# Division 233600 Air Terminal Units DESIGN GUIDE 

## 1 General

### 1.1 General

A. Engineer shall select terminal units for controllability at minimum and maximum airflows. Equipment selectin and system design downstream of the terminal units shall comply with room NC requirements.
B. For high efficiency VAV systems, considered fan powered terminal units for night heating needs at the perimeter of the building to keep the main air systems off at night.

## 2 Materials

### 2.1 Air Regulating Air Terminal Units

A. Galvanized steel casing and dampers with gasket. Self-lubricating bearings. Maximum 2\% leakage at 3 " inlet static pressure.
B. Internal insulation for sound control or consider downstream attenuators if needed to provide acoustic controls. When fibrous glass insulation is used, provide matting to resist erosion at velocities up to 5000 FPM. Exposed edges of liner coating with sealant to prevent entrainment of fibers in air stream.
C. Flow sensors: Cross or annular ring with multiple pressure sensing ports and averaging chamber.
D. Controller/Actuator/Thermostat: by 230900
E. Options-when required

1. Copper tube, aluminum fin heating coil
2. Fan powered terminal units-provide filters. Motors shall be 120 V , single phase.
F. Heating coils must have drain valves and air vents installed.
G. For all heating coils, supply with a bottom 4 inch $x$ 6-3/4 inch access door secured to the case with quarter turn latches.

## 3 Execution

### 3.1 Installation

A. Provide with straight inlet conditions as recommended by manufacturer.
B. Install with service clearances to maintain serviceability requirements specified in Section 230500.
C. Fan terminal units, where used shall be located in accessible locations for service of filters/fans/motors/dampers.

## 4 Appendix

### 4.1 Reserved for future.

