Middle Department Inspection Agency Inc.



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## 2014 NEC BASIC POOL WIRING REQUIREMENTS

1. A number 8 or larger **solid** copper wire bonding wire is required between all metallic parts of the pool structure, pump motor, and other metallic parts within 5 feet of the inside wall of the pool. Walls of a metal pool structure or the reinforcing steel of a concrete pool shall be used as the bonding grid. NEC Section 680.26.(B)(1) Through (7)

2. A125 volt, 15 or 20-amp general purpose **GFCI** receptacle is required within 6 to 20 feet of the inside wall of the pool NEC Section 680.22 (A)(3).

3. A **single** type 125 volt **GFCI** protected receptacle for the circulation and/or sanitation system is permitted – no less than 6 feet – from the inside wall of the pool with a weather tight "in-use" type cover. NEC Section 680.22 (A)(2).

4. If the pump motor is hard wired, a disconnect switch is required at the motor and must be GFCI protected. NEC 680.21 (A) (1-3) (B) (C).

5. Wiring to the pump motor and associated equipment must be installed in electrical conduit with the minimum cover as required by Table 680.10 of the NEC. (18 inches for 120 Volt in PVC conduit).

6. Wiring to the pump motor must be done **3** conductors. Including a **GREEN** insulated ground wire, minimum size of number 12. NEC 680.21 (A)(1).

7. **U.F. Type**, direct burial wire, **CANNOT** be used for a pump motor circuit. NEC Section 680.21 (A)(1).

8. Any of the wiring methods recognized in Chapter 3 of the 2014 NEC shall be permitted to be used in the interior of one family dwelling units for the pump motor circuit. NEC 680.21 (A)(4).

9. The flexible cord, if used for the pump motor, **CANNOT** exceed **3** feet in length, with a number **12** ground wire. NEC 680.7 (A-C).

10. All electrical outlets (receptacle or direct connect) shall now be **GFCI** protected, (including pool motors). (120V or 240V) NEC680.22 (A)(4).

11. Perimeter surfaces with rebar or wire mesh shall be bonded in **four** uniformly spaced points around the perimeter of the pool. NEC 680.26 (B)(2).

12. An intentional pool water bond must be a minimum of 9 sq. inches shall be installed in direct contact with the pool water. NEC 680.26 (C).

13. All pool wiring shall conform with Article 680 of the 2014 National Electrical Code.