Informational Note: See ANSI/UL 1666-2017, *Standard Test for Flame Propagation Height of Electrical and Optical-Fiber Cable Installed Vertically in Shafts*, for one method of defining fire-resistant characteristics of the cable capable of preventing the carrying of fire from floor to floor.

Δ **(C) General-Purpose Cables.**

N **(1) Type CMG.** Type CMG communications general-purpose cables shall be listed as being suitable for general-purpose use, with the exception of risers and plenums, and shall also be listed as being resistant to the spread of fire.

Informational Note: See CSA Vertical Flame Test — Cables in Cable Trays as described in CSA C22.2 No. 0.3-09 (R2019), *Test Methods for Electrical Wires and Cables*, for one method of defining resistance to the spread of fire where the damage (char length) of the cable does not exceed 1.5 m (4 ft 11 in.) or FT4 Flame Test in ANSI/UL 1685-2015, *Standard for Safety for Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables*. The smoke measurements in the test methods are not applicable.

N **(2) Types CM, CATV, BM, and BL.** Type CM communications general-purpose cables, Type CATV community antenna television coaxial general-purpose cables, Type BM network-powered broadband communications medium-power general-purpose cables, and Type BL network-powered broadband communications low-power general-purpose cables shall be listed as being suitable for general-purpose use, with the exception of risers and plenums, and shall also be listed as being resistant to the spread of fire.

Informational Note: See UL Flame Exposure in ANSI/UL 1685-2015, *Standard for Safety for Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables*, for one method of defining *resistance to the spread of fire* where the damage (char length) of the cable does not exceed 244 cm (8 ft 0 in.). The smoke measurements in the test method are not applicable.

(D) Limited-Use Cables. Type CMX limited-use communications cables, Type CATVX limited-use community antenna television coaxial cables, and Type BLX limited-use network-powered broadband low-power cables shall be listed as being suitable for use in dwellings and for use in raceway and shall also be listed as being resistant to flame spread.

Informational Note: See ANSI/UL 2556, *Standard for Wire and Cable Test Method*, for one method of determining that cable is resistant to flame spread is by testing the cable to the FV-2/VW-1 flame test.

N **(E) Circuit Integrity (CI) Cable, Fire-Resistive Cable System, or Electrical Circuit Protective System.** Cables that are used for survivability of critical circuits under fire conditions shall be listed and meet either 800.179(E)(1), (E)(2), or (E)(3).

N **(1) CI Cables.** Cables specified in 800.179(A) through (C) and used for survivability of critical circuits shall be marked with the additional classification using the suffix "CI." In order to maintain its listed fire rating, CI cable shall only be installed in free air in accordance with 800.24. CI cables shall only be permitted to be installed in a raceway where specifically listed and marked as part of a fire-resistive cable system as covered in 800.179(E)(2).

Informational Note: See UL 2196, *Standard for Fire Test for Circuit Integrity of Fire-Resistant Power, Instrumentation, Control, and Data Cables*, for one method of defining CI cable by establishing a minimum 2-hour fire resistance rating for the cable as specified in UL 444, *Standard for Safety Communications Cables*.

N **(2) Fire-Resistive Cable Systems.** Cables specified in 800.179(A) through (C) and 800.179(E)(1) that are part of an electrical circuit protective system shall be fire-resistive cable identified with the protective system number on the product, or on the smallest unit container in which the product is packaged, and shall be installed in accordance with the listing of the protective system.

Informational Note No. 1: See UL 2196, *Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables*, for one method of defining an electrical circuit protective system rating for the system. UL *Guide Information for Electrical Circuit Integrity Systems (FHIT)* contains information to identify the system and its installation limitations to maintain a minimum fire-resistive rating.

Informational Note No. 2: The listing organization provides information for electrical circuit protective systems (FHIT), including installation requirements for maintaining the fire rating.

N **(3) Electrical Circuit Protective System.** Protectants for cables specified in 800.179(A) through (E), which are part of an electrical circuit protective system, shall be identified with the protective system identifier and hourly rating marked on the protectant or the smallest unit container and installed in accordance with the listing of the system.

Informational Note: See UL 1724, *Fire Tests for Electrical Circuit Protective Systems*, for one method of defining an electrical circuit protective system. UL *Guide Information for Electrical Circuit Integrity Systems (FHIT)* contains information to identify the system and its installation limitations to maintain the fire-resistive rating.

N **(F) Types CMP-LP, CMR-LP, CMG-LP, and CM-LP Limited Power (LP) Cables.** Types CMP-LP, CMR-LP, CMG-LP, and CM-LP communications limited power cables shall be listed as suitable for carrying power and data up to a specified current limit for each conductor without exceeding the temperature rating of the cable where the cable is installed in cable bundles in free air or installed within a raceway, cable tray, or cable routing assembly. The cables shall be marked with the suffix "-LP(XXA)," where XX designates the current limit in amperes per conductor.

Informational Note: An example of the marking on a communications cable with an LP rating is "CMP-LP (0.6A)(75°C) 23 AWG 4 pair," which indicates that it is a 4-pair plenum cable with 23 AWG conductors, a temperature rating of 75°C, and a current limit of 0.6 amperes.