

SCOTT MESSER
Director

Construction Industry Communication #12

From: Amit Ghosh, Chief Building Official
Re: Flexible Metal Raceway Connections to Emergency Light Fixtures in Hospitals
Date: January 29, 2008

Requirements: National Electric Code Article 517.31(C)(3) requires the wiring of the emergency system in hospitals to be mechanically protected.

Background: The wiring of emergency systems in hospitals (Use Group I-2) requires additional protection not normally required in other occupancies. Only metal raceways of the nonflexible type and Type MI cable are permitted as a wiring method for hospital emergency systems. As described in 517.31, the emergency system in a hospital consists of the life safety branch and the critical branch.

ASTM E580 Standard Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Moderate Seismic Restraint, established criteria for the installation of suspended acoustic ceilings in areas subject to light or moderate seismic disturbance to provide an unrestrained ceiling system that will accommodate the movement of the structure during a seismic event. The objective is to have a free-floating ceiling. This standard requires lighting fixtures weighing less than 56 lb to have, in addition to that required in NEC 410.36(B), two (2) No. 12-gage hangers connected from the fixture housing to the structure above. These wires may be slack. Lighting fixtures weighing 56 lb or more shall be supported directly from the structure above by approved hangers. Rigid conduit is not permitted for attachment of the fixtures.

Memorandum: The City of Columbus will permit a maximum of six (6) feet of connection to be used for the installation of fixtures complying with National Electric Code Article 517.31(C)(3)(3d) which permits the use of listed flexible metal raceways and listed metal sheathed cable assemblies where necessary for flexible connections to equipment. Lengths exceeding six (6) feet will require documentation to show additional length is needed for the anticipated movement.

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