

flexible nonmetallic conduit (LFNC) with listed fittings, or flexible cord listed for extra-hard usage and provided with listed fittings. Where flexible cords are used, they shall also comply with 506.17 and be terminated with a listed cord connector that maintains the type of protection of the terminal compartment. If flexible connections are subject to oil or other corrosive conditions, the insulation of the conductors shall be of a type listed for the condition or be protected by means of a suitable sheath.

*Exception No. 1: Liquidtight flexible conduit (LFMC or LFNC), flexible conduit fittings, and cord fittings listed for Class II, Division 1 locations shall be permitted.*

*Exception No. 2: For elevator use, an identified elevator cable of Type EO, Type ETP, or Type ETT, shown under the "use" column in Table 400.4 for "hazardous (classified) locations," and terminated with listed connectors that maintain the type of protection of the terminal compartment shall be permitted.*

Informational Note No. 1: See 506.30 for grounding requirements where flexible conduit is used.

Informational Note No. 2: See ANSI/UL 2225, *Cables and Cable-Fittings for Use in Hazardous (Classified) Locations*, for information on construction, testing, and marking of cables, cable fittings, and cord connectors.

- (7) Optical fiber cable Type OFNP, Type OFCP, Type OFNR, Type OFCR, Type OFNG, Type OFCG, Type OFN, or Type OFC installed in raceways in accordance with 506.15(A). Optical fiber cables shall be sealed in accordance with 506.16.

**Δ (B) Zone 21.** In Zone 21 locations, the following wiring methods shall be permitted:

- (1) All wiring methods permitted in 506.15(A)
- (2) Fittings and boxes that are dusttight, that are provided with threaded bosses for connection to conduit, and in which taps, joints, or terminal connections are not made and are not used in locations where metal dust is present

Informational Note: See ANSI/UL 2225, *Cables and Cable-Fittings for Use in Hazardous (Classified) Locations*, for information on construction, testing, and marking of cables, cable fittings, and cord connectors.

*Exception: Equipment identified as intrinsically safe "ib" shall be permitted to be connected using the wiring methods identified in 504.20.*

**Δ (C) Zone 22.** In Zone 22 locations, the following wiring methods shall be permitted:

- (1) All wiring methods permitted in 506.15(B).
- (2) Rigid metal conduit (RMC) or intermediate metal conduit (IMC) with listed threaded or threadless fittings.
- (3) Electrical metallic tubing (EMT) or dusttight wireways.
- (4) Type MC or Type MI cable with listed termination fittings.

- (5) Type PLTC cable or Type PLTC-ER cable used in Class 2 or Class 3 circuits, including installation in cable tray systems. The cable shall be terminated with listed fittings. Type PLTC-ER cable shall include an equipment grounding conductor in addition to a drain wire that might be present.
- (6) Type ITC cable or Type ITC-ER cable as permitted in 335.4 and terminated with listed fittings. Type ITC-ER cable shall include an equipment grounding conductor in addition to a drain wire.
- (7) Type MV, Type TC, or Type TC-ER cable, including installation in cable tray systems. Type TC-ER cable shall include an equipment grounding conductor in addition to a drain wire that might be present. The cable shall be terminated with listed fittings.
- (8) Intrinsic safety type of protection "ic" using any of the wiring methods permitted for unclassified locations. Intrinsic safety type of protection "ic" systems shall be installed in accordance with the control drawing(s). Simple apparatus, not shown on the control drawing, shall be permitted in a circuit of intrinsic safety type of protection "ic", provided that the simple apparatus does not interconnect the intrinsic safety type of protection "ic" circuit to any other circuit. Separation of circuits of intrinsic safety type of protection "ic" shall be in accordance with one of the following:
  - a. Be in separate cables
  - b. Be in multiconductor cables where the conductors of each circuit are within a grounded metal shield
  - c. Be in multiconductor cables where the conductors have insulation with a minimum thickness of 0.25 mm (0.01 in.)

Informational Note: See Article 100 for the definition of *simple apparatus*.

- (9) Boxes and fittings shall be dusttight.
- (10) Optical fiber cable Type OFNP, Type OFCP, Type OFNR, Type OFCR, Type OFNG, Type OFCG, Type OFN, or Type OFC installed in cable trays or any raceway in accordance with 506.15(C). Optical fiber cables shall be sealed in accordance with 506.16.
- (11) Cablebus.

**506.16 Sealing.** Where necessary to protect against the ingress of combustible dust, combustible fibers/flyings, or ignitable fibers/flyings, or to maintain the type of protection, seals shall be provided. The seal shall be identified as capable of preventing the ingress of combustible dust, combustible fiber/flying, or ignitable fiber/flying and maintaining the type of protection but need not be explosionproof or flameproof.

**Δ 506.17 Flexible Cords.** Flexible cords used in Zone 20, Zone 21, and Zone 22 locations shall comply with all of the following: