

HEALTHCARE INTERPRETATIONS TASK FORCE INTERPRETATION

Number: HITF.2007.002

Date: December 5, 2007

Code: NFPA 101 (2000)

PORTABLE DEVICES/EQUIPMENT IN CORRIDORS

Background: Healthcare occupancies are prone to having more and different types of equipment in them. While NFPA 101 – Sections 18.2.3.4 and 19.2.3.4 work to address the importance of maintaining minimum corridor widths, portable devices / equipment invariably find their way into these corridor spaces. Computers on wheels (COWs) are a particular concern.

NOTE: Because the size, geometry, and combustibility of mattresses and bed furnishings can vary to a great degree, and the possibility of other items being “stored” on the mattress surface, beds should not be considered portable devices / equipment for the purposes of this interpretation.

Questions/Answers:

Q1. How long should portable devices / equipment on wheels (such as COWs, portable x-ray machines (i.e. C-arms), EKG / EEG or other diagnostic equipment or other equipment with electrical connections) located in a corridor be permitted to be inactive before they are considered to be in storage? In this context, inactive is the amount of time that passes between users accessing the equipment.

A1. Although the code does not address a specific time limit (See NFPA 101:A.18.2.3.4/A.19.2.3.4), recent interpretations by the Joint Commission and Centers for Medicare/Medicaid Services have established a time of 30 minutes as a maximum limit on the amount of time that portable devices/equipment on wheels can be considered to be in use. The HITF agrees that this is a reasonable time frame for an AHJ to consider.

Note: This limitation should not be applied to crash carts or isolation carts.

Q2. Based on the answer to Q1, if the portable devices / equipment on wheels do not compromise the required egress width, can they be stored in the egress corridors, i.e. alcoves or spaces?

A2. YES. Alcoves or spaces being used for such purposes are not considered to be hazardous areas as defined by NFPA 101:18.3.2.1/19.3.2.1, nor should they be subject to the requirements for areas open to the corridor (See NFPA 101:18.3.6.1/19.3.6.1).

Q3. If the answer to Q2 is yes, can the portable devices / equipment on wheels be charging in these acceptable locations or while in use?

A3. YES, provided that the battery and charging systems meet the following design requirements to ensure safe operation:

- Sealed Lead-Acid Batteries:
 - Absorbed Glass Mat design and
 - Sealed Case (Sealed Lead-Acid)
- All Battery Systems (SLA, NiMH, Li+ Ion, Li+ Ion Polymer):
 - Smart Charging system with overcharge protection and
 - Shorted cell protection that shuts down upon detecting a shorted cell

End of Interpretation HITF.2007.002