

- (3) Cable trays
- (4) Cablebus
- (5) Electrical metallic tubing (EMT)
- (6) Flexible metal conduit (FMC)
- (7) Intermediate metal conduit (IMC)
- (8) Liquidtight flexible metal conduit (LFMC)
- (9) Liquidtight flexible nonmetallic conduit (LFNC)
- (10) Messenger-supported wiring
- (11) Open wiring on insulators
- (12) Reinforced thermosetting resin conduit (RTRC)
- (13) Rigid metal conduit (RMC)
- (14) Rigid polyvinyl chloride conduit (PVC)
- (15) Type MC cable
- (16) Type MI cable
- (17) Type SE cable
- (18) Type TC-ER cable
- (19) Type UF cable
- (20) Wireways

▲ 225.11 Feeder and Branch-Circuit Conductors Entering, Exiting, or Attached to Buildings or Structures. Feeder and branch-circuit conductors entering or exiting buildings or structures shall be installed in accordance with 230.52. Overhead branch circuits and feeders attached to buildings or structures shall be installed in accordance with 230.54.

225.12 Open-Conductor Supports. Open conductors shall be supported on knobs, racks, brackets, or strain insulators, that are made of glass, porcelain, or other approved materials.

225.14 Open-Conductor Spacings. Conductors shall comply with the spacings provided in Table 230.51(C).

(A) Separation from Other Circuits. Open conductors shall be separated from open conductors of other circuits or systems by not less than 100 mm (4 in.).

(B) Conductors on Poles. Conductors on poles shall have a separation of not less than 300 mm (1 ft) where not placed on racks or brackets. Conductors supported on poles shall provide a horizontal climbing space not less than the following:

- (1) Power conductors below communications conductors — 750 mm (30 in.)
- (2) Power conductors alone or above communications conductors:
 - a. 300 volts or less — 600 mm (24 in.)
 - b. Over 300 volts — 750 mm (30 in.)
- (3) Communications conductors below power conductors — same as power conductors
- (4) Communications conductors alone — no requirement

Sufficient space is required for personnel to be able to climb safely over or through conductors to work with conductors on the pole.

225.15 Supports over Buildings. Outside branch-circuit and feeder conductors passing over a building shall be securely supported.

225.16 Attachment to Buildings.

(A) Point of Attachment. The point of attachment to a building shall be in accordance with 230.26.

(B) Means of Attachment. The means of attachment to a building shall be in accordance with 230.27.

225.17 Masts as Supports. Only feeder or branch-circuit conductors specified within this section shall be permitted to be attached to the feeder and/or branch-circuit mast. Masts used for the support of final spans of feeders or branch circuits shall be installed in accordance with 225.17(A) and (B).

Conductors that are attached to the exterior of the mast are not permitted to be attached between the weatherhead and any coupling that is above a point of securement to the building. Attaching conductors in that space can put additional strain on the mast, which could cause it to fail.

A mast supporting an overhead branch circuit or feeder span is not permitted to support conductors of other systems, such as overhead conductor spans for signaling, communications, or CATV systems.

See also

230.28, which provides similar requirements for masts supporting service drops

(A) Strength. The mast shall have adequate strength or be supported by braces or guy wires to safely withstand the strain imposed by the overhead feeder or branch-circuit conductors. Hubs intended for use with a conduit serving as a mast for support of feeder or branch-circuit conductors shall be identified for use with a mast.

(B) Attachment. Feeder and/or branch-circuit conductors shall not be attached to a mast where the connection is between a weatherhead or the end of the conduit and a coupling where the coupling is located above the last point of securement to the building or other structure, or where the coupling is located above the building or other structure.

225.18 Clearance for Overhead Conductors and Cables. Overhead spans of open conductors and open multiconductor cables of not over 1000 volts, nominal, shall have a clearance of not less than the following:

- (1) 3.0 m (10 ft) — above finished grade, sidewalks, or from any platform or projection that will permit personal contact where the voltage does not exceed 150 volts to ground and accessible to pedestrians only
- (2) 3.7 m (12 ft) — over residential property and driveways, and those commercial areas not subject to truck traffic where the voltage does not exceed 300 volts to ground