

Using Relocatable Power Taps in Health Care Facilities

Listed relocatable power taps (outlet strips) are frequently used in both home and business locations, but the appropriate application of Listed relocatable power taps in the patient care areas of health care facilities is an important safety consideration.

Relocatable Power Taps

Relocatable power taps, often called outlet strips, are Listed under the Relocatable Power Taps category (XBYS), and are intended for indoor use as relocatable, multiple outlet extensions of a single branch circuit; they supply power to a wide range of portable electric equipment and appliances. They consist of an attachment plug and a flexible cord terminated in an enclosure in which one or more receptacles are mounted, which may be provided with supplementary overcurrent protection, switches, suppression components, indicator lights and/or connections for cable, communications, telephone and/or antenna.

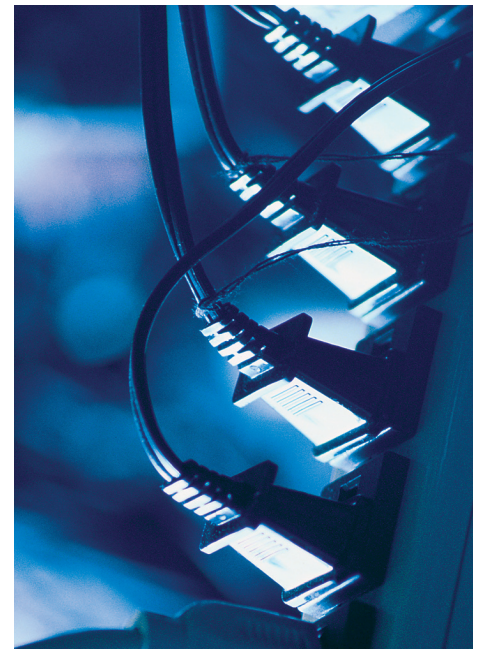
Relocatable power taps have not been investigated for use with medical equipment in general or critical patient care areas of health care facilities. These areas are defined in Article 517 of the National Electrical Code® (NEC) and include portions of a health care facility wherein patients are examined or treated, which encompasses patient and examining rooms, clinics, intensive and coronary care units, angiography and cardiac catheterization laboratories, delivery and operating rooms and other areas in which patients receive medical care. Relocatable power taps are suitable, however, for use in health care facilities in areas not defined as patient care areas, such as business offices, corridors, waiting rooms, etc.

Powering equipment in patient care areas

Article 517 of the NEC includes detailed requirements for receptacles in both general and critical patient care areas. Among other things, the NEC requires receptacles be hospital grade and on separate branch circuits, with either a minimum of four receptacles, for general patient care areas, or six receptacles, for critical patient care areas, near each bed location. These minimum requirements help ensure a sufficient number of receptacles for powering devices are available near each bed.

Medical facilities often utilize carts containing electro-medical equipment that is wheeled into patient care areas and plugged into a receptacle near the patient's bed. Again, basic relocatable power taps are not Listed for use on carts used in patient care areas. UL does Classify medical carts and equipment for use in patient care applications under the Medical Equipment (PIDF) category, which covers equipment that makes physical or electrical patient contact that is intended to diagnose, treat or monitor patients under medical supervision.

Some UL Classified carts include relocatable power taps as an integral part of the cart. These are Recognized Component Special Purpose Relocatable Power Taps (SPRPTs), which are specifically



investigated to supply power to the plug-connected equipment on the cart and to verify compliance with the Standard for Health Care Facilities, NFPA 99, Section 8.4.1.2.4.2. This standard is applicable when two or more power receptacles supplied by a flexible cord are used to supply power to plug-connected components of a movable equipment assembly that is rack-, table- or pedestal-mounted. SPRPTs have not been investigated for stand-alone use in patient care vicinities.