PART 1: GENERAL

1.01 CEILING AIR PLENUMS

A. Ceiling supply air plenums shall not be used.

B. Ceiling return plenums must not be used in laboratories and are discouraged in all other applications. Fully ducted systems are preferred. When ceiling plenums are used:

1. Install balancing dampers at each floor.
2. Require careful inspection and sealing of the plenum including all chase penetrating.
3. Insulate the roof to a U-value of .05 BTU/°F/HR/FT$^2$ minimum.
4. Coordinate architectural and structural plans to ensure plenum has adequate free area throughout.
5. Design plenum pressure - relative to occupied space .04 i.w.c. or less. Avoid the use of tile retainer clips.

1.02 DUCTWORK

A. We encourage duct sizing for low velocity (less than 1500 ft/min.). Duct static pressure should also be kept as low as possible through low velocity duct sizing, minimizing duct bends, and selection of terminal boxes and outlets for low pressure drop.

B. All ductwork shall be constructed and supported in accordance with the latest SMACNA standards.

C. Access doors shall be installed at each fire damper or duct mounted coil.

D. Duct sealing shall be required on all traverse joints for static pressures 3 i.w.g. and below. For 3 i.w.g. and above seal as per SMACNA standards.

E. Duct lining shall not be used without perforated metal liner.