

Δ (B) Delayed-Automatic or Manual Connection to the Equipment Branch. The equipment specified in 517.44(B)(1) through (B)(4) shall be permitted to be connected to the equipment branch and shall be arranged for either delayed-automatic or manual connection to the alternate power source.

N (1) Heating Equipment to Provide Heating for General Patient Rooms. Heating of general patient rooms during disruption of the normal source shall not be required under any of the following conditions:

- (1) The outside design temperature is higher than -6.7°C (20°F).
- (2) The outside design temperature is lower than -6.7°C (20°F) and, where a selected room(s) is provided for the needs of all confined patients, then only such room(s) need be heated.
- (3) The facility is served by a dual source of normal power as described in 517.30(C), Informational Note.

Informational Note: The outside design temperature is based on the 97.5 percent design values, as shown in Chapter 24 of the *ASHRAE Handbook of Fundamentals* (2013).

N (2) Elevator Service. In instances where interruptions of power would result in elevators stopping between floors, throw-over facilities shall be provided to allow the temporary operation of any elevator for the release of passengers.

N (3) Optional Connections to the Equipment Branch. Additional illumination, receptacles, and equipment shall be permitted to be connected only to the equipment branch.

N (4) Multiple Systems. Where one switch serves multiple systems as permitted in 517.43, transfer for all loads shall be non-delayed automatic.

[99:6.7.6.2.1.6(E)]

Informational Note: See 517.43(G) for elevator cab lighting, control, and signal system requirements. [99:A.6.7.6.2.1.6(E)(2)]

517.45 Essential Electrical Systems for Other Health Care Facilities.

Δ (A) Essential Electrical Distribution. If required by the governing body, the essential electrical distribution system for Category 3 patient care spaces shall be comprised of an alternate power system capable of supplying a limited amount of lighting and power service for the orderly cessation of procedures during a time normal electrical service is interrupted.

Informational Note: See NFPA 99-2021, *Health Care Facilities Code*.

(B) Electrical Life Support Equipment. Where electrical life support equipment is required, the essential electrical distribution system shall be as described in 517.29 through 517.30.

Δ (C) Category 1 Patient Care Spaces. Where Category 1 patient care spaces are present, the essential electrical distribution system shall be in accordance with 517.29 through 517.30.

Δ (D) Category 2 Patient Care Spaces. Where Category 2 patient care spaces are present, the essential electrical distribution system shall be in accordance with 517.40 through 517.45.

(E) Power Systems. If required, alternate power sources acceptable to the governing body shall comply with the requirements of NFPA 99-2021, *Health Care Facilities Code*.

Depending on the type and level of patient care, medical and dental offices and ambulatory health care facilities may require an alternate source of power similar to that provided at a hospital. The level of patient care may be essentially the same as a hospital, even though the facility is not called or licensed as a hospital.

Part IV. Inhalation Anesthetizing Locations

Informational Note: See NFPA 99-2021, *Health Care Facilities Code*, for further information regarding safeguards for anesthetizing locations.

Δ 517.60 Anesthetizing Location Classification.

Informational Note: See 517.20 if either of the anesthetizing locations in 517.60(A) or 517.60(B) is designated a wet procedure location.

(A) Hazardous (Classified) Location.

(1) Use Location. In a location where flammable anesthetics are employed, the entire area shall be considered to be a Class I, Division 1 location that extends upward to a level 1.52 m (5 ft) above the floor. The remaining volume up to the structural ceiling is considered to be above a hazardous (classified) location.

(2) Storage Location. Any room or location in which flammable anesthetics or volatile flammable disinfecting agents are stored shall be considered to be a Class I, Division 1 location from floor to ceiling.

Some countries still use flammable anesthetics and rely on these safety measures. There are no known medical schools in the United States still teaching the use of flammable anesthetics or health care facilities in the United States using flammable anesthetics. Use of these precautions would be necessary should flammable anesthetics be re-instituted.

Section 517.60 designates anesthetizing locations either as hazardous locations, where flammable or nonflammable anesthetics may be interchangeably employed [517.60(A)], or as other-than-hazardous locations, where only nonflammable anesthetics are used [517.60(B)].

(B) Unclassified Location. Any inhalation anesthetizing location designated for the exclusive use of nonflammable anesthetizing agents shall be considered to be an unclassified location.

517.61 Wiring and Equipment.

(A) Within Hazardous (Classified) Anesthetizing Locations.

(1) Isolation. Except as permitted in 517.160, each power circuit within, or partially within, a flammable anesthetizing