

TOWN of EVANS

ELECTRICAL REQUIREMENTS FOR

PERMANENTLY INSTALLED SWIMMING POOLS

As per the requirements of the 2014 National Electric Code and the 2015 International Residential Code as amended by the NYS Building Standards and Codes 2016 Uniform Code Supplement.

PERMANENTLY INSTALLED SWIMMING POOLS: as defined by the 2015 International Residential Code as amended by the NYS Building Standards and Codes 2016 Uniform Code Supplement are those that are constructed in the ground or partially in

1.) Pool Pump Receptacle (outlet) and Wiring Method

- a. If a pump motor receptacle is located between 6 to 10 feet from the inside of the pool wall, the receptacle must be a single twist-lock receptacle, grounded and Ground Fault Circuit Interrupter (GFCI) protected.
- b. The receptacle shall have a weather-proof cover that can be closed when the cord is plugged in. (an in-use type cover)
- c. The circuit line for the pump must be a continuous line going directly to the panel box, and is to be isolated from all other receptacles.
- d. The wire for the pump motor receptacle shall not be less than #12 AWG insulated copper ground wire, and must be in a conduit. (except when entering a building the wire can be changed to NM) (NM wire can not be used in the conduit)
- e. Conduit
 - i. PVC..... All PVC conduit* must be buried at least to a depth of eighteen (18) inches below grade.
 - ii. Metal...All rigid metal conduit* must be buried at least to a depth of six (6) inches below grade.

* All wires used in conduit shall be single strand wires. (ex. THWN, etc. NM or UF cable shall not be used in conduit)

2.) Convenience Receptacle (outlet) and Wiring Method

- a. At least one (1) 15 or 20 amp convenience receptacle shall be located not closer than six (6) feet but not further than twenty (20) feet from the outside of the pool wall. (the receptacle may be an existing or newly wired Ground Fault Circuit Interrupter [GFCI] protected receptacle)
- b. The convenience receptacle shall have a weather-proof cover that can be closed when the cord is plugged in. (an in-use type cover is required for existing, unattended, convenience receptacles in wet locations)
- c. The convenience receptacle wiring shall be separate from the pump motor receptacle wiring.
- e. Wiring
 - i. UF cable if buried shall be buried to at least to a depth of twenty four (24) inches below grade.
 - ii. PVC..... All PVC conduit* shall be buried at least to a depth of eighteen (18) inches below grade.
 - iii. Metal...All rigid metal conduit* shall be buried at least to a depth of six (6) inches below grade.

* All wires used in conduit shall be single strand wires. (ex. THWN, etc. NM or UF cable shall not be used in conduit)

3.) Bonding the Pool

- a. All metal parts shall be bonded together using a #8 or larger solid copper wire.
- b. All attachments shall be made with non-corrosive clamps.
- c. Conductive pool shells shall be bonded in a minimum of four (4) equally spaced locations around the pool perimeter.
- d. Nonconductive pool shells shall have a #8 (or larger) solid copper wire eighteen (18) to twenty four (24) inches from the inside pool wall under the perimeter surface four (4) to six (6) inches below the final grade surrounding the pool.
- e. A minimum of nine (9) square inches of metal must be in the water to properly ground the water.

