

Modify subsection .01, Paragraph 5 in Section 23 00 01 per the following (deletions are shown struck through and additions are double underlined). Remainder of section is unchanged.

23 00 01 Owner General Requirements and Design Intent

.01 HVAC Design General Requirements

5. All drawing sets shall include:
 - a. Coordinated single line diagrams shall include both existing and new work as applicable.
 1. *Overall building airflow diagram(s) showing interrelationships of air handling units, exhaust fans, duct risers and mains, primary dampers and air balance / pressure relationships.*
 2. *Overall building hydronic and steam system diagrams showing interrelationships of main heating/cooling plant equipment or central utility source, heat exchangers, pumps, pipe risers and mains and primary isolation and control valves.*
 3. *Diagrams shall include connected and cumulative design capacities and flow rates which can be toggled on during design phase for review purposes and off if desired for final construction documents.*
 - b. Clear delineation between demolition, existing to remain, and new work on plans and riser diagrams.
 - c. For areas with special pressure relationship requirements that must be properly controlled, the Design Professionals shall include plans in the construction set of drawings showing simplified pressure relationships and tabular summaries of overall air balance for each pressure controlled space and summaries of system airflows.
 1. These plans shall be the basic floor plan (clearly identifying all room names/use – not just numbers) with easily recognizable tags for any room that is not neutral pressurization. The tag would indicate airflow direction (e.g. + and – or POS and NEG) and airflow (cfm).
 2. The drawing would also have a table indicating system level summaries of airflows per floor. (i.e. System SA(max/min), RA (max/min), General Lab Exhaust (max/min), Fume Hood Exhaust (max/min), General Exhaust, Transfer Air (including intended source – adjacent system), and any other special exhaust systems).

3. The purpose is to have easy to follow summaries to help everybody involved understand the design intent during all phases of the project and for the record set for future operation and maintenance reference. Showing transfer air on a complicated duct drawing does not work well. The concept is similar to having simple Life Safety Plans for accurate and quick understanding.

END of revision

Update Commentary:

Section was updated primarily for the following reasons:

- 1) *To add requirements that for areas with special pressure relationship requirements that must be properly controlled, the Design Professionals shall include plans in the construction set of drawings showing simplified pressure relationships and tabular summaries of overall air balance for each pressure controlled space and summaries of system airflows.*