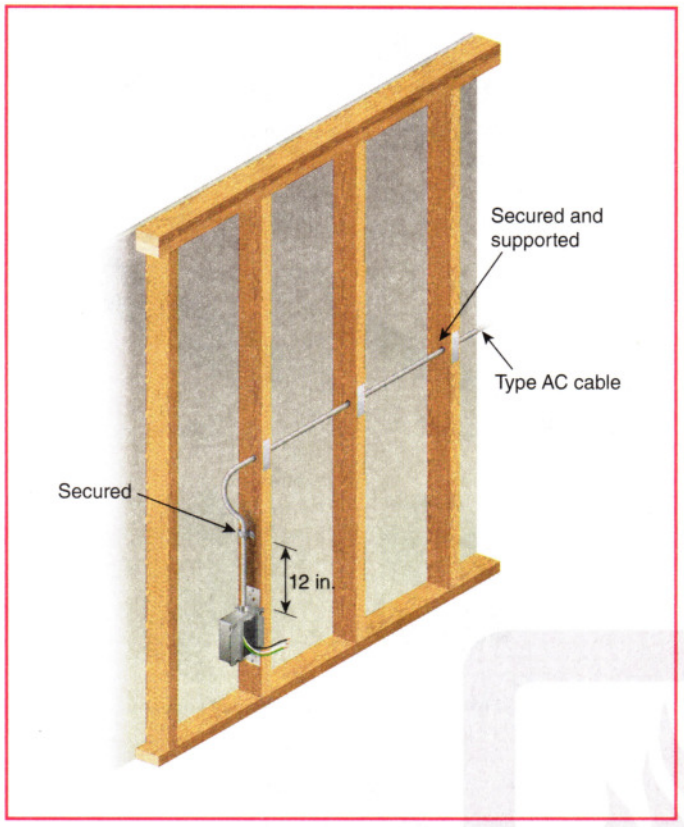

EXHIBIT 320.2 Type AC cable supported by framing members and secured within 12 inches of the outlet box.

(C) Supporting. Unless otherwise permitted, Type AC cable shall be supported at intervals not exceeding 1.4 m (4½ ft).

Horizontal runs of Type AC cable installed in wooden or metal framing members or similar supporting means shall be considered supported and secured where such support does not exceed 1.4 m (4½ ft) intervals.

Bored or punched holes in framing members support and secure horizontal runs of Type AC cable. Additional securing and supporting are not needed, provided the cable is secured within 12 inches of the outlet and the framing members are less than 4½ feet apart. Exhibit 320.2 illustrates the difference between securing and supporting.

Δ **(D) Unsupported Cables.** Type AC cable shall be permitted to be unsupported and unsecured where the cable complies with any of the following:

(1) Is fished between access points through concealed spaces in finished buildings or structures and supporting is impracticable
(2) Is not more than 600 mm (2 ft) in length at terminals where flexibility is necessary
(3) Is not more than 1.8 m (6 ft) in length from the last point of cable support to the point of connection to a luminaire(s) or other electrical equipment and the cable and point of connection are within an accessible ceiling

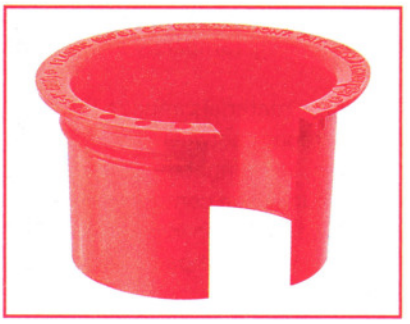

EXHIBIT 320.3 An anti-short bushing designed to protect insulated conductors from abrasion. *(Courtesy of Eaton, Crouse-Hinds Division)*

320.40 Boxes and Fittings. At all points where the armor of AC cable terminates, a fitting shall be provided to protect wires from abrasion, unless the design of the outlet boxes or fittings is such as to afford equivalent protection, and, in addition, an insulating bushing or its equivalent protection shall be provided between the conductors and the armor. The connector or clamp by which the Type AC cable is fastened to boxes or cabinets shall be of such design that the insulating bushing or its equivalent will be visible for inspection. Where change is made from Type AC cable to other cable or raceway wiring methods, a box, fitting, or conduit body shall be installed at junction points as required in 300.15.

An anti-short bushing (sometimes referred to as a "red head") is shown in Exhibit 320.3. It is a plastic insert placed between the metal jacket of a Type AC cable and the insulated conductors at the point where the conductors emerge from the metal jacket of the Type AC cable. The anti-short bushing provides the insulated conductors with an additional level of short-circuit and ground-fault protection where they are most vulnerable.

Armored cable connectors are considered suitable for equipment grounding if installed in accordance with 300.10.

320.80 Ampacity. The ampacity shall be determined in accordance with 310.14.

(A) Thermal Insulation. Armored cable installed in thermal insulation shall have conductors rated at 90°C (194°F). The ampacity of cable installed in these applications shall not exceed that of a 60°C (140°F) rated conductor. The 90°C (194°F) rating shall be permitted to be used for ampacity adjustment and correction calculations; however, the ampacity shall not exceed that of a 60°C (140°F) rated conductor.

Where more than two Type AC cables containing two or more current-carrying conductors in each cable are installed in contact with thermal insulation, caulk, or sealing foam without maintaining spacing between cables, the ampacity of each conductor shall be adjusted in accordance with Table 310.15(C)(1).

Armored cable installed in thermal insulation has a decreased heat dissipation capacity. Cable marked "ACTH" indicates an armored cable rated 75°C and employing conductors having thermoplastic insulation. Cable marked "ACTHH" indicates an armored cable rated 90°C and employing conductors having thermoplastic insulation. Cable marked "ACHH" indicates armored cable rated 90°C and employing conductors having