

thermosetting insulation. Where conductors are rated 90°C, the 90°C ampacity can be used for derating (ampacity adjustment, correction, or both).

Thermal insulation and similar materials impede the dissipation of heat from the cables. No space between the cables further reduces the heat dissipation, and ampacity adjustment is required. This rule covering the bundles in contact with insulation, caulking, or foam offsets the permission in 310.15(C)(1)(d) to install bundled AC or MC cable without ampacity adjustment factors having to be applied.

(B) Cable Tray. The ampacity of Type AC cable installed in cable tray shall be determined in accordance with 392.80(A).

Part III. Construction Specifications

320.100 Construction. Type AC cable shall have an armor of flexible metal tape and shall have an internal bonding strip of copper or aluminum in intimate contact with the armor for its entire length.

The armor of Type AC cable is recognized as an equipment grounding conductor (EGC) by 250.118. This internal bonding strip is not required to be connected to an equipment grounding terminal and can be cut off at the termination of the armored cable or be bent back on the armor. Its purpose is to reduce the inductive reactance of the spiral armor and increase the armor's effectiveness as an equipment ground. Many installers use this strip to help prevent the insulating (anti-short) bushing required by 320.40 (also known as the "red head") from falling out during rough wiring.

320.104 Conductors. Insulated conductors shall be of a type listed in Table 310.4(1) or those identified for use in this cable. In addition, the conductors shall have an overall moisture-resistant and fire-retardant fibrous covering. For Type ACT, a moisture-resistant fibrous covering shall be required only on the individual conductors.

320.108 Equipment Grounding Conductor. Type AC cable shall provide an adequate path for fault current as required by 250.4(A)(5) or (B)(4) to act as an equipment grounding conductor.

320.120 Marking. The cable shall be marked in accordance with 310.8, except that Type AC shall have ready identification of the manufacturer by distinctive external markings on the cable armor throughout its entire length.

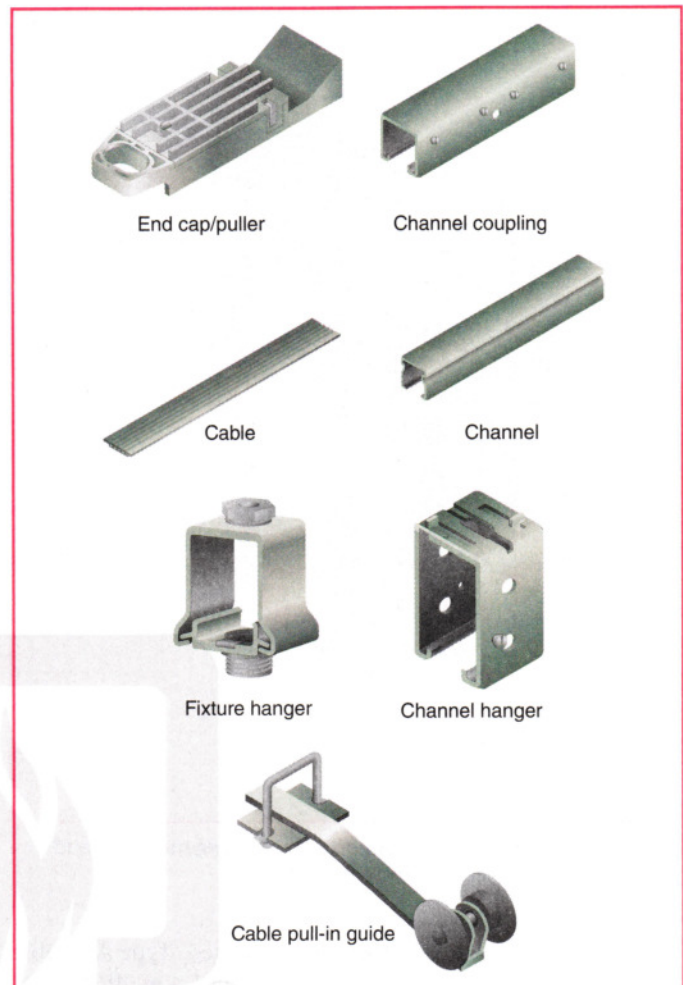


EXHIBIT 322.1 Basic components and accessories that may be used for an installation of Type FC cable. (Courtesy of Legrand®)

Type FC cable is an assembly of three or four parallel 10 AWG special stranded copper wires formed integrally with an insulating material web. The cable is marked with the size of the maximum branch circuit to which it can be connected, the cable type designation, the manufacturer's identification, the maximum working voltage, the conductor size, and the temperature rating. A marking accompanying the cable on a tag or reel indicates the special metal raceways and specific Type FC cable fittings with which the cable is intended to be used. Exhibits 322.1 and 322.2 show the basic components of this wiring method.

322.6 Listing Requirements. Type FC and associated fittings shall be listed.

Part II. Installation

322.10 Uses Permitted. Flat cable assemblies shall be permitted only as follows:

ARTICLE

322

Flat Cable Assemblies: Type FC

Part I. General

322.1 Scope. This article covers the use, installation, and construction specifications for flat cable assemblies, Type FC.