ARTICLE

215 Feeders

INTRODUCTION TO ARTICLE 215—FEEDERS

The next logical step up from the branch circuit is the feeder circuit. Consequently, Article 215 follows Article 210. This article covers the rules for the installation, minimum size, and ampacity of feeders.

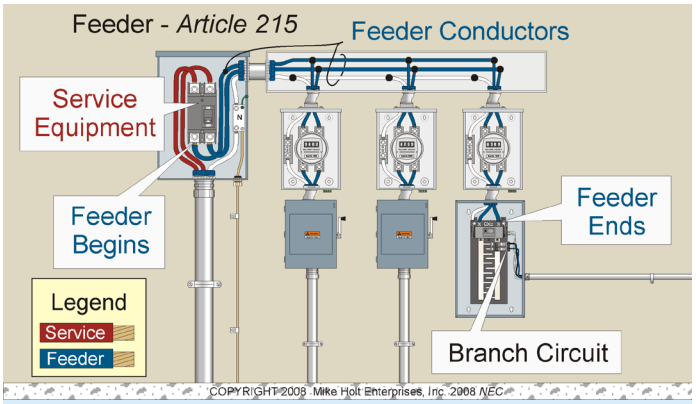
This is a very short article, and that's puzzling at first glance. It might seem feeders should just be "heavier" branch circuits, and Article 215 should just be another Article 210 but with more stringent requirements. This, however, isn't the case at all.

If you go back and look at Article 210 again, you'll see it covers many types of branch circuits. It also devotes extensive space to dwelling-area branch circuits. Dwelling units don't have many feeders, but multifamily dwelling buildings will have at least one feeder for each dwelling unit.

Here's an object lesson in the value of Article 100. Go there now and review the definitions of branch circuit and feeder, and think about how much time you spend working with branch circuits and how little time you spend working with feeders. Once you've done that, you'll understand why Article 215 is so much shorter than Article 210.

215.1 Scope. Article 215 covers the installation, conductor sizing, and protection requirements for feeders.

Author's Comment: See the definition of "Feeder" in Article 100. Figure 215–1



Feeder: [Article 100 Definition] The circuit conductors between the service equipment or the source of a separately derived system and the final branch-circuit overcurrent device.

Figure 215–1

215.2 Minimum Rating.

(A) Feeder Conductor Size.

(1) Continuous and Noncontinuous Loads. The minimum feeder-circuit conductor ampacity, before the application of any adjustment and/or correction factors, must be no less than 125 percent of the continuous load, plus 100 percent of the noncontinuous load, based on the terminal temperature rating ampacities as listed in Table 310.16 [110.14(C)]. Figure 215–2

Author's Comment: See 215.3 for the feeder overcurrent device sizing requirements for continuous and noncontinuous loads.

Exception No. 1: Where the assembly and the overcurrent device are both listed for operation at 100 percent of its rating, the conductors can be sized at 100 percent of the continuous load.

Author's Comment: Equipment suitable for 100 percent continuous loading is rarely available in ratings under 400A.

Exception No. 2: Neutral conductors can be sized at 100 percent of the continuous and noncontinuous load. Figure 215-3