permitted in the same raceway, cable tray, box, enclosure, or cable routing assembly with jacketed cables of any of the following circuits:

(1) Class 2 and Class 3 remote-control, signaling, and power-limited circuits in compliance with Parts I and II of Article 725
(2) Power-limited fire alarm systems in compliance with Parts I and III of Article 760
(3) Communications circuits in compliance with Parts I and IV of Article 805
(4) Nonconductive and conductive optical fiber cables in compliance with Parts I and V of Article 770
(5) Community antenna television and radio distribution systems in compliance with Parts I and V of Article 820

(c) *Medium-Power Network-Powered Broadband Communications Circuit Cables with Optical Fiber Cables and Other Communications Cables.* Medium-power network-powered broadband communications cables shall not be permitted in the same raceway, cable tray, box, enclosure, or cable routing assembly with conductors of any of the following circuits:

(1) Communications circuits in compliance with Parts I and IV of Article 805
(2) Conductive optical fiber cables in compliance with Parts I and V of Article 770
(3) Community antenna television and radio distribution systems in compliance with Parts I and V of Article 820

(d) *Medium-Power Network-Powered Broadband Communications Circuit Cables with Other Circuits.* Medium-power network-powered broadband communications cables shall not be permitted in the same raceway, cable tray, box, enclosure, or cable routing assembly with conductors of any of the following circuits:

(1) Class 2 and Class 3 remote-control, signaling, and power-limited circuits in compliance with Parts I and II of Article 725
(2) Power-limited fire alarm systems in compliance with Parts I and III of Article 760

(e) *Electric Light, Power, Class 1, Nonpowered Broadband Communications Circuit Cables.* Network-powered broadband communications cable shall not be placed in any raceway, cable tray, compartment, outlet box, junction box, or similar fittings with conductors of electric light, power, Class 1, or non-power-limited fire alarm circuit cables.

Exception No. 1: Network-powered broadband communications cable shall be permitted to be placed in a raceway, cable tray, compartment, outlet box, junction box, or similar fittings with conductors of electric light, power, Class 1, or non-power-limited fire alarm circuit cables where all of the conductors of electric light, power, Class 1, non-power-limited fire alarm circuits are separated from all of the network-powered broadband communications cables by a permanent barrier or listed divider.

Exception No. 2: Where power circuit conductors in outlet boxes, junction boxes, or similar fittings or compartments where such conductors are introduced solely for power supply to the network-powered broadband communications system distribution equipment, the power circuit conductors shall be routed within the enclosure to maintain a minimum 6 mm (¼ in.) separation from network-powered broadband communications cables.

Δ **(2) Other Applications.** Network-powered broadband communications cable shall be separated at least 50 mm (2 in.) from conductors of any electric light, power, Class 1, and non-power-limited fire alarm circuits.

Exception No. 1: Separation shall not be required where: (1) all of the conductors of electric light, power, Class 1, and non-power-limited fire alarm circuits are in a raceway or in metal-sheathed, metal-clad, nonmetallic-sheathed, Type AC, or Type UF cables, or (2) all of the network-powered broadband communications cables are encased in a raceway.

Exception No. 2: Separation shall not be required where the network-powered broadband communications cables are permanently separated from the conductors of electric light, power, Class 1, and non-power-limited fire alarm circuits by a continuous and firmly fixed nonconductor, such as porcelain tubes or flexible tubing, in addition to the insulation on the wire.

(B) Support of Network-Powered Broadband Communications Cables. Raceways shall be used for their intended purpose. Network-powered broadband communications cables shall not be strapped, taped, or attached by any means to the exterior of any conduit or raceway as a means of support.

N **(C) Splicing of Medium-Powered Network-Powered Communications Cables.** Where a medium-powered network-powered broadband communications cable is spliced or extended, a listed junction box or listed patch panel shall be used.

830.154 Substitutions of Network-Powered Broadband Communications System Cables. The substitutions for network-powered broadband system cables listed in Table 830.154 shall be permitted.

The applications for the cable, communications raceways, and cable routing assemblies are summarized in Table 800.154(a). The installation location dictates the type of cable permitted within the raceway or assembly and is subject to the installation requirements of 800.110, 800.113, and 830.40. Table 830.154 reflects permitted interchangeability between cable types that may be utilized within the applications listed in Table 800.154(a).