

Electric Requirements for Above Ground Residential Pools

1. No direct burial cable permitted. Metal or PVC conduit system is required outside the dwelling unit.
2. Minimum filter motor attachment cord size #12 AWG.
3. Minimum ground wire size #12 AWG.
4. 20 Ampere locking type receptacle required for filter motor for [above ground pools](#)
[\(#\)](#) located at a minimum of 6 feet from pool wall. This receptacle shall be ground fault protected and shall employ an "In-Use" cover. This circuit shall be dedicated to the filter motor and shall have no other devices connected.
5. A convenience receptacle shall be located between 6 feet and 20 feet from the pool wall, shall be ground fault protected and may be connected to a routine circuit in the dwelling.
6. All metal parts within 5' of the pool (fences, Bilco doors lamp posts etc.) must be included within the bonding grid described in #11 of this handout.
7. The filter motor may be "hard wired" but a disconnecting means is required and with-in sight of filter. Ground fault protection is required.
8. Burial Depth is routinely 18" for conduit.
9. Unless a pool light is present, any approved wiring method within the dwelling is approved for use as the feeder to the [pool equipment](#)
[\(#\)](#) but must be changed over to conduit once this wiring leaves the dwelling unit. If a pool light is installed, a conduit system is required from the service panel board and a green insulated ground wire is required to be installed in the conduit with the circuit conductors, typically black, white, & green THWN. Cable is not permitted to be installed in the conduit.
10. All wiring installed in a common conduit system must either be Ground Fault protected or not. Do not intermix these two types of wiring protection.
11. A # 8 solid copper bare wire is required to be installed to follow the entire circumference of the pool, at a depth of 4 to 6 inches below finished grade, at a distance of 18 to 24 inches from the inside wall of the pool. This bond wire must attach to the pool frame at 4 equidistant points using a direct burial lug fastened to the frame with either a galvanized or stainless steel nut and bolt. This bond wire must also pass through the lug provided by the manufacturer on the pool filter pump motor.
12. Bond pool water as per NEC Article 680.26(C).
13. For pools refer to the [National Electrical Code](#)
14. [Need to install a timer on the pool motor.](#)

