

COMMONWEALTH ELECTRICAL INSPECTION SERVICE INC.  
1355 PITTSFORD-MENDON ROAD, PO BOX 723, MENDON, NY 14506

SPRING 2011 RULES

This covers most pools

**ELECTRICAL CODE RULES BASED ON 2008 N.F.P.A -70**  
**THE RESIDENTIAL CODE OF New York STATE 2010**  
**ALL IN-GROUND POOLS AND ABOVE GROUND POOLS CAPABLE OF HOLDING 42" OR MORE OF WATER ARE CONSIDERED PERMANETLY INSTALLED POOLS**

1. Wiring for pump motor shall not have less than **# 12 AWG insulated copper grounding** wire, and to be in conduit, except when entering building can change to NM cable **680.21(A) (1-4)** If using 15 amp breaker may be 14 gauge wire for hot and neutral but ground must be #12.
2. If the pump motor receptacle is located **from 6' to 10'** from outside pool wall. The receptacle must be **single, twistlock, 15 or 20amp, GFCI protected with watertight inuse cover. 680.22(A)(1)(1-4)**
3. Pump motor cord **shall not exceed 3'** and shall have a grounding wire of not smaller than **# 12 AWG** copper. **680.7**
4. Circuit line for pump motor shall be a continuous circuit going directly to panel box and **shall have no other receptacles. 430-22(A)** All pumps and heaters must have a timer controlled power circuit. (Energy Code)
5. A receptacle used unattended in a wet location shall have a **watertight inuse cover. 406.8 (B)(1)**
6. All underground UF wire and PVC conduits must be 18" deep, unless circuit is protected by GFCI upstream then 12" deep. **300.5** Only electric specific to the pool is allowed less than 5" feet to the water's edge and must be **18" deep** and be installed in a approved raceway. **680.10**
7. At least one convenience **receptacle must be located between 6 and 20** feet from the waters edge and must be GFCI protected. Existing outlets between 6 and 20 feet shall be GFCI protected. **680.22(A)(1-5)** This can be wired with any approved wiring method.
9. All metal parts must be **bonded together with a No. 8 or** larger solid copper wire must be used. (Motor, ladders pool frame, diving board, lights, etc.) **680-22 / E4104.1**
10. **A minimum** of 9 square inches of metal must be in contact with the water to bond water.
11. **PERIMETER EQUIPOTENTIAL BONDING** all pools with shall have #8 CU 18-24 inches out 4-6 inches deep if no concrete with wire or mesh in it. **680.26 (B) (2)** this wire must circle pool.
12. When bonding pool frame or any metal parts to main bonding wires or wire mesh, you must use listed **non-corrosion clamps. 680-22(A)(B) / E4104.1** Both #11 and #12 attach to motor lug.
13. For in pool lights ask for separate light regulation sheet.
14. For any lighting fixtures outside of pool. **680-6 (b) (1) (2) (3) / E4103.4.3**

**NOTE:** A building permit is required in **ALL** localities, secure permits **before starting**.

Pool alarms required on all new pools.