

EXHIBIT 220.2 The requirements of 220.14(H)(1) and (H)(2) as applied to fixed multioutlet assemblies.

(H) Fixed Multioutlet Assemblies. Fixed multioutlet assemblies used in other than dwelling units or the guest rooms or guest suites of hotels or motels shall be calculated in accordance with the following:

- (1) Where appliances are unlikely to be used simultaneously, each 1.5 m (5 ft) or fraction thereof of each separate and continuous length shall be considered as one outlet of not less than 180 volt-amperes.
- (2) Where appliances are likely to be used simultaneously, each 300 mm (1 ft) or fraction thereof shall be considered as an outlet of not less than 180 volt-amperes.

For the purposes of this section, the calculation shall be permitted to be based on the portion that contains receptacles.

In light-use commercial and industrial applications, not all the cord-connected equipment is expected to be used at the same time. An example of light use is a workbench area where one worker uses one electrical tool at a time. In heavy-use applications, all the cord-connected equipment generally is operating at the same time. An example of heavy use is a retail store displaying television sets, where most or all sets are operating simultaneously. Exhibit 220.2 illustrates the difference between 220.14(H)(1) and (H)(2).

See also

220.47 for demand factors that apply to the load calculation in 220.14(H) and (I)

- Δ (I) Receptacle Outlets.** Except as covered in 220.41 and 220.14(J), receptacle outlets shall be calculated at not less than 180 volt-amperes for each single or for each multiple receptacle on one yoke. A single piece of equipment consisting of a multiple receptacle comprised of four or more receptacles shall be calculated at not less than 90 volt-amperes per receptacle. This provision shall not be applicable to the receptacle outlets specified in 210.11(C)(1) and (C)(2).

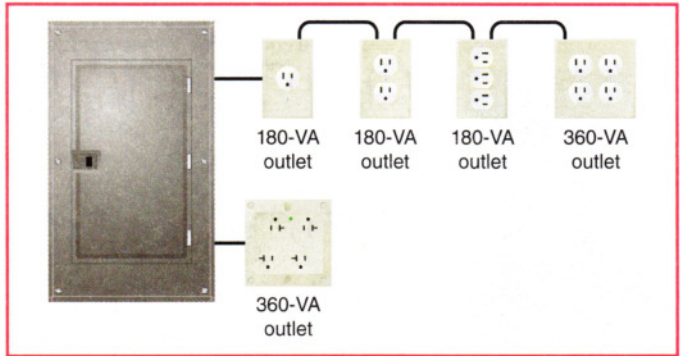


EXHIBIT 220.3 The load requirement of 180 volt-amperes per 220.14(I) applied to single- and multiple-receptacle outlets on single straps and the load of 360 volt-amperes applied to a multiple device consisting of four receptacles.

Section 220.47 contains demand factors that apply to the load calculation in 220.14(H) and (I). In dwelling units, the minimum unit load for receptacles supplied by general-purpose branch circuits is specified in 220.41 and is based on floor area rather than an assigned load per receptacle outlet. The load requirements for the laundry and small-appliance branch circuits are 1500 volt-amperes per circuit, as described in 220.52.

Exhibit 220.3 shows the load of 180 volt-amperes applied to single and multiple receptacles mounted on a single yoke or strap, and the load of 360 volt-amperes applied to the outlet containing two duplex receptacles and to the outlet containing the device with four receptacles. Note that the last outlet of the top circuit consists of two duplex receptacles on separate straps. The multiple receptacle supplied from the bottom circuit in the exhibit consists of four receptacles. For example, single-strap and multiple-receptacle devices are calculated as follows:

Device	Calculated Load
Duplex receptacle	180 VA
Triplex receptacle	180 VA
Double duplex receptacle	360 VA (180 × 2)
Quadplex-type receptacle	360 VA (90 × 4)

In Exhibit 220.4, the maximum number of receptacle outlets permitted on 15- and 20-ampere branch circuits is 10 and 13 outlets, respectively, based on the load assigned for each outlet by 220.14(I). This restriction does not apply to receptacle outlets in dwelling occupancies.

- N (J) Receptacle Outlets in Office Buildings.** In office buildings, the receptacle loads shall be calculated to be the larger of the following:

- (1) The calculated load from 220.14(I)
- (2) 11 volt-amperes/m² (1 volt-ampere/ft²)

(K) Other Outlets. Other outlets not covered in 220.14(A) through (J) shall be calculated based on 180 volt-amperes per outlet.