

See also

517.30(B), which identifies the permitted types of power sources for the essential electrical system (EES) in health care facilities

517.31(B)(2), which permits alternate power sources to serve essential electrical systems of contiguous or multiple building facilities such as a health care campus with a centrally located alternate power plant

N Ambulatory Health Care Occupancy. An occupancy used to provide services or treatment simultaneously to four or more patients that provides, on an outpatient basis, one or more of the following:

- (1) Treatment for patients that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others.
- (2) Anesthesia that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others.
- (3) Treatment for patients who, due to the nature of their injury or illness, are incapable of taking action for self-preservation under emergency conditions without the assistance of others.

[101:3.3.198.1] (517) (CMP-15)

Ambulatory health care occupancies, including outpatient surgery centers, freestanding emergency medical centers, and hemodialysis units, are subject to the requirements of Part II of Article 517 and 517.45. This definition, which correlates with NFPA 99, *Health Care Facilities Code*, recognizes that some emergency or urgent care is performed at ambulatory health care occupancies.

Ampacity. The maximum current, in amperes, that a conductor can carry continuously under the conditions of use without exceeding its temperature rating. (CMP-6)

“Conditions of use” include factors such as ambient temperature and the number of conductors in the cable or raceway. A conductor with insulation rated at 60°C and installed near a furnace where the ambient temperature is continuously maintained at 60°C has no current-carrying capacity. Any current flowing through the conductor will raise its temperature above the 60°C insulation rating. Therefore, the ampacity of the conductor, regardless of its size, is zero.

Additional conductors in a raceway or cable raise the temperature in the raceway, decreasing the available ampacity. [See 310.15(C)(1).]

See also

Table 310.15(B)(1)(1), Table 310.15(B)(1)(2), and Informative Annex B for the ampacity correction factors for temperature

310.15(B)(1) and its commentary for more on the temperature limitation of conductors

N Amplifier (Audio Amplifier) (Pre-Amplifier). Electronic equipment that increases the current or voltage, or both, of an

audio signal intended for use by another piece of audio equipment. Amplifier is the term used to denote an audio amplifier. (640) (CMP-12)

Appliance. Utilization equipment, generally other than industrial, that is fastened in place, stationary, or portable; is normally built in a standardized size or type; and is installed or connected as a unit to perform one or more functions such as clothes washing, air-conditioning, food mixing, deep frying, and so forth. (CMP-17)

N Applicator. The device used to transfer energy between the output circuit and the object or mass to be heated. (665) (CMP-12)

Approved. Acceptable to the authority having jurisdiction. (CMP-1)

Typically, approval of listed equipment is more readily given by an *authority having jurisdiction (AHJ)* if the authority accepts a laboratory’s listing mark. Other options may be available for the jurisdiction to approve equipment, including evaluation by the inspection authority or field evaluation by a qualified laboratory or individual. Where an evaluation is conducted on site, industry standards such as NFPA 79, *Electrical Standard for Industrial Machinery*, if applicable, can be used. NFPA 790, *Standard for Competency of Third-Party Field Evaluation Bodies*, can be used to qualify evaluation services. NFPA 791, *Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluation*, can be used to evaluate unlabeled equipment in accordance with nationally recognized standards and any requirements of the AHJ.

See also

110.2, 110.3, and the definition of *authority having jurisdiction (AHJ)* for more information on the approval process

The definitions of *field evaluation body* and *field labeled* for information on this option for product approval by the AHJ

Arc-Fault Circuit Interrupter (AFCI). A device intended to provide protection from the effects of arc faults by recognizing characteristics unique to arcing and by functioning to de-energize the circuit when an arc fault is detected. (CMP-2)

Arc-fault circuit interrupters (AFCIs) are evaluated in accordance with UL 1699, *Standard for Arc-Fault Circuit-Interrupters*, using testing methods that create or simulate arcing conditions to determine a product’s ability to detect and interrupt arcing faults. AFCIs are also tested to verify that arc detection is not inhibited by the presence of loads and circuit characteristics that mask the hazardous arcing condition. In addition, these devices are evaluated to determine resistance to unwanted tripping due to the presence of arcing that occurs in equipment under normal operating conditions or to a loading condition that closely mimics an arcing fault, such as a solid-state electronic ballast or a dimmed load.

N Array. A mechanically and electrically integrated grouping of modules with support structure, including any attached system