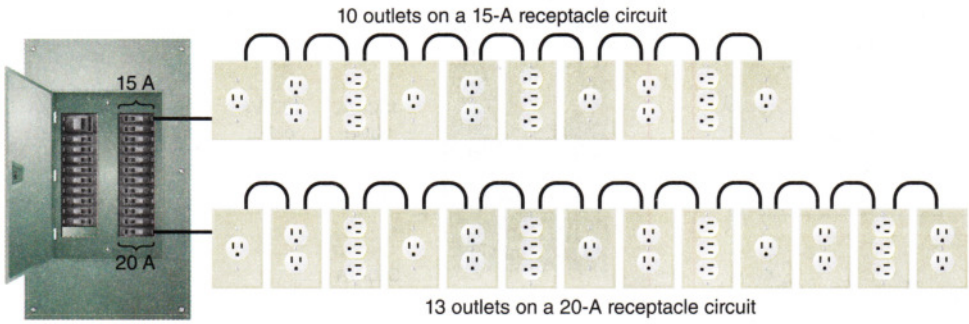

EXHIBIT 220.4 Maximum number of receptacle outlets permitted on 15- and 20-ampere branch circuits.

220.16 Loads for Additions to Existing Installations.

(A) Dwelling Units. Loads added to an existing dwelling unit(s) shall comply with the following as applicable:

(1) Loads for structural additions to an existing dwelling unit or for a previously unwired portion of an existing dwelling unit shall be calculated in accordance with 220.14.
(2) Loads for new circuits or extended circuits in previously wired dwelling units shall be calculated in accordance with 220.14.

(B) Other Than Dwelling Units. Loads for new circuits or extended circuits in other than dwelling units shall be calculated in accordance with either 220.42 or 220.14, as applicable.

Part III. Feeder and Service Load Calculations

Δ **220.40 General.** The calculated load of a feeder or service shall not be less than the sum of the loads on the branch circuits supplied, as determined by Part II of this article, after any applicable demand factors permitted or required by Part III, IV, V, VI, or VII have been applied.

Informational Note No. 1: See Informative Annex D, Examples D1(a) through D10, for examples of feeder and service load calculations.

Informational Note No. 2: See 220.11(B) for the maximum load in amperes permitted for lighting units operating at less than 100 percent power factor.

In the example shown in Exhibit 220.5, each panelboard supplies a calculated load of 80 amperes. The main set of service conductors is sized to carry the total calculated load of 240 amperes (3 × 80 A). The service conductors from the meter enclosure to each panelboard (2 AWG Cu = 95 A per 60°C column of Table 310.16) are sized to supply a calculated load of 80 amperes and to meet the requirement of 230.90 relative to overcurrent (overload) protection of service conductors terminating in a single-service overcurrent protective device (OCPD). The main set of service conductors (250 kcmil THWN Cu = 255 A per 75°C column of Table 310.16) is not required to be sized to carry 300 amperes based on the combined rating of the panelboards. The individual service-entrance conductors to each panelboard (2 AWG THWN) meet the requirement of 230.90.

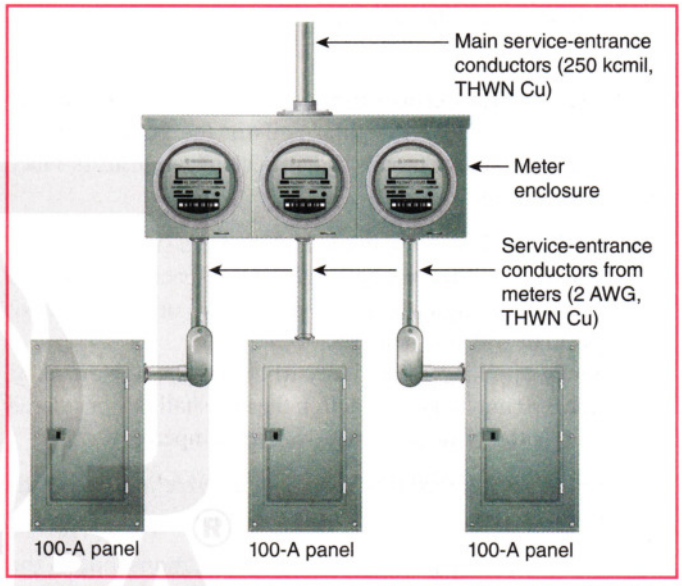

EXHIBIT 220.5 Service conductors sized in accordance with 220.40.

See also

230.23, 230.31, and **230.42** for specifics on size and rating of service conductors

Δ **220.41 Dwelling Units, Minimum Unit Load.** In one-family, two-family, and multifamily dwellings, the minimum unit load shall be not less than 33 volt-amperes/m^2 (3 volt-amperes/ft^2).

Unit loads include the following lighting and receptacle outlets, and no additional load calculations shall be required:

(1) All general-use receptacle outlets of 20-ampere rating or less, including receptacles connected to the circuits specified in 210.11(C)(3) and (C)(4)
(2) The receptacle outlets specified in 210.52(E) and (G)
(3) The lighting outlets specified in 210.70