



Technical Bulletin

Subject: Electrical Systems Supported by Suspended
Ceilings

Date: February 16, 2018 **No.:** 18-04

Summary: Fairfax County clarification of National Electrical Code (NEC) provisions regarding the support of luminaires (light fixtures), raceways, cables and boxes in suspended ceiling assemblies.

Effective date: Immediately

Background: Securing methods of luminaires continue to be questioned by designers and contractors due to the language of the corresponding NEC provisions. Plan reviews and inspections have not passed due to lack of independent or secure mounting, or both. As permitted by Article 90.4, the building official has the authority to make interpretations and clarifications of the NEC provisions. Accordingly, the following bulletin seeks to clarify various acceptable options for securing luminaires.

Policy:

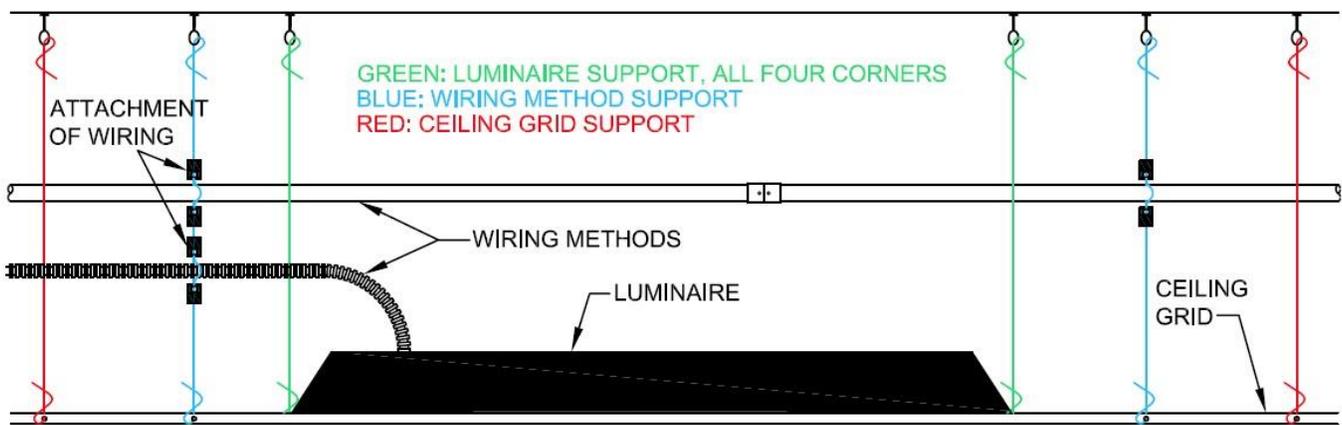


Figure: Support of Electrical System Elements

Luminaires

Luminaires shall be attached to the structure by one of the methods below.

1. When permitted by the ceiling grid manufacturer, attach luminaires to the grid with clips, screws or other approved fasteners at all four corners.
2. When not permitted by the manufacturer or where specifications are not available, luminaires shall be attached to the structure at all four corners (see figure).
3. Attach per approved plans.



Raceways, cable assemblies, boxes, etc.

Raceways, cable assemblies, boxes, cabinets and fittings shall be securely fastened in place to prevent vertical and horizontal movement. Independent supports must be provided that attach to the underside of the structure at one end and the top of the ceiling grid at the other.

Wiring

Wiring methods shall not be secured to or supported by the ceiling assembly elements. Independent means of support shall be installed which is distinguishable by color or label from the ceiling elements. See figure.

Exceptions:

1. Ceilings of a fire-rated assembly are permitted to support wiring and associated equipment that have been tested as part of the fire-rating.
2. Ceilings of a non-fire-rated assembly can support wiring and equipment where permitted by the ceiling system's specifications and installed in accordance with the manufacturer's instructions.

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