



LEE'S SUMMIT MISSOURI

Residential Swimming Pools and Hot Tubs

November 1, 2017

The following are general requirements pertaining to the construction of swimming pools and hot tubs accessory to one and two family dwellings. This does not represent all the provisions regulating swimming pool construction and is not intended to replace the adopted codes and ordinances of the City of Lee's Summit, MO. For all requirements pertaining to swimming pool construction refer to the 2012 International Residential Code and Chapter 7 of the Lee's Summit Code of Ordinances.

GENERAL:

1. Definition - A swimming pool is defined as a receptacle for water or an artificial pool of water, with bottom and sides formed of material other than soil and rock, having a capacity of more than 5000 gallons of water **or** having a depth of more than 24 inches at its deepest level, intended for the purpose of immersion or partial immersion therein of human beings, and including all appurtenant equipment.
1. Fees- Building permit fees for pools are based upon the valuation of the pool.
2. Contractor Licenses – All contractors/builders are required to have a business license. Certification of at least one employee of the company as a master electrician, master plumber or master mechanical shall be a requisite for licensing an electrical, plumbing or mechanical contractor. The certification of the master and the business license must remain current throughout the period of construction. The right of a company to do work as an electrical, plumbing or mechanical contractor depends upon the retention of the person holding the master certification as an employee, member or officer of the company. Except for persons doing work on their own residence, no person, other than a licensed contractor or employee of a licensed contractor shall engage in electrical, plumbing or mechanical business, construction or installations. (LSCO 7-130)
3. Required Setback from Property Lines – Currently 10 feet from side and rear property lines to the concrete deck or any deck. (See Unified Development Ordinance, available in the Development Services Department). The pool cannot be located within any easements on the property.

Development Services

4. Permits – A permit is required for any swimming pool meeting the definition given above. Plot plans are required when submitting application for a pool permit. The following must be indicated on the plot plan, which shall be drawn to scale: (LSCO 7-127 and 7-128)
 - A. Property address and legal description.
 - B. Lot dimensions.
 - C. All easements located on the property.
 - D. Location of all permanent structures.
 - E. The location of the pool and any decking, including the distance from all property lines and the house (or any deck attached to the house).
5. Permit Expiration - Permits for pools accessory to one and two family dwellings shall become invalid unless the work is completed within 180 days from the date of issuance. Time extensions may be granted when substantial progress (50% complete) has been made and the applicant documents the capability of finishing the work within one time extension. (LSCO7-134)
6. Placement of Permit – Permits for pools shall be posted on site and visible from the street or the property address clearly identified and visible from the street. Failure to clearly identify the property or post the permit may result in inspections not being performed. (LSCO 7-136)
7. Erosion Control – Erosion control devices shall be installed and maintained throughout the construction process in accordance with the City of Lee’s Summit Design and Construction manual. Failure to install or maintain erosion control devices may result in inspections not being performed, stop work orders being issued or court charges filed against the permit applicant.
8. Required Inspections – Inspections for pools will vary depending on the type of pool and the scope of work being performed. This information will be reviewed with the applicant when the permit is issued. One day advance notice is required for all inspections.

CONSTRUCTION DETAILS:

1. Re-circulation – All pools shall be of the re-circulation type in which circulation of the water is maintained through the pool by pumps; the water drawn from the pool being clarified and disinfected before being returned to the pool. (LSCO 7-1009)
 - The re-circulation system shall consist of pumping equipment, hair and lint catcher, filters, together with the necessary pipe connections to the pool inlets and outlets, facilities and pipe connections necessary for backwashing filters and facilities and equipment for disinfecting the pool water.
 - Every pool shall have a re-circulating system with an hourly capacity equal to the pool volume divided by eight (8).

2. Fencing - The area in which a swimming pool, sauna, hot tub, or Jacuzzi is located shall be entirely enclosed and separated from adjoining property by a protective fence or other permanent structure not less than four (4) feet in height, measured from grade. The enclosure shall be so constructed that a sphere six (6) inches in diameter cannot pass through. Fence posts shall be decay or corrosion resistant and shall be set in concrete bases. Such protective enclosure shall be provided with gates equipped with self-closing and self-latching devices placed at the top of the gate; provided, however, that above-grade structures of four (4) feet or greater in height that are equipped with a ladder that can be manually lifted and locked shall not be required to have a protective enclosure. Said ladder shall be locked when the swimming pool, hot tub, sauna, or Jacuzzi is not attended.
 - At the option of the property owner, a hot tub or Jacuzzi may be covered with a latching, protective cover instead of the fencing or protective enclosure described above. The cover on the hot tub or Jacuzzi shall be closed and latched at all times that the hot tub or Jacuzzi is not in use. If a covered hot tub or Jacuzzi is located in the same area as a swimming pool or sauna, the swimming pool or sauna must still be fenced or enclosed with a permanent structure in the manner described above.

ELECTRICAL:

1. Receptacle Location – Receptacles that provide power for water-pump motors or other loads related to the circulation and sanitation system are permitted to be located between 6 and 10 feet from the inside walls of pools and outdoor spas and hot tubs, where the receptacle is single and of the locking and grounding type and protected by ground-fault circuit interrupters.

Other receptacles on the property shall be located not less than 6 feet from the inside walls of pools and outdoor spas and hot tubs. (IRC E4203.1.1)

2. Required receptacles – At least one 125-volt 15- or 20-amp receptacle, supplied by a general-purpose branch circuit shall be located a minimum of 6 feet from and not more than 20 feet from the inside wall of pools and outdoor spas and hot tubs. This receptacle cannot be located more than 6 feet 6 inches above the floor, platform or grade level serving the pool, spa or hot tub. (IRC E4203.1.2)
3. GFCI protection – All 15- and 20-amp, single phase, 125-volt receptacles located within 20 feet of the inside walls of pools and outdoor spas and hot tubs shall be protected by a ground-fault circuit-interrupter. Outlets supplying pool pump motors from branch circuits with short-circuit and ground-fault protection rated 15 or 20 amps, 125 volts through 250 volts, single phase, whether by receptacle or direct connection, shall be provided with GFCI protection for personnel. (IRC E4203.1.3)

4. Disconnecting means – One or more means to disconnect all ungrounded conductors for equipment, other than lighting, shall be provided. Each means of disconnect shall be readily accessible and within sight from the equipment if serves and shall be located at least 5 feet horizontally from the inside walls of the pool, spa or hot tub unless separated from the open water by a permanently installed barrier that provides a 5-foot or greater reach path. This horizontal distance shall be measured from the water’s edge along the shortest path required to reach the disconnect. (IRC E4203.3)
5. Luminaires and ceiling fans – Luminaires, lighting outlets and ceiling-suspended paddle fans shall not be installed over the pool or over the area extending 5 feet horizontally from the inside walls of the pool, except where no part of the luminaire or ceiling-suspended paddle fan is less than 12 feet above the maximum water level. (IRC E4203.4.1)
6. Overhead clearances – See IRC section E4203.6 and table E4203.5
7. Underground wiring – Underground wiring shall not be installed under or within the area extending 5 feet horizontally from the inside walls of pools and outdoor hot tub and spas except where the wiring it installed to supply the pool, spa or hot tub equipment or where space limitations prevent the wire from being routed 5 feet or more horizontally from the inside walls. Where installed within 5 feet of the inside walls, the wiring method shall be a complete raceway system of rigid metal conduit, intermediate metal conduit or a nonmetallic raceway system. Metal conduit shall be corrosion resistant and suitable for the location. See Table E4203.7 for minimum raceway depths. (IRC E4203.7)
8. Bonding – All metallic parts of the pool shall be bonded in accordance with Section E4204 of the IRC.
9. Grounding – Grounding shall be done in accordance with Section E4205 of the IRC.

The above references are made for outdoor locations. For regulations regarding indoor locations, see Chapter 42 of the IRC.

PLUMBING:

1. Backflow Prevention - Pools shall be equipped with suitable facilities for adding makeup water as needed. There shall be no physical connection between the water supply line and the pool system. If the makeup water supply is added directly to the pool, the outlet shall be at least six inches above the rim of the tank. If a hose connection from a sill cock or other plumbing fixture is to be used for supplying makeup water, then an approved backflow prevention device shall be installed between the sill cock or control valve at the fixture and the hose connection. The backflow prevention device shall be installed in accordance with its listing, chapter 32, Article III of the Lee's Summit Code of Ordinances and the current adopted Plumbing Code. The maximum size of the fill pipe to be two inches.