



CODE ENFORCEMENT AGENCY

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2018 Pool & Spa Code

The guidelines referenced hereto are solely for the purposes of a RESIDENTIAL pool or spa. Pools shall be referred to above the ground, in-ground and temporary (seasonal) pools. The code reference describes ANY device used holding water greater than 24" in depth is considered in this interpretation. This guide is used to help describe the 2018 International Pool and Spa Code for residential purposed and is not the complete set of codes or references. Additional provisions may apply specific to your installation and design.

- 1) **Location** – The pool or spa application shall include a direct spot or location of the proposed structure. The area defined must include information on any area hazards such as direct buried water lines, sanitary or septic lines, power lines, gas lines or any other utility or easement. The pool location must address the boundary limits between any property or public right of ways. The safety of keeping a pool at a safe distance from affecting neighbors or property is important. Most of the boundary limits and consideration shall be reviewed by your local Zoning Officer and may require a separate Zoning Permit prior to pool permit application.
- 2) **Pool Structure after placement**- Now, the proper place is chosen, the Building Department needs information on the pool itself. There are dozens of pool types, styles and designs. Please be as specific as possible in describing the pool of your choice. Above ground: 28' round, rectangular, squared? Inground: 4', 6' 10", rounded, rectangular. Spa on deck, patio or ground?
- 3) **Pool Equipment for circulation**- Now, the pool area and pool structure is described, please include all the equipment for circulation of the water. This information should include the filter, pump, heater and any other equipment associated with the process.

Ladders, Diving Boards and Handrails, lights, sound systems and cooling fans are a part of pool equipment.

- 4) **Utilities to the Pool**- In most cases, you will need to run utilities to the new pool or spa. These utilities include, water, electric and gas (if applicable). When running new utility service such as a new sub electric panel, a gas line for heater or hose bib, the code must be applied and inspected to ensure safe connections and proper placement including underground supply, direct burial, overhead or above ground. When describing the new pool or spa, please detail the required or requested placement of all utilities to the pool areas.

NOTE: Potable water line for the pool will require a backflow preventer. Gas Line for Pool Heater should be sized with your gas provider to make sure an adequate size is installed. Electric Sub Panel or Sub to Sub panel requires additional electrical information and permit.

- 5) **Barriers & Guards** – The pool or spa is now required to have a barrier or guards placed around it to help prevent accidental entry into the pool or pool area. These barriers need to be described by the homeowner or the permit applicant. Most often, a fence is considered the barrier, but in some pool designs, other methods of barriers and guards may be required, necessary or preferred.

An outdoor swimming pool, including an in ground, above ground or on ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:

The top side of the barrier shall be at least 48 inches (1219 mm) 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 (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the structure is above grade, such as an above ground pool, the barrier may be at ground level, such as the pool structure. Where the barrier is mounted on the 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 (102mm). Access gates shall comply with the regulations of section AG105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outwards away from the pool and shall be self-closing and have 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 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:

- (a)8.1 The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate.
- (b)8.2 The gate and barrier shall have no opening larger than ½” (12.7 mm) within 18” (457 mm) of the release mechanism.

The barrier must be self-closing and lockable!

- 6) Spas on a patio or deck? If you are planning a spa placement on a patio, deck or balcony, you may be required to present more information for structural loads. These structural loads are calculated by a table in the IRC. If you cannot properly calculate the loads, then perhaps the Building Code Official may require a review by a licensed engineer to help certify the load adjustments.

7) **Electrical Bonding and Grounding of Pools and Equipment. (HOT TIPS)**

No aerial wires within 10 feet of the internal water edge. ALL electrical equipment must be listed, labeled or marked properly. Perimeter bonding is required for all surfaces surrounding an above ground pool, including unpaved lawn. A solid #8 AWG copper wire must be installed 4-6 inches below grade at 18-24 inches from the pool perimeter. Grounding and bonding terminals are to be identified for wet and corrosive environments. Outdoor receptacles including pool pump motors must be GFCI protected. Underground conduit must be properly labeled, identified and buried a minimum of 18 inches of cover. Exterior receptacle can be mounted on a pressure treated 4 x 4, with the GFCI receptacle at least 6 feet from the inside wall of the pool. At least one receptacle must be located at least 6 feet and not more than 20 feet from the inside wall of the pool.

The conductor is to be bonded to the pool at 4 equally spaced points and all metal items (ladder, diving equip, fencing, pool frame etc.) within 5 feet to be bonded to the #8 copper wire. Pool equipment other than lighting to have a maintenance disconnect at least 5 feet horizontally from the inside pool wall. The pool water must be bonded to the #8 copper conductor with a fitting installed in the filtration system or other approved device. PVC conduit and wet location rated conductors with an insulated equipment grounding conductor are code compliant. Any use of UF cable is not permitted near pool area, water or connectors.

ENFORCEMENT NOTES:

100% of pool application failures are due to the applicant using multiple contractors for a single permit. Pool projects may be simple or become very complex, please discuss all the requirements with your pool installer and review the necessary information required for PA UCC permit. If you use multiple contractors, then please list all required contractors and describe the scope of their projects. You may end up with a pool contractor, a plumber, an electrician, a fence contractor, a deck contractor and landscapers all in the same permit or job. Make sure you list all the required information for the inspector. Failure to complete the proper information will only delay the permit approval and inspection process.

NO pool may be filled with water and used until a FINAL inspection is approved. You must have a barrier or temporary barrier (with end date specified) in place, before any opening or use of the pool or spa.

A signed contract, proposal, sales agreement or brochure is NOT a sufficient detail for UCC permitting. You must detail the and specify the work that is being performed. Please discuss with your contractor and get more information on the scope of their work project.

All applicable safety requirements must be in place and operable for inspections. This shall include GFCI covers, safety signs (if applicable), rope and float for inground pools, lockable devices and required covers.

Inspections such as rough ins and final are the applicant's responsibility. If you are acting as the General Contractor for all the contractors involved for your new pool or spa, then all the required inspections and sign offs are your responsibility. Please clearly discuss these requirements with your contractor prior to scheduling any inspections. CEA will not provide any design or corrective advice of code deficiencies.

ANY Deck around pools must follow the 2018 International Residential Code requirements and may require separate approval and permit.

NO temporary electrical extension cords, temporary plumbing and piping, temporary gas line, temporary platforms are to be acceptable or approved. You must have the final minimum code compliance for any final inspection. A temporary barrier may be accepted with **BCO** approval for up to six months.

Applicable Zoning Approval is always required before any application for pool or spa is reviewed for plan examination and permit.