## SWIMMING POOLS

## RESIDENTIAL CODES AND REGULATIONS

## Planning and Zoning

Public or private in-ground or above-ground swimming, wading or other pools as defined by the Building Code as structures requiring a permit, shall not be located in front yards, and shall be no closer than five (5) feet to the side, or rear property line.

## Building Code Ordinance

Any public or private in-ground or above-ground swimming, wading or other pools capable of containing three feet or more of water depth, or with a sidewall height of 36 inches shall be considered structures for permit requirements.

## Fence Requirements

The owners and/or operators of any swimming pool located within the City shall construct and maintain fences that will deny ingress to animals and persons not admitted to such swimming pool by the owner/operator.

Fences shall be constructed so that no more than three inches of open space exists between the bottom of the fencing material and the ground measured vertically and shall have not more than four inches of clear opening in any dimension except for doors or gates.

Fences shall be not less than four feet in height, and not more than six feet in height. Exception: Above-ground pools having sidewalls of four feet or more in height from the finish grade, shall be required to have fencing and gates only where access to the pool may be had.

Fences shall be equipped with locks so as to comply with regulations.

## Permit Fees

Building Permit: $\$ 25.00$ Electrical Permit: $\$ 25.25$ Zoning Certificate: $\$ 25.00$ Fence (if needed): $\$ 25.00$

INSPECTIONS REQUIRED: Electrical - Trench \& Final Building - Final

## Electrical Code Requirements (General)

- All pool circuit wiring shall be suitable for wet locations and include an insulated copper conductor for grounding purposes. Wiring supplying the pump motor circuit is permitted to be any type permitted by Code on the interior of a one family dwelling unit.
- All underground wiring must be in a raceway (conduit).
- Conduit buried underground must have a minimum of 18 inches of cover (plastic) or 6 inches of cover (rigid metal).
- Pump motor receptacle must be 10 feet from the pool but may be no less than 6 ' if it employs a single, locking, grounding type configuration with GFCl protection.
- For dwelling units, at least one 125 volt, 15 or 20 amp general purpose receptacle must be provided no less than 6 feet and not more than 20 feet from pool.
- All 15 and 20 amp 125 volt receptacles located within 20 feet of pool shall be GFCl protected.
- All of the following (if present) must be bonded together to form an equipotential bonding grid:

1. Conductive pool shells (poured or sprayed concrete, concrete block, metal)
2. Perimeter surfaces (walking surfaces within 3 feet of pool walls)
3. Metallic components (reinforcing steel, etc.)
4. Underwater lighting (metal forming shells)
5. Metal fittings (ladders, handrails, etc.)
6. Electrical equipment (pump motors, pool cover motors, water heaters, etc.)
7. Fixed metal parts within 5 feet of pool (metal raceways, piping, awnings, fences, doors, windows, etc.)
8. Pool water

## PLEASE SEE NATIONAL ELECTRICAL CODE ARTICLE 680 FOR COMPLETE ELECTRICAL REQUIREMENTS FOR POOLS

## Residential Guide for Above Ground Swimming Pool



## General Electrical Requirements for Above Ground Swimming Pools

Intended to help with Home Owner Electrical Permits. This is not an exclusive list.
All electrical wring shall comply with the 2017 National Electrical Code - Article 680

All swimming pool wiring shall be suitable for wet locations.
All exterior swimming pool wiring shall be in a conduit.

- PVC Plastic Conduit shall be a minimum of $18^{\prime \prime}$ deep.
- Rigid Metal - Intermediate Metal Conduits shall be a minimum of 6" deep.

Cannot use: NM (Romex Cable) or UF (Underground Romex) cable outdoors or underground.
Exterior Pool Wiring shall be minimum wire size \#12 THHW (W = suitable for wet locations).
The Equipment Grounding Conductor shall be a minimum size \# 12, insulated and GREEN in color.

- Three common conductor colors - Black - White - Green.

Pump Motor Receptacle shall be:

- A minimum of 6 feet from the edge of pool water.
- GFCI (Ground Fault Circuit Interrupter) protected - can use a GFCI receptacle of GFCI breaker.

All other (new and existing) outdoor receptacles located within 20 feet of the swimming pool water's edge shall be GFCI protected.

## Perimeter Bonding (Equipotential Bonding) of the Swimming Pool Area and equipment:

This is simply a bare copper wire buried in the ground that circles around the outer edge of the swimming pool and connects to any metal objec(s)located within 5 feet of the swimming pool water's edge.

The Perimeter Bonding shall be:

- A minimum size \#8 bare solid copper wire.
- Shall circle around the outside walls of the swimming pool.
- Located 18 to 24 inches from the outer edge of the swimming pool walls.
- Buried 4 to 6 inches deep in the ground.

If the Swimming Pool Support Legs are:

- Metal - Four (4) of the metal legs shall be connected to the perimeter bonding wire in four (4) evenly spaced locations.
- Resin, plastic or non-metallic materials - No connects are required.

The Circulating Pump Motor shall connect to the perimeter bonding wire.
Other Fixed Metal Objects located within 5 feet of the pool water shall connect to the bonding wire.
${ }^{* *}$ Examples: awnings, fences, pool heaters, etc.

