

Δ (2) **Flexible Connections.** If flexibility is necessary to minimize the transmission of vibration from equipment during operation or to allow for movement after installation during maintenance, one of the following shall be permitted:

- (1) Flexible fittings listed for the location.
- (2) Flexible cord in accordance with 505.17(A), terminated with cord connectors listed for the location.
- (3) In restricted industrial establishments for applications limited to 600 volts nominal or less, where the cable is not subject to physical damage and is terminated with fittings listed for the location, Type TC-ER-HL cable. Type TC-ER-HL cable shall be listed for use in Class I, Division 1 or Zone 1 locations and shall be installed in accordance with 336.10.

Informational Note No. 1: See ANSI/UL 2225, *Cables and Cable-Fittings for Use in Hazardous (Classified) Locations*, for information on construction, testing, and marking of cables and cable fittings.

- (4) In restricted industrial establishments listed Type P cable with metal braid armor and an overall jacket. Type P cable shall be terminated with fittings listed for the location and installed in accordance with Part II of Article 337.

Informational Note No. 2: See UL 1309A, *Outline of Investigation for Cable for Use in Mobile Installations*, for information on construction, testing, and marking of Type P cable.

Informational Note No. 3: See ANSI/UL 2225, *Cables and Cable-Fittings for Use in Hazardous (Classified) Locations*, for information on construction, testing, and marking of cable fittings.

"Flexible connections" refers only to the fittings. The intent of this section is not to permit a flexible wiring method. The fitting should be no longer than is needed. Limited use of flexible cord is permitted in accordance with 505.17 for specific applications where flexibility of the wiring method is made necessary by the type of equipment being supplied.

The requirement in 505.16(B)(1) to provide a seal within 2 inches of an enclosure and the requirement in 505.16(B)(2) to provide a seal within 18 inches of an enclosure apply where flexible connections are used.

(C) Zone 2.

Δ (1) **General.** In Zone 2 locations, the following wiring methods shall be permitted:

Informational Note No. 1: See Article 100 for the definition of *restricted industrial establishment [as applied to hazardous (classified) locations]*.

- (1) All wiring methods permitted by 505.15(B).
- (2) Type MC, Type MV, Type TC, or Type TC-ER cable, including installation in cable tray systems. Type TC-ER shall include a separate equipment grounding conductor in addition to a drain wire that might be present. The cable shall be terminated with listed fittings. Single conductor Type MV cables shall be shielded or metallic-armored.

- (3) Type ITC cable or Type ITC-ER cable as permitted in 335.4 and terminated with listed fittings. Type ITC-ER shall include a separate insulated equipment grounding conductor in addition to a drain wire.
- (4) Type PLTC cable or Type PLTC-ER cable used for Class 2 or Class 3 circuits, including installation in cable tray systems. The cable shall be terminated with listed fittings. Type PLTC-ER shall include a separate insulated equipment grounding conductor in addition to a drain wire that might be present.
- (5) Enclosed gasketed busways or enclosed gasketed wireways.
- (6) In restricted industrial establishments and where metal conduit does not provide the corrosion resistance needed for the environment where it is installed, listed reinforced thermosetting resin conduit (RTRC), factory elbows, and associated fittings, all marked with the suffix -XW, and Schedule 80 PVC conduit, factory elbows, and associated fittings. Where seals are required for boundary conditions as defined in 505.16(C)(1)(b), the Zone 1 wiring method shall extend into the Zone 2 area to the seal, which shall be located on the Zone 2 side of the Zone 1/Zone 2 boundary.
- (7) 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 an intrinsic safety type of protection "ic" circuit if the simple apparatus does not interconnect the intrinsic safety type of protection "ic" systems to any other circuit. Separate intrinsic safety type of protection "ic" systems shall be installed in accordance with one of the following:

- a. In separate cables
- b. In multiconductor cables where the conductors of each circuit are within a grounded metal shield
- c. In multiconductor cables where the conductors of each circuit have insulation with a minimum thickness of 0.25 mm (0.01 in.)

Informational Note No. 2: See Article 100 for the definition of *simple apparatus*.

- (8) Optical fiber cable of Type OFNP, Type OFCP, Type OFNR, Type OFCR, Type OFNG, Type OFCG, Type OFN, or Type OFC installed in cable trays or any other raceway in accordance with 505.15(C). Optical fiber cable shall be sealed in accordance with 505.16.
- (9) Cablebus.
- (10) In restricted industrial establishments, listed Type P cable with or without metal braid armor and an overall jacket. Type P cable shall be terminated with fittings listed for the location and installed in accordance with Part II of Article 337.