

2011 NATIONAL ELECTRICAL CODE & SPS 316

SWIMMING POOL WIRING NEC ARTICLE 680

- 680.5 GFCI's that are required may be either breakers or receptacle type.
- 680.7 Max. cord length for a pump motor is 3' except for storable pools.
- 680.8 Overhead wire clearance is min. 10' horizontal from the pool wall.
- 680.10 Underground wiring less than 5' from pool needs to be in approved conduit.
- 680.12 A means of disconnection such as a switch or plug must be within sight of the equipment served.
- 680.21(A)(1) Branch circuits for pump motors shall be in rigid, intermediate or non metallic conduit or MC cable. UF cable is not allowed because the equipment ground must be insulated. Exceptions apply where wiring is on or within buildings. Flex is allowed at the pump motor.
- 680.22(A)(1) Receptacles for pump motors between 6' to 10' from the pool wall must be locking type, grounded, single outlet and GFCI protected.
- 680.22(A)(2) Other Receptacles shall be at least 6' from the pool wall and GFCI protected.
- 680.22(A)(3) At least one general purpose receptacle from 6' to 20' away is required for pools at 1 & 2 family homes and other dwelling units.
- 680.26 Perimeter bonding and water bonding is required for permanent aboveground pools and inground pools. A minimum #8 AWG copper wire (ground ring) must be installed around the pool 4" to 6" below grade, 18" to 24" from the pool and connect to the pump motor, heater and the pool water.
- 680.26(B) 4 Point bonding is not required to the vertical uprights of pools with Vinyl Liners as it is considered a nonconductive material.
"For nonconductive pool shells, bonding at 4 points shall not be required"
- 680.26(C) The pool water must be bonded to at least 9 sq" of metal.
This may be accomplished by:
1. Bonding to a pool water heater.
 2. Installing a metal pipe nipple in the water circulation system so a ground strap may be attached to it.
 3. Other approved methods.
- 680.30 Storable pools (temporary pools) do not need water bonding or a ground ring. They shall be provided with a GFCI receptacle with a weather proof cover to allow attachment of the factory installed pool pump cord. The receptacle shall be at least 6' from the pool. Extension cords shall not be used.