1. Supply return and exhaust duct work to conform to the relevant SMACNA Guidelines

2. Size supply air distribution ductwork with 10% excess capacity to allow for future load changes. Without exception there shall be 10% excess capacity in the duct risers and in the horizontal take-offs from the shafts.

3. Where multiple air systems are used in a common area, if possible, duct the return air separately back to each air handling unit.

4. Ductwork and plenums (supply and return) are to be sized for the fans operating at 100% rpm. Provide adequately sized noise attenuation to ensure air noise is not excessive. Refer to ASHRAE guidelines for acceptable HVAC noise criteria in rooms.

5. Duct all exhaust air systems. Do not use ceiling spaces or mechanical rooms as exhaust air plenums.

6. Use corrosion resistant materials for exhaust ducts conveying corrosive fumes and vapors, or where condensation is likely to occur.

7. For applications with corrosive and non-corrosive fume hoods on the same riser, the riser is to be stainless steel with stainless collar provided for connection of galvanized ductwork on non-corrosive fans. Considerations shall be made for use of galvanized ductwork on accessible locations on corrosive fume hoods.

8. Ensure that all exhaust ductwork is at a negative pressure at all times with respect to the interior building space.