

## Part IV. Installation Methods Within Buildings

### 800.110 Raceways, Cable Routing Assemblies, and Cable Trays.

Δ (A) **Types of Raceways.** Wires and cables shall be permitted to be installed in raceways that comply with 800.110(A)(1), 800.110(A)(2), or 800.110(A)(3). Medium-power networked-powered broadband communications cables shall not be installed in raceways that comply with 800.110(A)(2).

(1) **Raceways Recognized in Chapter 3.** Wires and cables shall be permitted to be installed in any raceway included in Chapter 3. The raceways shall be installed in accordance with Chapter 3.

(2) **Communications Raceways.** Wires and cables shall be permitted to be installed in plenum communications raceways, riser communications raceways, and general-purpose communications raceways selected in accordance with Table 800.154(b), listed in accordance with 800.182, and installed in accordance with 800.113 and 362.24 through 362.56, where the requirements applicable to electrical nonmetallic tubing (ENT) apply.

(3) **Innerduct for Communications Wires and Cables, Coaxial Cables, or Network-Powered Broadband Communications Cables.** Listed plenum communications raceways, listed riser communications raceways, and listed general-purpose communications raceways selected in accordance with Table 800.154(b) shall be permitted to be installed as innerduct in any type of listed raceway permitted in Chapter 3.

(B) **Raceway Fill.** The raceway fill requirements of Chapters 3 and 9 shall apply to medium-power network-powered broadband communications cables.

(C) **Cable Routing Assemblies.** Cables shall be permitted to be installed in plenum cable routing assemblies, riser cable routing assemblies, and general-purpose cable routing assemblies selected in accordance with Table 800.154(c), listed in accordance with 800.182, and installed in accordance with 800.110(C)(1) and (C)(2) and 800.113.

(1) **Horizontal Support.** Cable routing assemblies shall be supported where run horizontally at intervals not to exceed 900 mm (3 ft) and at each end or joint, unless listed for other support intervals. In no case shall the distance between supports exceed 3 m (10 ft).

(2) **Vertical Support.** Vertical runs of cable routing assemblies shall be supported at intervals not exceeding 1.2 m (4 ft), unless listed for other support intervals, and shall not have more than one joint between supports.

(D) **Cable Trays.** Wires and cables and communications raceways shall be permitted to be installed in metal or listed nonmetallic cable tray systems. Ladder cable trays shall be permitted to support cable routing assemblies.

**800.113 Installation of Cables Used for Communications Circuits, Communications Wires, Cable Routing Assemblies, and Communications Raceways.** Installation of wires, cables,

cable routing assemblies, and communications raceways shall comply with 800.113(A) through (L). Installation of cable routing assemblies and communications raceways shall comply also with 800.110. Types of cables used by this section are identified in Table 800.113.

N **TABLE 800.113** Cables Used for Communications Circuits

Listed Cable Types	
Plenum cables	CMP, CATVP, BLP, OFNP, OFCP
Riser cables	CMR, CATVR, BMR, BLR, OFNR, OFCR
General-purpose cables	CMG, CM, CATV, BM, BL, OFNG, OFN, OFCG, OFC
Limited-use cables	CMX, CATVX, BLX
Undercarpet	CMUC
Underground	BMU, BLU

Δ (A) **Listing.** Cables used for communications circuits, communications wires, cable routing assemblies, and communications raceways installed in buildings shall be listed and installed in accordance with the limitations of the listing.

*Exception: Cables installed in compliance with 800.48 shall not be required to be listed.*

Δ (B) **Ducts Specifically Fabricated for Environmental Air.** Installations of cables used for communications circuits, communications wires, cable routing assemblies, and communications raceways in ducts specifically fabricated for environmental air shall be in accordance with 800.113(B)(1) and (B)(2).

Δ (1) **Uses Permitted.** The following cables shall be permitted in ducts specifically fabricated for environmental air as described in 300.22(B) if they are directly associated with the air distribution system:

- (1) Plenum cables up to 1.22 m (4 ft) in length
- (2) Plenum, rise, general-purpose, and limited-use cables installed in raceways that are installed in compliance with 300.22(B)

N (2) **Uses Not Permitted.** The following cables, wires, cable routing assemblies, and communications raceways shall not be permitted in ducts specifically fabricated for environmental air as described in 300.22(B):

- (1) Plenum, riser, and general-purpose communications raceways
- (2) Plenum, riser, and general-purpose cable routing assemblies
- (3) Riser, general-purpose, and limited-use cables
- (4) Type CMUC cables and wires
- (5) Types BMU and BLU cables
- (6) Communications wires
- (7) Hybrid power and communications cables