ELECTRICAL WIRING REQUIREMENTS FOR SWIMMING POOLS

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 (1067 MM)

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 GFCI protected. Maximum flexible cord length for pump is 3 Ft.
   B. Receptacle must have a weatherproof cover that can be closed when the cord is plugged in. (In-use type/bubble cover)
   C. Circuit for the pump motor shall not be less than #12 AWG insulated copper grounded wire, and must be in conduit. (Except when within a building the wire can change to NM) (Cannot use NM wire in underground conduits)
   D. 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

2) Convenience Receptacle (Outlet) and Wiring Method
   A. At least one (1) 15- or 20-ampere convenience receptacle must be located not closer than 10’ but not further than 20’ from the outside pool wall (Can be existing and/or wired with any approved wiring method)
      I. Convenience receptacle must be Ground Fault Circuit Interrupter (GFCI) protected.
      II. Must have a weatherproof cover where exposed to the weather (In-use type bubble cover)
      III. Must be separate from the pool pump receptacle wiring.
   B. Burial Depths
      I. UF cable if buried must be at least 24” deep
      II. PVC – All PVC conduits must be buried at least 18” deep
      III. Metal – All Rigid Metal Conduits must be at least 12” deep

3) Bonding the Pool
   A. All metal parts (walls, metal, posts, ladders, etc) must be bonded together using a #8 (or larger) solid copper wire.
   B. Must use non-corrosive clamps, listed for Electrical Use.
   C. A minimum of nine (9) square inches of metal must be in contact with the water to bond the water (2 Most Common Methods are a Grounded Metal Plate in the Skimmer, Or a 12” Long Non-Corrosive Metal Pipe Sectioned into the Pump System)
   D. Only one bond needed for structures of the pool if they are all connected to be electrically continuous.
   E. Equipotential Bonding is required on all pools with conductive shells using a #8 (or larger) solid copper wire
Building Permits are Required for MOST Swimming Pools. Please Check with Your Municipality Before Installing a Swimming Pool.