



## REPLACEMENT OF COMMERCIAL HVAC UNITS

October 30, 2017

**2017 6<sup>th</sup> Edition FBC-M 301.15 Wind resistance.** Mechanical equipment, appliances and supports that are exposed to wind shall be designed and installed to resist the wind pressures on the equipment and the supports as determined in accordance with the *Florida Building Code, Building*.

**Permit documentation:**

*Installation details designed under raised seal by a Florida registered architect or engineer attesting to and demonstrating compliance with the wind load provisions of the Code -or- installation details bearing product approval acceptance by the State of Florida or Miami-Dade agencies shall accompany all applications for permit.*

**2017 6<sup>th</sup> Edition FBC-B 1510.10 Roof Mounted Mechanical units.** Units shall be mounted on curbs raised a minimum of 8 inches (203 mm) above the roof surface, or where roofing materials extend beneath the unit, on raised equipment supports providing a minimum clearance height in accordance with Table 1510.10.

**Permit documentation:**

*There are three options regarding permitting of replacement roof mounted units.*

- 1. Provide construction grade plans/details showing the existing curb system is structurally adequate and is in compliance with the code in effect at the time of installation. If the details are reviewed and accepted by this office as meeting those requirements. The unit can be replaced in kind.*
- 2. If it is questionable that the original curb installation was in compliance with the code in effect at that time, then an engineer's evaluation and recommendations for remedial measures will be required.*
- 3. Engineered details in compliance w/Chapter 15 of the 2017 6<sup>th</sup> Edition FBC-B is always an acceptable option for compliance.*

**2017 6<sup>th</sup> Edition FBC-EC C501.7 Building systems and components.** Thermal efficiency standards are set for the following building systems and components where new products are installed or replaced in existing buildings, and for which a permit must be obtained. New products shall meet the minimum efficiencies allowed by this code for the following systems and components:

- Heating, ventilating or air conditioning systems;
- Service water or pool heating systems;
- Lighting systems; and
- Replacement fenestration.

**Exceptions:**

1. Where part of a functional unit is repaired or replaced. For example, replacement of an entire HVAC system is not required because a new compressor or other part does not meet code when installed with an older system.
2. If the unit being replaced is itself a functional unit, such as a condenser, it does not constitute a repair. Outdoor and indoor units that are not designed to be operated together must meet the U.S. Department of Energy certification requirements contained in Section R303.1.2. Matched systems are required; this match may be verified by any one of the following means:
  - AHRI data
  - Accredited laboratory (example ARL labs)
  - Manufacturer's letter
  - Letter from registered P.E. State of Florida
3. Where existing components are utilized with a replacement system, such as air distribution system ducts or electrical wiring for lights, such components or controls need not meet code if meeting code would require that component's replacement.
4. Replacement equipment that would require extensive revisions to other systems, equipment or elements of a building where such replacement is a like-for-like replacement, such as through-the-wall condensing units and PTACs, chillers, and cooling towers in confined spaces.

**Permit documentation:**

*Matched systems verification per one of the four methods prescribed in C501.7 needs to accompany all applications for permit.*