



BROWARD COUNTY BOARD OF RULES AND APPEALS

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FBC 7th EDITION (2020) FORMAL INTERPRETATION (#10)

DATE: July 9, 2020
TO: All Building Officials
FROM: James DiPietro, Administrative Director
SUBJECT: Ceiling Grid Support for Light Fixtures

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Per NEC 410.36, when lighting fixtures are installed in acoustical ceiling grids, they must be securely fastened to the grid. The FBC 5th Edition Section 808.1 requires ceiling grids to be installed as per ASTM C635 and ASTM C636. ASTM C635 is the standard for manufacturer's grid design. ASTM C635 Section 4 explains grid strength types such as light, medium and heavy duty and it also describes the allowable load to be applied to each grid type. ASTM C635 4.3 states the manufacturer is responsible for the design of the specified system. ASTM C636 explains the standard installation requirements. ASTM C636 Section 2.7 specifies the installation of lay in light fixtures in a grid ceiling. Depending on the load and the type of grid ceiling that is being used, there are three ways to support a lay in light fixture:

1. By fastening it to the grid per fixture manufacturer's instruction, NEC 410.36(B) and ASTM C636 2.7.1 where installing a light fixture does not compromise the design or strength of the ceiling.
2. By adding additional hanger wires on the grid at the four corners of the grid within 6" of the fixtures where it is determined that more support is needed to support additional loads per ASTM C636 2.7.2.
3. Per ASTM C2636 2.7.2, by independently supporting the fixtures from the grid where the weight of the fixture is determined to be too great for the selected grid to meet the deflection requirement.

Formal Interpretation:

A support detail shall be provided on the Ceiling Grid Plan Pages indicating the method of support of lay-in light fixtures, ceiling fans, ventilator fans, and other ceiling mounted equipment or fixtures based on the lay-in ceiling system manufacturer's load capabilities for the selected grid used. The detail shall be provided by the design Professional or the manufacturer.

EFFECTIVE DATE: March 10, 2016
RE-ISSUED DATE: July 9, 2020
EFFECTIVE DATE: December 31, 2020

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