

an EGC that is an insulated copper conductor sized in accordance with Table 250.122, but not smaller than 12 AWG.

The equipment grounding conductor (EGC) installed with the feeder can be an aluminum conductor if the location in which it is installed is not a corrosive environment. Where a panelboard is supplied by a separately derived system, such as a transformer, the rules covering the EGC apply only to the feeder between the separately derived system (in the case of a transformer, the secondary conductors) and the panelboard, and not to any feeder conductors on the supply side of the separately derived source. The feeder is also required to be installed in a raceway where installed in corrosive environments in accordance with 680.14.

See Exhibit 680.1 for an illustration of applying the wiring method and grounding requirements to a feeder-supplied panelboard that provides branch circuits for swimming pool-related equipment. Also note the branch-circuit wiring methods shown in the illustration.

(B) Cord-and-Plug Connections. The flexible cord shall contain an EGC that is an insulated copper conductor sized in accordance with Table 250.122, but not smaller than 12 AWG. The flexible cord shall terminate in a grounding-type attachment plug having a fixed grounding contact member.

(C) Terminals. Terminals used for bonding and equipment grounding shall be identified for use in wet locations. Field-installed terminals in damp or wet locations or corrosive environments shall be composed of copper, copper alloy, or stainless steel and shall be listed for direct burial use.

680.8 Cord-and-Plug-Connected Equipment. Fixed or stationary equipment, other than underwater luminaires, for a

permanently installed pool shall be permitted to be connected with a flexible cord and plug to facilitate the removal or disconnection for maintenance or repair.

(A) Length. For other than storable pools, the flexible cord shall not exceed 900 mm (3 ft) in length.

(B) Equipment Grounding. The flexible cord shall have a copper equipment grounding conductor sized in accordance with 250.122 but not smaller than 12 AWG. The cord shall terminate in a grounding-type attachment plug.

(C) Construction. The equipment grounding conductors shall be connected to a fixed metal part of the assembly. The removable part shall be mounted on or bonded to the fixed metal part.

In some climates, disconnecting and removing a permanent pool's filter pump for cold-weather months is necessary. A 3-foot cord is permitted to facilitate the removal of fixed or stationary equipment for maintenance and storage. Listed filter pumps for use with storable pools (covered in Part III) are considered portable and are permitted to be equipped with cords longer than 3 feet.

680.9 Overhead Conductor Clearances. Overhead conductors shall meet the clearance requirements in this section. Where a minimum clearance from the water level is given, the measurement shall be taken from the maximum water level of the specified body of water.

(A) Power. Overhead conductors and open overhead wiring not in a raceway shall comply with the minimum clearances given in Table 680.9(A) and illustrated in Figure 680.9(A).

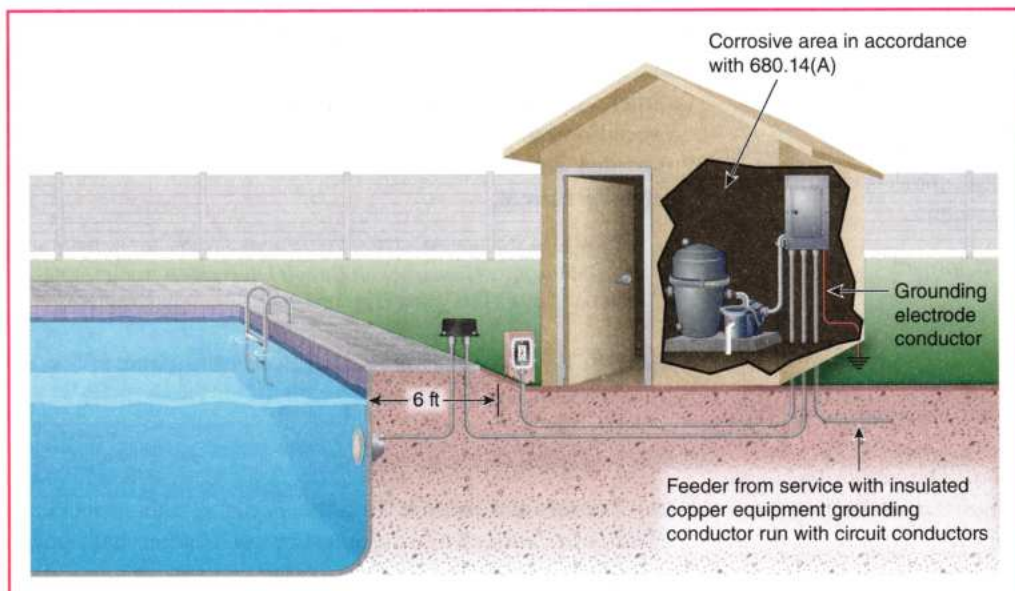


EXHIBIT 680.1 Wiring method and grounding requirements for a feeder panelboard supplying swimming pool equipment.