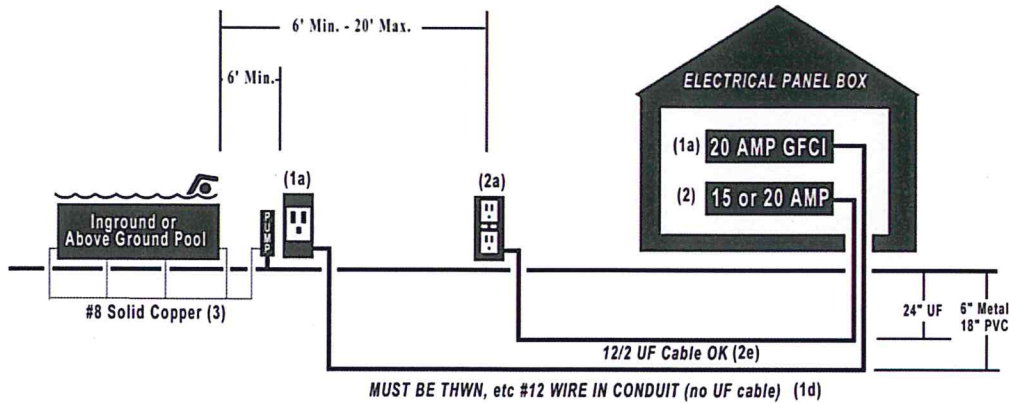


PERMANENTLY INSTALLED SWIMMING POOLS 2018

PERMANENTLY INSTALLED SWIMMING POOLS ARE THOSE THAT ARE CONSTRUCTED IN THE GROUND OR PARTIALLY IN THE GROUND AND ALL OTHERS CAPABLE OF HOLDING WATER WITH A DEPTH GREATER THAN 42 INCHES

ELECTRICAL WIRING REQUIREMENTS – 2014 NATIONAL ELECTRICAL CODE



1) Pool Pump Receptacle (Outlet) and Wiring Method

- If a pump motor receptacle is located between 6'-10' from the inside wall of the pool, the receptacle shall be a **single receptacle**, grounded, and Ground Fault Circuit Interrupter (GFCI) protected.
- Receptacle must have an **extra-duty, in-use, weatherproof cover** that can be closed when the cord is plugged in. Pump Cord shall be #12 AWG and shall not exceed 3'-0" long.
- The circuit line for the pump motor must be a dedicated line going directly to the panel box, and is to be isolated from all other receptacles/loads.
- Conduit: 1. PVC – All PVC conduit* must be buried at least 18" deep (12" if GFCI protected).
2. Metal – All Rigid Metal Conduit* must be at least 6" deep.
*Wires used in conduit must be single strand wires (ex: THWN, etc. - **NO NM or UF CABLE in Conduit**).
- Ground Wire for the pump motor shall not be less than a #12 AWG **insulated green** copper grounding wire and in conduit. (Exception: When entering a building the wire can change to NM) (Cannot use NM wire in conduit).
- Pool pump timers are required.

2) Convenience Receptacle (Outlet) and Wiring Method

- At least one (1) 15 or 20 ampere convenience receptacle must be located not closer than 6' but not further than 20' from the outside pool wall (Can be existing and/or wired with any Chapter 3 approved wiring method).
- Convenience receptacle must be Ground Fault Circuit Interrupter (GFCI) protected, Tamper Resistant (TR), and a Weather Resistant (WR) type receptacle.
- Must have an **extra-duty, in-use, weatherproof cover** that can be closed when the cord is plugged in.
- Must be separate from the pool pump receptacle wiring.
- Wiring: 1. UF cable if buried shall be at least 24" deep (12" if GFCI protected).
2. PVC – All PVC Conduits* must be buried at least 18" deep (12" if GFCI protected).
3. Metal- All Rigid Metal Conduits* must be at least 6" deep.
*Wires used in conduit must be single strand wires (ex: THWN, etc. - **NO NM or UF CABLE in Conduit**).

3) Equipotential Bonding of the Pool

- All metal parts must be bonded together using a #8 (or larger) **solid bare copper wire**.
- Conductive pool shells must be bonded in a minimum of four (4) equal points uniformly spaced around the pool. Must use **non-corrosive clamps/lugs**.
- Nonconductive and conductive pool shells must have a #8 (or larger) **solid bare copper wire** 18-24" from the inside pool wall under the perimeter surface 4-6" below the final grade.
- A minimum of nine (9) square inches of corrosion resistant metal must be in the water to bond the water.

4) Other

- Building and Electrical Permits are required **prior to beginning work**.
- Pool alarms are required. (Check with your local Code Enforcement Official for additional information).

5) Required Electrical Inspections

- Equipotential Bond, Concrete, Trench and Final Electrical Inspection when complete.

PLEASE CONTACT YOUR ELECTRICAL INSPECTOR OR CONTRACTOR IF YOU HAVE ANY QUESTIONS

This document prepared by Steve Lomison – Electrical Inspector, Town of West Seneca and Orchard Park – Office 558-3221