by 3 inches in cross section.
    - 4. The horizontal rails shall be located on the pool side of the fence and more than 48 inches apart.
  - C. <u>Masonry/Concrete.</u>
    - 1. Masonry fences shall be supported on a foundation of concrete extending not less than 12 inches below grade, not less than 12 inches in width, and not less than six inches in thickness.
    - 2. Reinforcing steel located in the masonry wall, when required, shall be embedded 16 diameters into the footing.
  - D. Wrought Iron.
    - 1. When the vertical members are spaced 1-3/4 inches maximum, then the horizontal members shall be located on the inside face of the fence, or
    - 2. The distance between the tops of horizontal members shall not be less than 45 inches.
  - E. <u>Combination of material.</u>

Different materials used in the horizontal direction shall be permitted, provided each portion of the pool enclosure meets the requirements of this section. Different materials used in the vertical direction (one-on-top of another) shall be prohibited, unless approved by the building official.

- VII. Gates
  - 1. Pedestrian walkway access gates shall be part of the pool enclosure and shall meet all the construction requirements of Section V and VI

- 2. The gate shall be self-closing and self-latching.
- 3. The gate shall open or swing away from the pool
- 4. The release mechanism of the self-latching device shall not be located less than 60 inches from the bottom of the gate.
- 5. The following doors and gates are prohibited as part of the pool enclosure due to intrinsic problems with self-closing or self-latching devices:
  - a. Double doors or pairs of gates.
  - b. Doors or gates wider than 4 feet.
  - c. Driveway gates.
  - d. Overhead garage doors.
- 6. Additional locking devices, hooks or bolts may be installed for security of the premises, provided normal satisfactory operation of the required self-closing and self-latching systems is maintained.

### VIII. Exceptions

## A. Buildings may be part of the pool enclosure.

- 1. Exterior wall of a building in combination with a pool enclosure, which completely surrounds the pool and obstructs access to the pool, shall be permitted.
- 2. All doors providing direct access from a dwelling unit to the pool shall comply with the following:
  - a. The door shall have an alarm that sound continuously for a minimum of 30 seconds within 7 seconds after the door and its screen, if present, are opened, and shall be capable of providing a sound pressure level of not less than 85 dBA when measured indoors at 10 feet. 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 no longer than 15 seconds. The deactivation switch shall be located at least 54 inches above the threshold of the door, or
  - b. The door shall have self-closing and self-latching devices with a release mechanism placed no lower than 54 inches above the floor.
- B. **Above-ground swimming pool structure.** Where an above-ground swimming pool structure is used as a barrier or where the barrier is mounted on top of the swimming pool structure, the ladder or steps shall be secured to prevent access or they shall be surrounded by a barrier. When the barrier is mounted on top of the above-ground pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall not allow the passage of a sphere 4 inches in diameter.
- C. **Use of other safety devices.** Lockable spa covers shall comply with ASTM Standard ES 13-89.
- IX. How to handle fence repair or replacement for existing pools.
  - A. Replacement of existing pool enclosure shall comply with this policy.
  - B. Pool enclosure constructed prior to January 1, 2007 shall be maintained in good condition without having to comply with all requirements above.
  - C. Any alteration, addition or repair to an existing pool, spa, hot tub or pool enclosure, shall require the pool enclosure to comply with all the above requirements.

Exceptions:

- a. Alterations, additions or repairs to an existing dwelling that do not create a new access into the pool area.
- b. Alterations such as re-plastering or changing the decking, tile or coping.
- c. Projects that only require electrical, plumbing or mechanical permits, such as replacing pumps, gas lines or heaters.
- D. Existing homes may install battery-operated alarms when a new pool is built or a pool/spa alteration triggers requirement of Section VIII-A-2-a.
- X. Detail examples
  - A. See attached details
- XI. Complaints or code violations Complaints regarding missing or damaged pool barriers of occupied buildings should be made to the nearest Sheriff's Station (Los Angeles County Health and Safety Code Section 11.50.130). For vacant buildings, complaints shall be referred to Property Rehabilitation Section.

Supersedes BCM 310 Article 6 dated 01-07-97

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#### SAMPLE FENCE AND GATE CONSTRUCTION FOR SWIMMING POOL, SPAS AND HOT TUBS ANY STRUCTURE THAT CONTAINS WATER OVER 18 INCHES DEEP

Revised: 06/2012

