

Regulatory Guidance

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The following information is interpretive guidance for your consideration as you strengthen your environment of care and life safety preparedness.

What are the battery-operated lighting requirements in automatic transfer switch (ATS) locations?

Battery lighting is not required in ATS locations unless they are collocated in Emergency Power Supply (EPS) locations. Furthermore NFPA 110-2010 does not require ATS and EPS to be housed in the same area although this is allowed.

NFPA 110-2010

7.2 Location.

7.2.1 The EPS shall be installed in a separate room for Level 1 installations. EPSS equipment shall be permitted to be installed in this room.

7.3 Lighting.

7.3.1 The Level 1 or Level 2 EPS equipment location(s) shall be provided with battery-powered emergency lighting. This requirement shall not apply to units located outdoors in enclosures that do not include walk-in access.

EPS = Emergency Power Source = Generator

EPSS = Emergency Powers Supply System = All equipment downstream of the generator

3.3.4* Emergency Power Supply (EPS). The source of electric power of the required capacity and quality for an emergency power supply system (EPSS).

3.3.5* Emergency Power Supply System (EPSS). A complete functioning EPS system coupled to a system of conductors, disconnecting means and overcurrent protective devices, transfer switches, and all control, supervisory, and support devices up to and including the load terminals of the transfer equipment needed for the system to operate as a safe and reliable source of electric power.

A.3.3.4 Emergency Power Supply (EPS). For rotary energy converters, components of an EPS include the following:

- (1) Prime mover
- (2) Cooling system
- (3) Generator
- (4) Excitation system
- (5) Starting system
- (6) Control system
- (7) Fuel system
- (8) Lube system, if required

The EPS includes all the related electrical and mechanical components of the proper size and/or capacity required for the generation of the required electrical power at the EPS output terminals.

A.3.3.5 Emergency Power Supply System (EPSS). See Annex B for diagrams of typical systems.

Annex B Diagrams of Typical Systems

This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

B.1 Typical Power Supply Systems. See Figure B.1(a) through Figure B.1(d) for examples.

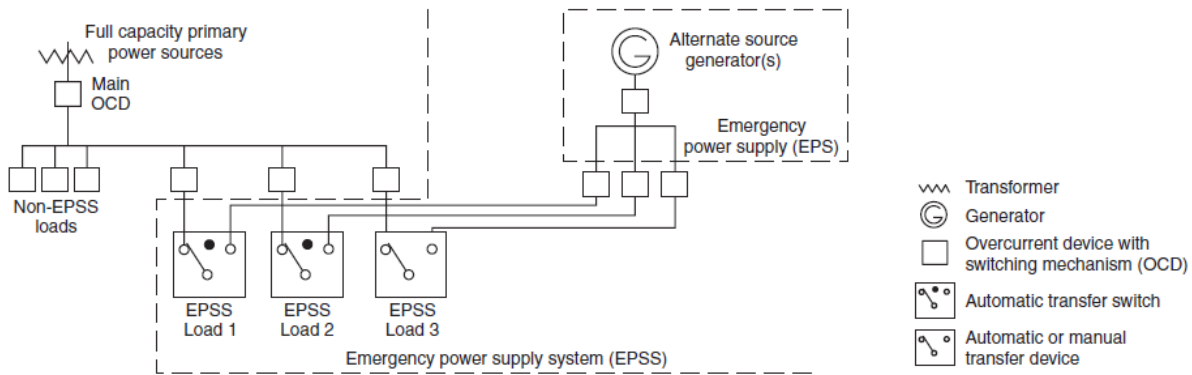


FIGURE B.1(a) Typical Rotating Emergency Power Supply System.

Is pharmaceutical compounding clean room suite suspended panel ceilings required to be sealed?

USP 797 Pharmaceutical Compounding - Sterile Preparations

Under section 4 Facilities and Engineering Controls in the USP 797 document, in paragraph 4.3.1 Cleanroom suite states the following:

4.3 Creating Areas to Achieve Easily Cleanable Conditions

4.3.1 Cleanroom suite: The surfaces of ceilings, walls, floors, doors, door frames, fixtures, shelving, work surfaces, counters, and cabinets in the classified area must be smooth, impervious, free from cracks and crevices, and nonshedding so they can be cleaned and disinfected and to minimize spaces in which microorganisms and other contaminants can accumulate. Surfaces should be resistant to damage (e.g., rust) by cleaning agents, sporicidal and other types of disinfectants, and tools used to clean. Junctures between the ceiling and the walls and between the walls and the floor must be sealed to eliminate cracks and crevices where dirt can accumulate. **If ceilings consist of inlaid panels, the panels must be caulked around each panel to seal them to the support frame.**

Walls must be constructed of, or may be covered with, durable material (e.g., epoxy painted walls or heavy-gauge polymer) and the integrity of the surface must be maintained. Panels must be joined together and sealed to each other and the support structure. Floors must include coving to the sidewall, or the juncture between the floor and the wall must be caulked. Classified areas should minimize dust-collecting overhangs, such as utility pipes, and ledges, such as windowsills. If overhangs or ledges are present, they must be easily cleanable. The exterior lens surface of ceiling light fixtures must be smooth, mounted flush, and sealed. Any other penetrations through the ceiling or walls must be sealed.

Is there an interruption that gasketed ceiling systems are not inlaid ceilings panels and therefore would not require being caulked to the grid? Does The Joint Commission concur with this statement?

See Armstrong whitepaper

(<https://www.armstrongceilings.com/content/dam/armstrongceilings/commercial/north-america/whitepapers/putting-the-science-behind-sealing-the-ceiling.pdf>), the Airassure gasketed ceiling system with a factory-applied gasket seal between the tile and the suspension grid reduces the leakage rate across the tiles by a factor of 4.

The current Joint Commission position is No. USP requires the ceilings to be caulked at this time until further notice. It appears that a gasketed ceiling tile provides the same functionality as one caulked to the frame however, this is a design requirement developed by The United States Pharmacopeia Convention (USP) and an official interpretation should be sought from them.

Can flood gates obstruct building exits?

Organization with a flood risk, are or are considering a flood control product that is being marketed and installed in hospitals and healthcare organizations that are accredited. When activated this device engages a liftgate which could possibly impede egress from a building exit. The activation of the flood gate may not be compliant with exiting requirements of NFPA 101-2012. Consequently, as part of survey process surveyors are asking that you inquire as to the ILSM these organizations intend to implement should the need arise for activation of these devices. Since these should only be deployed in a severe flood, organizations process for addressing these should be a part of their Emergency Operations Plan. <http://floodbreak.com/healthcare/>

Weapons Detection Systems, Egress Impairment?

While their use does serve to increase and ensure the safety of building occupants, weapons detection systems and any furniture or fixtures used by staff in conjunction with this screening cannot obstruct or impede exits, exit accesses and exit discharges. Furthermore, any open space within an exit enclosure cannot be used that would interfere with its purpose. The Life Safety Code does provide an allowance for (patient care) equipment in use however; these devices and installations do not fall under this code allowance.

Non-compliance with the means of egress requirements of the Life Safety Code would likely be scored under LS 02.01.20 EPs 13 & 14.