

Branch circuits serving patient bed locations shall not be part of a multiwire branch circuit.

Exception No. 1: Branch circuits serving only special-purpose outlets or receptacles, such as portable X-ray outlets, shall not be required to be served from the same distribution panel or panels.

Exception No. 2: The requirements of 517.18(A) shall not apply to patient bed locations in clinics, medical and dental offices, and outpatient facilities; psychiatric, substance abuse, and rehabilitation hospitals; sleeping rooms of nursing homes; and limited care facilities meeting the requirements of 517.10(B)(2).

Exception No. 3: A Category 2 patient bed location served from two separate transfer switches on the critical branch shall not be required to have circuits from the normal system.

Exception No. 4: Circuits served by Type 2 essential electrical systems shall be permitted to be fed by the equipment branch of the essential electrical system.

Patient bed locations in general care spaces are prohibited from deriving all their branch circuits from the essential electrical system. At least one branch circuit for each location must originate in a normal system panelboard. This supply circuit arrangement correlates with the limitations imposed by 517.34 regarding the types of loads permitted to be supplied by the critical branch of the essential electrical system.

Exception No. 3 allows both of the required branch circuits for a general care patient bed location to be supplied by the critical branch, provided they are supplied by two separate transfer switches. Two critical branch circuits have a higher reliability than one normal and one critical branch circuit.

Exception No. 4 recognizes that Category 2 spaces are permitted to be served by a Type 1 or Type 2 essential electrical system (EES). A Type 2 EES consists of the Life Safety and Equipment Branch. Section 517.44(A)(1) permits these types of configurations.

Multiwire branch circuits are required by 210.4(B) to be simultaneously disconnected from all ungrounded conductors, which could result in unintended and potentially dangerous interruption of power to lighting or receptacle loads at a patient bed location. Because of that concern, multiwire branch circuits are not permitted to be used to meet the requirements of 517.18(A).

(B) Patient Bed Location Receptacles.

(1) Minimum Number and Supply. Each patient bed location shall be provided with a minimum of eight receptacles.

(2) Receptacle Requirements. The receptacles required in 517.18(B)(1) shall be permitted to be of the single, duplex, or quadruplex type or any combination of the three. All receptacles shall be listed “hospital grade” and shall be so identified. The grounding terminal of each receptacle shall be connected to an insulated copper equipment grounding conductor sized in accordance with Table 250.122.

Exception No. 1: The requirements of 517.18(B)(1) and (B)(2) shall not apply to psychiatric, substance abuse, and rehabilitation hospitals meeting the requirements of 517.10(B)(2).

Exception No. 2: Psychiatric security rooms shall not be required to have receptacle outlets installed in the room.

Informational Note: It is not intended that there be a total, immediate replacement of existing non-hospital grade receptacles. It is intended, however, that non-hospital grade receptacles be replaced with hospital grade receptacles upon modification of use, renovation, or as existing receptacles need replacement.

Δ (C) Designated Category 2 Pediatric Locations. Receptacles that are located within patient rooms, bathrooms, playrooms, and activity rooms of pediatric units or spaces with similar risk as determined by the health care facility’s governing body by conducting a risk assessment, other than infant nurseries, shall be listed and identified as “tamper resistant” or shall employ a listed tamper-resistant cover. [99:6.3.2.2.1(D)]

Unlike the requirement in 406.12, this requirement applies to receptacles of any rating installed in specified rooms of pediatric locations. Safeguarding can be achieved through the use of either listed tamper-resistant receptacles or listed tamper-resistant covers. The use of locking covers over ordinary receptacles does not meet this requirement. Only 125-volt, 15- and 20-ampere tamper-resistant receptacles are available; therefore, other receptacle types are likely to require a listed tamper-resistant cover.

Exhibit 517.1 shows a listed hospital-grade tamper-resistant receptacle that can be used to comply with 517.18(C). The receptacle is identified by a green dot on its face and the letters “TR” located at the top right of the receptacle. Exhibit 517.2 shows a listed tamper-resistant, hospital-grade, GFCI receptacle installation in an examination room.

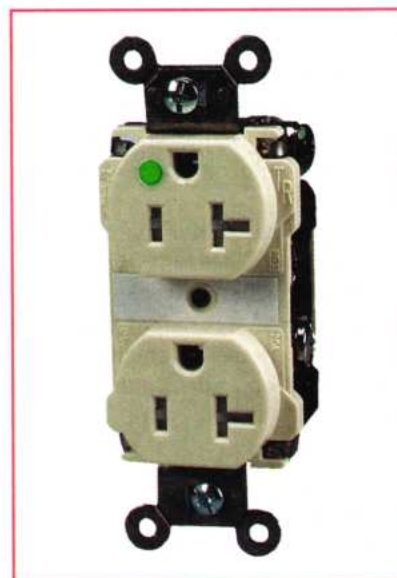


EXHIBIT 517.1 A tamper-resistant, hospital-grade receptacle. (Courtesy of Legrand®)