



Swimming Pool Installation Requirements

Updated as of 02/1/2021

The installation of pools, spas, hot tubs, etc. are required to comply with Yukon City Codes and Ordinances, IRC Building Codes, NEC Electrical codes, IFGC Gas codes and IPC Plumbing codes.

General Requirements

- 1) Swimming pools, spas, hot tubs, equipment, etc. shall be installed according to the manufacturer's installation instructions, Yukon City Codes and Ordinances that pertain to the installation.
- 2) The pool shall not be placed closer than 5 feet to the building to prevent damage to the foundation.
- 3) Swimming pools and/or pool decks shall not encroach into any utility easements or building setback lines.
- 4) All pool lighting must be low voltage (15 volts and below).
- 5) The pool shell and deck shall be bonded to all pool equipment using insulated, covered or bare solid copper conductors not smaller than 8 AWG.
- 6) The pool installation shall not change and/or effect the grading and/or drainage of storm water from the lot and any adjacent lots.

2015 International Residential Code Requirements

Hazardous Locations (Chapter 3)

- 1) The following shall be considered specific hazardous locations for the purposes of glazing : Glazing in walls and fences adjacent to indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60 inches above a walking surface and within 60 inches, measured horizontally and in a straight line, of the water's edge. This shall apply to single glazing and all panes in multiple glazing.

Electrical Requirements (Chapter 42)

- 1) Receptacles that provide power for water-pump motors or other loads directly related to the circulation and sanitation system shall be permitted to be located between 6 feet and 10 feet from the inside walls of pools, outdoor spas and hot tubs, where the receptacle is single and of the locking and

- grounding type and protected by ground-fault circuit interrupters. All other receptacles shall be located not less than 6 feet from the inside walls of pools, outdoor spas and hot tubs. **(E4203.1.1)**
- 2) At least one 125-volt, 15- or 20- ampere receptacle supplied by a general-purpose branch circuit shall be located a minimum of 6 feet and not more than 20 feet from the inside wall of pools, outdoor spas and hot tubs. This receptacle shall be located not more than 6 feet, 6 inches above the floor, platform or grade level serving the pool, spa or hot tub. **(E4203.1.2)**
 - 3) All 15- and 20-ampere, 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 amperes, 125 volts through 240 volts, single phase, whether by receptacle or direct connection, shall be provided with ground-fault circuit-interrupter protection for personnel. **(E4203.1.3)**
 - 4) One or more means to simultaneously disconnect all ungrounded conductors for all utilization equipment, other than lighting, shall be provided. Each of such means shall be readily accessible and within sight from the equipment it serves and shall be located at least 5 feet horizontally from the inside walls of a 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. **(E4203.3)**

2015 International Swimming Pool and Spa Code (Section 305)

- 1) The top of the barrier shall be at least 48 inches above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 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, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on the 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 4 inches.
- 2) Openings in the barrier shall not allow passage of a 4-inch-diameter sphere.
- 3) Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
- 4) Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1 ³/₄ inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 ³/₄ inches in width.

- 5) Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches or more, spacing between vertical members shall not exceed 4 inches. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 $\frac{3}{4}$ inches in width.
- 6) Maximum mesh size for chain link fences shall be a 2 $\frac{1}{4}$ inch square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1 $\frac{3}{4}$ inches.
- 7) Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1 $\frac{3}{4}$ inches.
- 8) Access gates shall comply with the requirements of items 1 – 7, 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 of mechanism of the self-latching device is located less than 54 inches from the bottom of the gate, the release mechanism and openings shall comply with the following:
 - 8-1) The release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate;
 - 8-2) The gate and barrier shall have no opening larger than $\frac{1}{2}$ inch within 18 inches of the release mechanism.
- 9) Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met :
 - 9-1) The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346
 - 9-2) 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/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. The deactivation switch(es) shall be located at least 54 inches above the threshold of the door.
 - 9-3) Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 9-1 or 9-2 described above.
- 10) 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:
 - 10-1) The ladder or steps shall be capable of being secured, locked or removed to prevent access.
 - 10-2) The ladder or steps shall be surrounded by a barrier which meets the requirements of Items 1-9. When the ladder or steps are secured,

locked or removed, any opening created shall not allow the passage of a 4-inch-diameter sphere.

- 11) Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them.

Fuel Gas Requirements (Chapter 24)

- 1) Materials used for piping systems shall comply with the requirements of Section G2414 of the IRC. **(G2414.1)**
- 2) A yellow insulated copper tracer wire or other approved conductor shall be installed adjacent to underground nonmetallic piping. Access shall be provided to the tracer wire or the tracer wire shall terminate above ground at each end of the nonmetallic piping. The tracer wire size shall not be less than 18 AWG and the insulation type shall be suitable for direct burial. **(G2415.17.3)**
- 3) Installation of piping systems shall comply with the requirements of Section G2415 of the IRC. **(G2415)**
- 4) Piping systems shall be provided with shutoff valves in accordance with Section G2420 of the IRC. **(G2420)**
- 5) Pool and spa heaters shall be tested in accordance with ANSI Z21.56 and shall be installed in accordance with manufacturer's installation instructions. **(G2441.1)**
- 6) Each above-ground portion of a gas piping system other than corrugated stainless steel tubing (CSST), that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping, other than CSST, shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance. **(G2411.1)**
- 7) Corrugated stainless steel tubing (CSST) gas piping systems shall be bonded to the electrical service grounding electrode system at the point where the gas service enters the building. The bonding jumper shall be no smaller than 6 AWG copper wire or equivalent. **(G2411.1.1)**

Plumbing Requirements (Chapter 30 & City Ordinance)

- 1) When any sewer lines must be re-routed then a separate permit is required and all materials and installations must comply with Chapter 30 of the IRC. **(P3001.1)**
- 2) Discharge of any chlorinated water shall be into the sanitary building sewer. Any discharge made into community waters or waters of the state are prohibited and shall be unlawful.

Should you have any questions, please do not hesitate to contact the office at 405-354-6676.

DISCLAIMER

****This document is not all-inclusive, other requirements not cited in this document are also required to be addressed.****