

## **CITY OF MONTE SERENO**

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## RESIDENTIAL POOL AND SPA INSTALLATION

## PLANNING DIVISION REQUIREMENTS

No planning permit is required for new pool or spa installations. The standards listed below are verified through the building permit process.

## **Setback Requirements**

The following table shows the setbacks requirements for the pool/spa and the related equipment based for each zoning district (pool equipment is not allowed in the front yard):

Zoning District	Minimum Distance from Waterline to Another Structure	Minimum Distance from Waterline to Property Line	Minimum Distance Between Pool Equipment and Property Line
R-1-8	6 feet	10 feet	10 feet
R-1-20	8 feet	12 feet	12 feet
R-1-44	8 feet	12 feet	12 feet

## **Structural and Impervious Coverage**

Swimming pools, spas, and similar structures which are capable of holding water to a depth of 2 feet or more, are considered structures and are included in the allowable structural and impervious coverage for a parcel. Following is a summary of the maximum structural and impervious coverage (as a percent of the lot area) allowed for single-family zoning districts:

Zoning District	Maximum Structural Coverage	Maximum Impervious Coverage
R-1-8	40%	60%
R-1-20	30%	40%
R-1-44	20%	30%

## **BUILDING DIVISION REQUIREMENTS**

A building permit is required for all pool and spa installations and shall be obtained prior to start of installation. The following is a listing of the general requirements for permit applications based on the 2022 California Building Code, 2022 California Residential Code, 2022 California Electrical Code, and the Monte Sereno Municipal Code. This brochure is intended to provide general information, contact the Building Department for any questions or additional information.

#### **Drowning Prevention Features**

In order to protect the occupants of the house and members of the public, drowning prevention safety features are required to restrict unauthorized access to the pool from the house and from the public sidewalk. All private swimming pools shall be equipped with at least two of the following safety features to limit access from both the house and from the public sidewalk (CBC 3109):

- 1. The pool shall be isolated by an enclosure that meets all of the following:
  - Gates shall open away from the swimming pool with opening devices placed a minimum of 60 inches above the ground. Gates shall be self-closing and self-latching;
  - Enclosure shall be a minimum of 60 inches high;
  - The clearance from the ground to the bottom of the enclosure shall be 2 inches maximum;
  - Gaps or voids in the enclosure are spaced so that a 4 inch sphere cannot pass through; and
  - The enclosure shall not have any protrusions, cavities, or other characteristics that would serve as hand/foot-holds.
- 2. The pool shall incorporate removable mesh pool fencing that meets ASTM Specifications F 2286 standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
- 3. The pool shall be equipped with an approved safety pool cover that meets all requirements of the ASTM Specifications F1346.
- 4. All doors providing direct access from a home to the swimming pool shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54" above the floor. Additionally, a fence meeting the requirements of item #1 shall be provided to protect the public from the swimming pool (this can be the property line fence).
- 5. The house shall be equipped with exit alarms on all doors providing direct access to the pool. Additionally, a fence meeting the requirements of item #1 shall be provided to protect the public from the swimming pool (this can be the property line fence).
- 6. Swimming pool alarms that, when placed in pools, will sound upon detection of accidental or unauthorized entrance into the water. These pool alarms shall meet and be independently certified to the ASTM Standard F2208. For purposes of this article, "swimming pool alarms" shall not include swimming protection alarm devices designed for individual use, such as an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water.

## **Electrical Requirements**

- If the existing main electrical service is 100 amps or less, provide load calculations for all existing loads and the new pool to justify the service is adequate. (CEC 220)
- Overhead electrical conductors/wires located over the pool/spa and within 10 feet horizontally of the pool/spa shall be a minimum of 22½ feet above the maximum water level and 14½ feet above any diving platform. (CEC 680.8)
- All fixed metal parts, including underwater lighting, fittings, electrical equipment, piping, awnings, fences, etc. within 5 feet of the inside of the pool wall shall be bonded to the equipment grid with a

#8AWG copper conductor. Bonding clamps for direct burial or concrete encasement shall be brass, copper, copper alloy, or other listed material.

Where none of the bonded parts is in direct connection with the pool water, the pool water shall be in direct contact with an approved corrosion-resistant conductive surface that exposes a minimum of nine square inches of surface area to the pool water at all times. The conductive surface shall be located where it is not exposed to physical damage or dislodgement during usual pool activities and it shall be bonded as noted above. (CEC 680.26)

- The perimeter surface within 3 feet of the inside wall of the pool (including unpaved, paved, concrete surfaces, etc.) shall be bonded and attached to the pool reinforcing steel or copper conductor grid at a minimum of four points spaced uniformly around the pool. Perimeter bonding shall be structural reinforcing steel bonded together by steel tie wires. (CEC 680.26)
- Junction boxes shall be a minimum vertical distance of 8 inches above the water or 4 inches above
  the deck, whichever provides the greater elevation. Junction boxes shall be a minimum horizontal
  distance of 4 feet from the inside wall of the pool (unless separated by a solid wall, fence, or other
  permanent barrier). (CEC 680.24)
- At least one GFCI receptacle shall be located between 6 feet and 20 feet from the inside wall of the pool. The receptacle shall be a maximum of 6 feet 6 inches high. (CEC 680.22)
- Lighting fixtures/outlets within 5 feet horizontally of the pool shall be installed at a height of not less than 12 feet. Lighting fixtures installed between 5 feet and 10 feet from the pool and less than 5 feet in height shall be GFCI protected. (CEC 680.22)
- Underground wiring within 5 feet of the pool edge shall meet the following burial depth requirements (CEC Table 300.5):

MINIMUM BURIAL DEPTHS			
Wiring Method	Minimum Burial		
Rigid metal conduit	6 inches		
Intermediate metal conduit	6 inches		
Nonmetallic raceways listed for direct burial without concrete encasement	18 inches		
Nonmetallic raceways listed for direct burial with minimum 4 inch concrete	6 inches		
coverage that extends 6 inch horizontally beyond raceway			
Other approved raceways	18 inches		

## **Other Requirements**

- All new and remodeled pools and spas shall have all suction outlets with an anti-entrapment cover meeting the current ASTM or ASME standards. (CBC 3109.4.4.8 and CRC Appendix V)
- Glass within 5 feet horizontally from the pool edge and within 5 feet vertically of the walking surface shall be safety glazing. (CBC 2406.4 and CRC R308.4)
- Covers are required for all new pools and spas for water efficiency purposes. (CEES 110.4(b))

## Smoke and Carbon Monoxide Alarms (CBC 907.2.11.1, CRC 314 and 315)

Smoke alarms shall be installed on the ceiling or wall (between 4" and 12" of the ceiling) in all sleeping rooms, each area/hallway adjacent to sleeping rooms, each story of the building, and in any basement. Smoke alarms shall be replaced 10 years after the date of manufacture listed on the alarm (if no date is listed the alarm shall be replaced). Newly installed smoke alarms shall have a 10-year battery.

Carbon monoxide (CO) alarms shall be installed on the ceiling or wall (above the door header) in each area/hallway adjacent to sleeping rooms, each occupiable story, and within a bedroom if the bedroom or attached bathroom contains a fuel-burning appliance. CO alarms are not required if there is no fuel-burning appliance or fireplace in the house and where the garage is detached from the house.

#### **PERMIT PROCESS**

## **Building Permit Review**

 Permit can be submitted at City Hall between 9am and 5pm Monday through Friday.

## **Inspections**

- 2. Portable, above ground spas require a rough electrical and a final inspection.
- 3. For in-ground pools and spas, the following inspections are required:
  - Pre-Gunite
  - Pre-Deck
  - Pre-Plaster
  - Final Inspections

Note: A completed Smoke Alarm and Carbon Monoxide Alarm Certification Form shall be provided to the inspector at the final inspection.

# Building Permit Application Requirements (3 copies of each item)

- ☐ A completed Building Permit Application
- ☐ A completed Project Summary Form
- ☐ Site plan showing the existing house, and other structures, overhead/underground utilities, easements, proposed location of the pool/spa, equipment location, and setback distances from all property lines.
- An electrical plan showing all equipment and wiring to pool or spa. Provide electrical load calculations if the existing service panel is 100 amps or less.
- ☐ Plumbing plans including a gas piping diagram and gas pipe sizing calculations.
- Structural details and calculations stamped and signed by the engineer (built-in pools/spas) or UL listing with installation requirements (for spas)