

*under this exception shall extend into an enclosure containing either the feeder supply or the feeder load terminations, as covered in 110.14(C)(1).*

Exception No. 2 to 215.2(A)(1) addresses installations where feeders are installed in multiple segments. Feeders installed under this scenario comprise three segments: two segments at the terminations — supply and load — and an intervening segment. The allowable ampacity of the intervening segment is permitted to be calculated without applying 125 percent to the continuous load.

The two segments at the terminations of the feeder are sized to accommodate the effects of continuous loading on the termination devices. Their ampacities are selected and coordinated to not exceed the lowest temperature rating of any connected termination, conductor, or device, as covered in 110.14(C)(1).

The intervening segment must terminate in enclosures at the feeder source and destination. This segment is sized in accordance with the ampacity requirements for the conductor specifically to provide wiring that will accommodate the maximum current, whether or not any portion of that current is continuous. The ampacity of this intervening segment is limited only by the ampacity parameters that apply over the length of the intervening segment and the ampacity at the listed and identified temperature rating of the pressure connector, as covered in 110.14(C)(2).

Exhibit 215.1 shows a 400-ampere load supplied by a feeder comprising three segments. The segments at the overcurrent device and load terminate on terminals rated at 75°C and connect to the intervening load with pressure connectors rated at 90°C. A 600-kcmil, Cu THHN, Type MC cable is used at the supply and load ends. A 500-kcmil, Cu THHN, Type MC cable is used for the intervening segment.

*Exception No. 3: Grounded conductors that are not connected to an overcurrent device shall be permitted to be sized at 100 percent of the continuous and noncontinuous load.*

Feeder grounded/neutral conductors that do not connect to the terminals of an overcurrent protective device are not required to be sized based on 125 percent of the continuous load. For example, if the maximum unbalanced load on a feeder neutral is calculated per 220.61 to be 200 amperes and the load is considered to be continuous, the use of a 3/0 AWG, Type THW copper conductor is permitted as long as the conductor terminates at a neutral bus or terminal bar within the electrical distribution equipment.

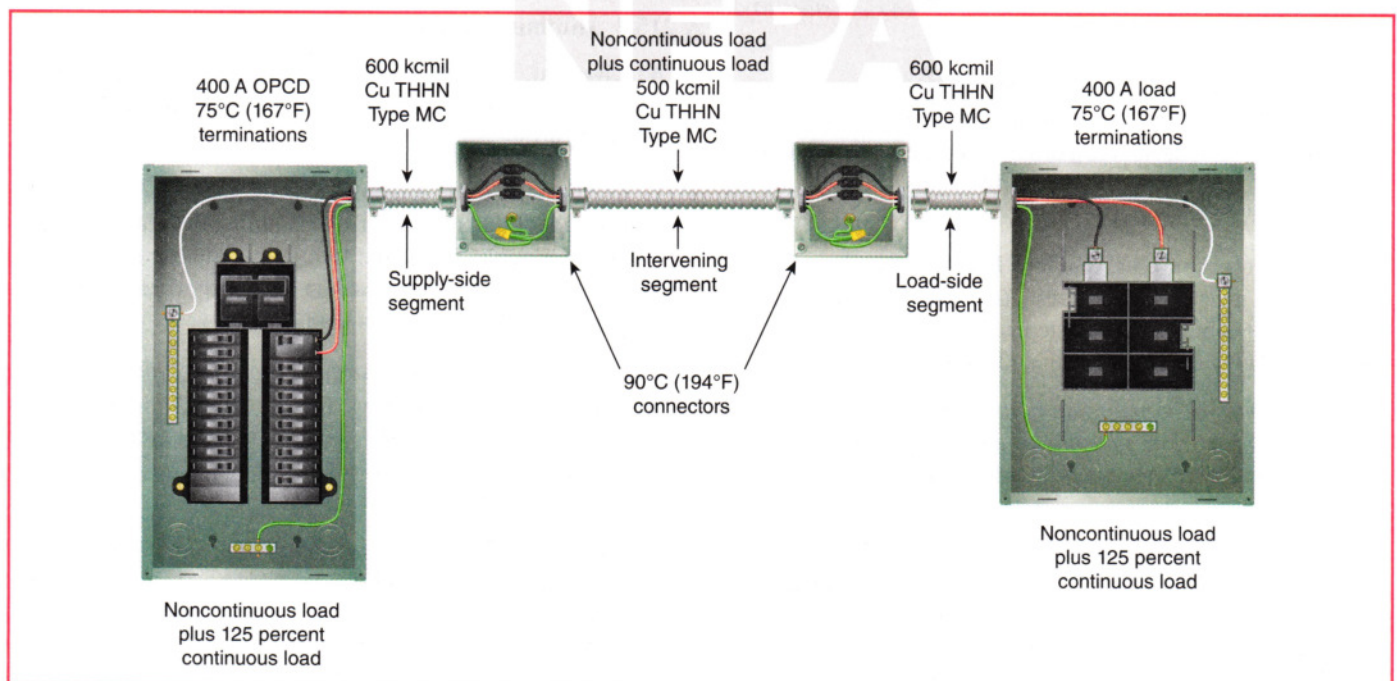
**N (2) Ampacity Adjustment or Correction Factors.** The minimum feeder conductor size shall have an ampacity not less than the maximum load to be served after the application of any adjustment or correction factors in accordance with 310.14.

Informational Note No. 1: See Informative Annex D for Examples D1 through D11.

Informational Note No. 2: Conductors for feeders, as defined in Article 100, sized to prevent a voltage drop exceeding 3 percent at the farthest outlet of power, heating, and lighting loads, or combinations of such loads, and where the maximum total voltage drop on both feeders and branch circuits to the farthest outlet does not exceed 5 percent, will provide reasonable efficiency of operation.

Informational Note No. 3: See 210.19, Informational Note for voltage drop for branch circuits.

Informational notes are not mandatory, as outlined in 90.5(C). Where circuit conductors are increased due to voltage drop, 250.122(B) requires an increase in circular mil area for the associated equipment grounding conductors.



**EXHIBIT 215.1** A feeder installed in accordance with 215.2(A)(1) Exception No. 2.