

conductor shall have a continuous identifying marker readily distinguishing it from the other conductor or conductors. Conductors having a continuous green color or a continuous green color with one or more yellow stripes shall not be used for other than equipment grounding conductors. Cords or cables consisting of integral insulation and a jacket without a nonintegral equipment grounding conductor shall be permitted to be green. The identifying marker shall consist of one of the methods in 400.23(A) or (B).

**(A) Colored Braid.** A braid finished to show a continuous green color or a continuous green color with one or more yellow stripes.

**(B) Colored Insulation or Covering.** For cords having no braids on the individual conductors, an insulation of a continuous green color or a continuous green color with one or more yellow stripes.

**400.24 Attachment Plugs.** Where a flexible cord is provided with an equipment grounding conductor and equipped with an attachment plug, the attachment plug shall comply with 250.138(A) and (B).

### Part III. Portable Cables Over 600 Volts, up to 2000 Volts, Nominal

**400.30 General.** Part III applies to single and multiconductor portable cables used to connect mobile equipment and machinery.

#### 400.31 Construction.

**(A) Conductors.** The conductors shall be 12 AWG copper or larger and shall employ flexible stranding.

**(B) Equipment Grounding Conductor(s).** An equipment grounding conductor(s) shall be provided in cables with three or more conductors. The total area shall not be less than that of the size of the equipment grounding conductor required in 250.122.

**400.32 Shielding.** All shields shall be connected to an equipment grounding conductor.

**400.33 Equipment Grounding Conductors.** Equipment grounding conductors shall be connected in accordance with Parts VI and VII of Article 250.

**400.34 Minimum Bending Radii.** The minimum bending radii for portable cables during installation and handling in service shall be adequate to prevent damage to the cable.

**400.35 Fittings.** Connectors used to connect lengths of cable in a run shall be of a type that locks or latches firmly together. Provisions shall be made to prevent opening or closing these connectors while energized. Suitable means shall be used to eliminate tension at connectors and terminations.

**400.36 Splices and Terminations.** Portable cables shall not contain splices unless the splices are of the permanent molded, vulcanized types in accordance with 110.14(B). Terminations on portable cables rated over 600 volts, nominal, shall be accessible only to authorized and qualified personnel.

### N Part IV. Portable Power Feeder Cables Over 2000 Volts, Nominal

**N 400.40 General.** Part IV applies to single and multiconductor portable power feeder cables over 2000 volts nominal used to connect portable equipment and machinery.

**N 400.41 Portable Power Feeder Cables.** Portable power feeder cables rated greater than 2000 volts shall comply with 400.14, 400.17, and 400.23 and with the following sections.

Informational Note: See ANSI/NEMA WC 58/ICEA S-75-381, *Portable and Power Feeder Cables for Use in Mines and Similar Applications*, for information on construction, testing, and marking of portable power feeder cables.

**N 400.42 Uses Permitted.** Portable power feeder cables over 2000 volts shall be used for the following:

- (1) Connection of portable equipment and machinery or for wiring of cranes and hoists
- (2) Temporary services and installations

**N 400.43 Uses Not Permitted.** Portable power feeder cables over 2000 volts shall not be used for the following:

- (1) As a substitute for the fixed wiring of a structure
- (2) Where run through holes in walls, ceilings, or floors
- (3) Where run through doorways, windows, or similar openings
- (4) Where attached to building surfaces
- (5) Where concealed by walls, floors, or ceilings
- (6) Where installed in raceways, except as otherwise permitted in this Code
- (7) Where subject to physical damage

#### N 400.44 Construction.

**N (A) Conductors.** The conductors shall be 6 AWG copper or larger and shall employ flexible stranding.

**N (B) Nominal Insulation Thickness.** The nominal thickness of insulation for portable power feeder cables shall not be less than specified in Table 400.44(B)(1) through Table 400.44(B)(4).

**N (C) Equipment Grounding Conductor(s).** An equipment grounding conductor(s) shall be provided in cables with three or more conductors. The total area shall not be less than that of the size of the equipment grounding conductor required in 250.122.

**N 400.45 Shielding.** All shields shall be grounded at least at one end.