

REPLACEMENT OF ROOFTOP HVAC UNITS

§M301.13 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. This may be accomplished by design or by application of §M301.13.1.

§1511.7 Mechanical units. Roof mounted mechanical 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 1511.7.

TABLE 1511.7
CLEARANCE BELOW RAISED ROOF MOUNTED MECHANICAL UNITS

Width of Mechanical Unit (inches)	Minimum Clearance Above Roof Surfaces (inches)
< 24	14
24 < 36	18
36 < 48	24
48 < 60	30
>= 60	48

Pending further clarification by the Florida Building Commission or non-binding agreement by the Unified Code Committee of Volusia County, it is this office's opinion (unincorporated areas only) that there are three options regarding permitting of replacement 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 2001 FBC is always an acceptable option for compliance.*

§M301.13.1 Ground-mounted units. Ground-mounted units for R3 residential applications may be anchored with #14 screws with gasketed washers according to the following.

1. For units with sides less than 12 inches, one screw shall be used at each side of the unit.
2. For units between 12 and 24 inches, two screws shall be used per side.
3. For units between 24 and 36 inches, three screws shall be used per side.
4. For units greater than 36 inches or 5 tons, anchorage shall be designed in accordance with §M301.13.

NOTES:

1. Corrosion protection. Buildings located within 3,000 feet of the ocean should utilize non-ferrous metal, stainless steel or steel with minimum G-90 hot-dip galvanized coating for equipment stands and anchors and stainless steel screws.
2. Strapping. Job site strengthening of fan cowlings and vent hoods is recommended. Two or four stainless steel cables are recommended, depending on design wind conditions. Alternatively, additional, heavy straps can be screwed to the cowling and curb.