

ELECTRICAL WIRING REQUIREMENTS FOR SWIMMING POOLS

2008 National Electrical Code / 2010 Residential Code of New York State

ALL INGROUND POOLS AND ANY POOL OVER 18' IN DIMENTION THAT IS ABOVE GROUND AND HOLDING WATER GREATER THAN 42" DEEP IS TO BE CONSIDERED A PERMINENTLY INSTALLED POOL.

1) Pool Pump Receptacle (Outlet) and Wiring Method

- a. If a pump motor receptacle is located between 6' – 10' from the inside pool wall, the receptacle must be a single twist-lock outlet, grounded, and Ground Fault Circuit Interrupter (GFCI) protected.
- b. Receptacle must have a weatherproof cover that can be closed when the cord is plugged in. (In-use type cover)
- c. The circuit line for the pump motor must be a continuous line going directly to the panel box, and is to be isolated from all other receptacles.
- d. Wire for the pump motor shall not be less than #12 AWG insulated copper grounded wire, and must be in conduit. (except when entering a building the wire can change to NM) (Cannot use UF wire in conduit)
- e. Conduit
 - i. PVC – All PVC conduit* must be buried at least 18" deep
 - ii. Metal – All Rigid Metal Conduit* must be at least 6" deep

* Wires used in conduit must be single strand wires (ex: THWN, XHHN, etc) NO UF CABLE

2) Convenience Receptacle (Outlet) and Wiring Method

- a. At least one (1) 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 approved wiring method)
- b. Convenience receptacle must be GFCI protected.
- c. Must have a weatherproof cover where exposed to the weather (In-use type cover required on used, unattended, receptacles in wet locations)
- d. Must be separate from the pool pump receptacle wiring.
- e. Wiring
 - i. UF cable if buried must be at least 24" deep
 - ii. PVC – All PVC conduit* must be buried at least 18" deep
 - iii. Metal – All Rigid Metal Conduit* must be at least 6" deep

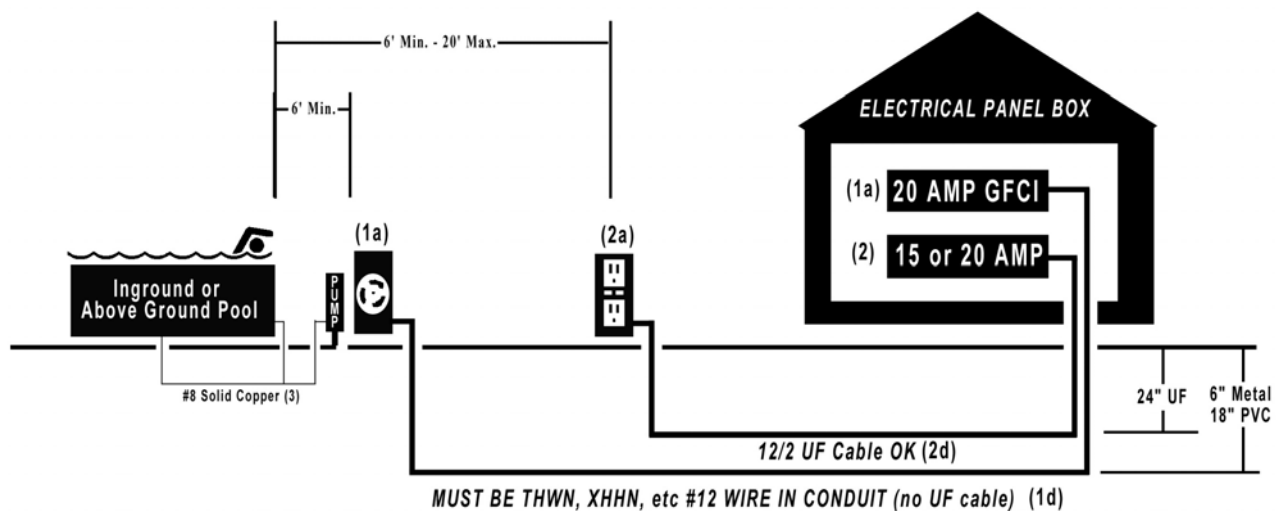
* Wires used in conduit must be single strand wires (ex: THWN, XHHN, etc - NO UF CABLE in Conduit)

3) Bonding The Pool

- a. All metal parts must be bonded together using a #8 (or larger) solid copper wire.
- b. Must use non-corrosive clamps.
- c. A minimum of nine (9) square inches of metal must be in the water to bond the water
- d. Recommend bonding in two (2) spots going ½ way around the pool.
- e. Equipotential Bonding is required on all pools with conductive shells. A #8 (or larger) solid copper wire

4) Other

- a. Building Permits are required. Secure a Building Permit prior to beginning work from your municipality
- b. Pool Alarms are required (Check with your local Building Department for additional information)
- c. Pool Pump Timers (Check with your local Building Department for additional information)



PLEASE CONTACT YOUR LOCAL INSPECTOR IF YOU HAVE ANY QUESTIONS

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