outlets installed together in common housing shall be permitted in accordance with 800.133(A)(3), Exception No. 2.

382.56 Splices and Taps. Extensions shall consist of a continuous unbroken length of the assembly, without splices, and without exposed conductors between fittings, connectors, or devices. Taps shall be permitted where approved fittings completely covering the tap connections are used. Aerial cable and its tap connectors shall be provided with an approved means for polarization. Receptacle-type tap connectors shall be of the locking type.

Part III. Construction Specifications (Concealable Nonmetallic Extensions Only)

382.100 Construction. Concealable nonmetallic extensions shall be of a multilayer flat conductor design consisting of a center ungrounded conductor enclosed by a sectioned grounded conductor and an overall sectioned equipment grounding conductor.

382.104 Flat Conductors. Concealable nonmetallic extensions shall be constructed, using flat copper conductors equivalent to 14 AWG or 12 AWG conductor sizes, and constructed per 382.104(A), (B), and (C).

A multilayer flat conductor is a complete assembly of branch-circuit conductors, thinner than a business card and yet flexible enough to bend to any angle required for a customized installation. Exhibit 382.1 is one example of a concealable nonmetallic extension circuit conductor assembly of flat conductors meeting the requirements of Article 382.

A concealable extension is a five-layer design for circuit integrity and protection. Flat-sectioned equipment grounding conductor (EGC) layers fully encase the ungrounded conductor and grounded conductor layers of the cable. By design, any penetration in the flat wire cable assembly will penetrate the EGC layer first, then the grounded conductor layer, then the ungrounded conductor layer. A penetration will result in a short circuit between the three conductors described that will immediately trip the overcurrent protective device (OCPD), causing automatic disconnection of the circuit.

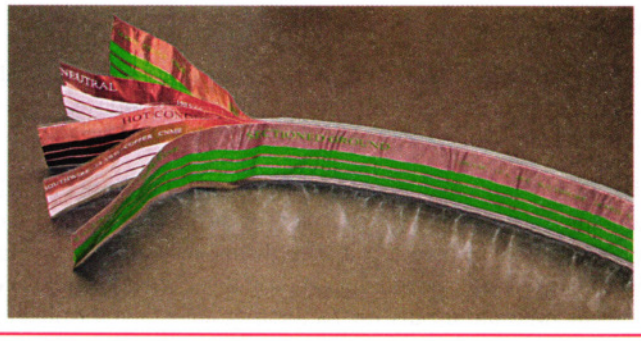

EXHIBIT 382.1 One example of a flat conductor cable assembly used as a concealable nonmetallic extension. *(Courtesy of FlatWire Technologies, a division of Southwire®)*

(A) Ungrounded Conductor (Center Layer). The ungrounded conductor shall consist of one or more ungrounded flat conductor(s) enclosed in accordance with 382.104(B) and (C) and identified in accordance with 310.6(C).

(B) Grounded Conductor (Inner Sectioned Layers). The grounded conductor shall consist of two sectioned inner flat conductors that enclose the center ungrounded conductor(s). The sectioned grounded conductor shall be enclosed by the sectioned equipment grounding conductor and identified in accordance with 200.6.

(C) Equipment Grounding Conductor (Outer Sectioned Layers). The equipment grounding conductor shall consist of two overall sectioned conductors that enclose the grounded conductor and ungrounded conductor(s) and shall comply with 250.4(A)(5). The equipment grounding conductor layers shall be identified by any one of the following methods:

(1) As permitted in 250.119
(2) A clear covering
(3) One or more continuous green stripes or hash marks
(4) The term "Equipment Grounding Conductor" printed at regular intervals throughout the cable

382.112 Insulation. The ungrounded and grounded flat conductor layers shall be individually insulated and comply with 310.14(A)(3). The equipment grounding conductor shall be covered or insulated.

382.120 Marking.

(A) Cable. Concealable nonmetallic extensions shall be clearly and durably marked on both sides at intervals of not more than 610 mm (24 in.) with the information required by 310.8(A) and with the following additional information:

(1) Material of conductors
(2) Maximum temperature rating
(3) Ampacity

(B) Conductor Identification. Conductors shall be clearly and durably identified on both sides throughout their length as specified in 382.104.

ARTICLE 384 Strut-Type Channel Raceway

Part I. General

384.1 Scope. This article covers the use, installation, and construction specifications of strut-type channel raceway.