These types of cables are often used to provide Ethernet- and Power over Ethernet (PoE)-type services.

Informational Note No. 2: See 725.144 for requirements to manage the temperature rise of bundles of cables that provide power.

Power over Ethernet (PoE) systems are allowed to provide power to communications equipment via the communications cable. As more power is delivered to the equipment, overheating the cables becomes more of a concern. Therefore, how the cables are bundled together must be monitored and accounted for. Cables are required to comply with 725.144 for communications cables used as Class 2 and Class 3 cables. Table 725.144 contains ampacity values for various conductor sizes with respect to the number of cables within a given bundle. This requirement does not apply when the power source limits the current imposed on a conductor to less than 0.3 ampere when the conductor is 24 AWG or larger.

Part VII. Listing Requirements

840.170 Equipment and Cables. Premises-powered broadband communications systems equipment and cables shall comply with 840.170(A) through (D).

(A) Network Terminal. The network terminal and applicable grounding means shall be listed for application with premises-powered broadband communications systems.

Informational Note No. 1: See ANSI/UL 60950-1-2014, *Standard for Safety of Information Technology Equipment*; ANSI/UL 498A-2015, *Current Taps and Adapters*; ANSI/UL 467-2013, *Grounding and Bonding Equipment;* or ANSI/UL 62368-1-2014, *Audio/Video, Information and Communication Technology Equipment – Part 1: Safety Requirements*.

Informational Note No. 2: There are no requirements on the network terminal and its grounding methodologies except for those covered by the listing of the product.

(B) Premises Communications Wires and Cables. Communications wires and cables shall be listed and marked in accordance with 800.179.

(C) Power Source. The power source for circuits intended to provide power over communications cables to remote equipment shall be limited in accordance with Table 11(B) in Chapter 9 for voltage sources up to 60 volts dc and be listed as specified in either of the following:

(1) A power source shall be listed as specified in 725.60(A)(1), (A)(2), (A)(3), or (A)(4). The power sources shall not have the output connections paralleled or otherwise interconnected unless listed for such interconnection.
(2) A power source shall be listed as communications equipment for limited-power circuits.

Informational Note: See ANSI/UL 60950-1-2014, *Standard for Safety of Information Technology Equipment-Safety — Part 1*, or ANSI/UL 62368-1-2014, *Audio/Video, Information and Communication Technology Equipment — Part 1: Safety Requirements*. Typically, such circuits are used to interconnect equipment for the purpose of exchanging information (data).

(D) Accessory Equipment. Communications accessory equipment and/or assemblies shall be listed for application with premises-powered communications systems.

Informational Note: See ANSI/UL 1863-2004, *Communications-Circuit Accessories*.