



**EXHIBIT 230.22** A service equipment enclosure that groups six service disconnecting means in separate compartments.

### 230.72 Grouping of Disconnects.

**(A) General.** The two to six disconnects, if permitted in 230.71, shall be grouped. Each disconnect shall be marked to indicate the load served.

*Exception: One of the two to six service disconnecting means permitted in 230.71, where used only for a water pump also intended to provide fire protection, shall be permitted to be located remote from the other disconnecting means. If remotely installed in accordance with this exception, a plaque shall be posted at the location of the remaining grouped disconnects denoting its location.*

**(B) Additional Service Disconnecting Means.** The one or more additional service disconnecting means for fire pumps, emergency systems, legally required standby, or optional standby services permitted by 230.2 shall be installed remote from the one to six service disconnecting means for normal service to minimize the possibility of simultaneous interruption of supply.

The AHJ is responsible for determining what is a sufficiently remote location for the additional service disconnecting means.

**(C) Access to Occupants.** In a multiple-occupancy building, each occupant shall have access to the occupant's service disconnecting means.

*Exception: In a multiple-occupancy building where electric service and electrical maintenance are provided by the building*

*management and where these are under continuous building management supervision, the service disconnecting means supplying more than one occupancy shall be permitted to be accessible to authorized management personnel only.*

**230.74 Simultaneous Opening of Poles.** Each service disconnect shall simultaneously disconnect all ungrounded service conductors that it controls from the premises wiring system.

**230.75 Disconnection of Grounded Conductor.** Where the service disconnecting means does not disconnect the grounded conductor from the premises wiring, other means shall be provided for this purpose in the service equipment. A terminal or bus to which all grounded conductors can be attached by means of pressure connectors shall be permitted for this purpose. In a multisection switchboard or switchgear, disconnects for the grounded conductor shall be permitted to be in any section of the switchboard or switchgear, if the switchboard or switchgear section is marked to indicate a grounded conductor disconnect is located within.

*Informational Note:* In switchgear or multisection switchboards, the disconnecting means provided for the grounded conductor is typically identified as a neutral disconnect link and is typically located in the bus to which the service grounded conductor is connected.

**230.76 Manually or Power Operable.** The service disconnecting means for ungrounded service conductors shall consist of one of the following:

- (1) A manually operable switch or circuit breaker equipped with a handle or other suitable operating means
- (2) A power-operated switch or circuit breaker, provided the switch or circuit breaker can be opened by hand in the event of a power supply failure

**230.77 Indicating.** The service disconnecting means shall plainly indicate whether it is in the open (off) or closed (on) position.

**230.79 Rating of Service Disconnecting Means.** The service disconnecting means shall have a rating not less than the calculated load to be carried, determined in accordance with Part III, IV, or V of Article 220, as applicable. In no case shall the rating be lower than specified in 230.79(A), (B), (C), or (D).

**(A) One-Circuit Installations.** For installations to supply only limited loads of a single branch circuit, the service disconnecting means shall have a rating of not less than 15 amperes.

**(B) Two-Circuit Installations.** For installations consisting of not more than two 2-wire branch circuits, the service disconnecting means shall have a rating of not less than 30 amperes.

**(C) One-Family Dwellings.** For a one-family dwelling, the service disconnecting means shall have a rating of not less than 100 amperes, 3-wire.