

250.118 Types of Equipment Grounding

Conductors. The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

- (1) A copper, aluminum, or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered, or bare; and in the form of a wire or a busbar of any shape.
- (2) Rigid metal conduit.
- (3) Intermediate metal conduit.
- (4) Electrical metallic tubing with an additional equipment grounding conductor.
- (5) Listed flexible metal conduit with an additional equipment grounding conductor, and meeting all the following conditions:
 - a. The conduit is terminated in fittings listed for grounding.
 - b. The combined length of flexible metal conduit and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6 ft) for feeders and 15 m (50 ft) for branch circuits.
 - c. The additional equipment grounding conductor is terminated at each termination or junction point.
- (6) Listed liquidtight flexible metal conduit meeting all the following conditions:
 - a. The conduit is terminated in fittings listed for grounding.
 - b. For metric designators 12 through 16 (trade sizes 3/8 through 1/2), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
 - c. For metric designators 21 through 35 (trade sizes 3/4 through 1 1/4), the circuit conductors contained in the conduit are protected by overcurrent devices rated not more than 60 amperes and there is no flexible metal conduit, flexible metallic tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sizes 3/8 through 1/2) in the grounding path.
 - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6 ft).
 - e. Where used to connect equipment where flexibility is necessary after installation, an equipment grounding conductor shall be installed.
- (7) Listed liquidtight flexible metal conduit with an additional equipment grounding conductor and meeting all of the following conditions:
 - a. The conduit is terminated in fitting listed for grounding.
 - b. The combined length of liquidtight flexible metal conduit and flexible metal conduit in the same ground return path does not exceed 15 m (50 ft) for branch circuits and 1.8 m (6 ft) for feeders.
 - c. The additional equipment grounding conductor is terminated at each termination or junction point.
- (8) Flexible metallic tubing where the tubing is terminated in fittings listed for grounding and meeting the following conditions:
 - a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.
 - b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6 ft).
- (9) Armor of Type AC cable with an additional equipment grounding conductor and as provided in 320.108.
- (10) The copper sheath of mineral-insulated, metal-sheathed cable.
- (11) Type MC cable where listed and identified for grounding in accordance with the following:
 - a. The combined metallic sheath and grounding conductor of interlocked metal tape-type MC cable
 - c. The metallic sheath or the combined metallic sheath and grounding conductors of the smooth or corrugated tube type MC cable.
- (12) Cable trays as permitted in 392.3(C) and 392.7.
- (13) Cablebus framework as permitted in 370.3.
- (14) Other listed electrically continuous metal raceways and listed auxiliary gutters.
- (15) Surface metal raceways listed for grounding.