

EXHIBIT 230.12 Service conductors installed so as not to pass through the interior of Building No. 1 to supply Building No. 2.

For example, in Exhibit 230.12, the disconnecting means suitable for use as service equipment is shown on the exterior walls of Building No. 1 and Building No. 2. The prohibition against passing through one building to another applies only to service conductors, because feeders and branch circuits are provided with overcurrent protection at the point they receive their supply unless otherwise permitted by 240.21.

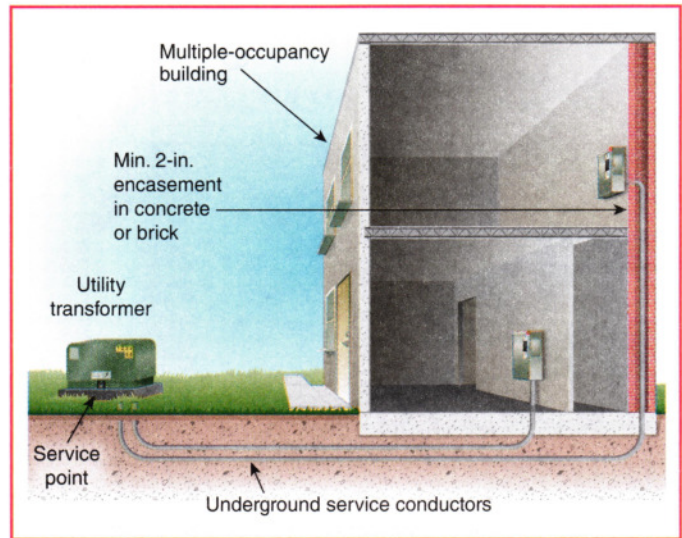


EXHIBIT 230.13 Service conductors considered outside a building where installed under not less than 2 inches of concrete beneath the building or in a raceway encased by not less than 2 inches of concrete or brick within the building.

vault, the service disconnecting means has to be installed as required by 230.70(A)(1).

Service conductors installed in conduit and under 18 inches of earth beneath the building are also considered outside the building according to 230.6(4). An example of that would be a building or structure built on piers with service conductors buried beneath and running to a readily accessible service disconnecting means located within the interior of the building or structure.

Service conductors passing through a roof overhang as covered in 230.24(A), Exception No. 3, and depicted in Exhibit 230.17 are considered to be outside the building per 230.6(5). This requirement would not allow horizontal runs through eaves.

Δ 230.6 Conductors Considered Outside the Building.

Conductors shall be considered outside of a building or other structure under any of the following conditions:

- (1) Where installed under not less than 50 mm (2 in.) of concrete beneath a building or other structure
- (2) Where installed within a building or other structure in a raceway that is encased in concrete or brick not less than 50 mm (2 in.) thick
- (3) Where installed in any vault that meets the construction requirements of Part III of Article 450
- (4) Where installed in conduit and under not less than 450 mm (18 in.) of earth beneath a building or other structure
- (5) Where installed within rigid metal conduit (RMC) or intermediate metal conduit (IMC) used to accommodate the clearance requirements in 230.24 and routed directly through an eave but not a wall of a building

Exhibit 230.13 illustrates two of the conditions that permit service conductors to be considered outside a building.

Service conductors installed in an interior vault complying with the construction requirements of Part III of Article 450 are considered to be outside a building regardless of whether or not the vault contains a transformer. Once the conductors leave the

- Δ 230.7 Other Conductors.** Circuit conductors other than service conductors, shall not be installed in the same raceway, cable, handhole enclosure, or underground box as the service conductors.

Service conductors are not provided with overcurrent protection where they receive their supply; they are protected against overload conditions at their load end by the service disconnect fuses or circuit breakers. If feeder or branch-circuit conductors are in the same raceway with service conductors during a fault, the fault current that could flow through them would be much higher than the ampacity of the feeder or branch-circuit conductors.

The gutter space of a panelboard cabinet or other electrical equipment enclosure is not a raceway (see Article 100 for the definition of raceway) and is not subject to the requirement of 230.7. Service conductors, feeder conductors, and branch-circuit conductors can share the same gutter space. The panelboard cabinet gutter space accommodates a set of service conductors terminating on the 200-ampere main breaker, a set of feeder conductors supplying the adjacent panelboard, and several sets