

Electrical Requirements for Above-ground Swimming Pools – 2008 NEC

1. GFCI (ground fault circuit interrupter) protected receptacle required between 6 and 20 feet from the pool.
2. Pool pump receptacle must be twist lock, GFCI protected with an in-use cover located minimum 6 feet from pool.
3. Conduit for pool pump shall be minimum 18" cover.
4. Pool pump receptacle shall be mounted on a post usually 4" x 4" pressure treated
5. Pool pump motor needs to be bonded to pool with a #8 solid copper wire
6. Pool pump receptacle feed wires shall be individual conductors in PVC or metal (rigid or intermediate). All wiring methods must have an insulated copper ground conductor not smaller than #12. **UF cable not allowed.**
7. All metal within 5 feet of inside wall of pool shall be bonded to the pool with #8 solid copper
8. Bonding connectors shall be stainless steel, brass, copper or copper alloy.
9. The pool pump motor shall be listed and labeled for swimming pool use.
10. If the pool ladder is metal, it must be bonded to the pool
11. A minimum 9 square inch conductive plate shall be installed in contact with the water. The plate must be included in the bonding network. This plate can be satisfied with a metallic fill pipe or a metal filter basket
12. The perimeter surface, even if unpaved (lawn), must be bonded to the bonding grid at 4 points equally spaced around the perimeter. Bury the #8 copper min of 4-6 inches into the soil. If the pool structure contains no metal parts, extend the bonding ring to the pool pump. If the pool pump is double insulated, coil the bond wire at the pump to allow for future replacement of the pump. For nonconductive pool shells (fiberglass an example) bonding at 4 points shall not be required. See Article 680.26 for specifics. (18-24 inches from pool) **SPECIAL NOTE: The above statements are illustrative of Code requirements only, strict adherence to all Article 680 requirements is mandatory.**
13. Romex allowed inside dwelling for pump branch circuit. Outside dwelling, THWN in conduit is required including an insulated ground wire
14. Equi-potential bonding 680.26
15. Forming shell bonding and wet niche bonding are required
16. **ALL NEC 2008 grounding and bonding are required**