

HVAC - System Airflow Diagram Guidelines

Division 230000-6

The Facilities Services Subgroup designer shall clearly communicate the HVAC system airflow distribution, air balance and instrumentation concepts and requirements for applicable systems. The system airflow diagram and the corresponding air balance schedule is the preferred method for conveying this information. The following guidelines reflect the Owner's system airflow diagram content preferences for Heating, Ventilation and Air Conditioning (HVAC).

Division 23 HVAC System Airflow Diagram Guidelines:

- The System Airflow Diagram should utilize industry recognized symbols and abbreviations.
- A schedule should be presented on the System Airflow Diagram or other referenced drawing, identifying all symbols, abbreviations and instrumentation function identifiers.
- System directional flow arrows should be utilized on the System Airflow Diagram.
- Design flow quantities and temperature and pressure setpoints are to be presented on the System Airflow Diagram or corresponding schedule.
- System Airflow Diagram components are to be labeled with unique tags or identifiers.
- Duct system lines are to be labeled at regular intervals to better facilitate the following of the lines on the drawing. Where duct lines extend to subsequent drawings, those drawings are to be incorporated into an off-sheet identifier, referencing the system line type and the location of the continuation of the duct system line.
- The System Airflow Diagram may be used to present line sizes and type information, insulating requirements, etc. where scale or complexity prohibit such presentation on the plans.
- The HVAC System Airflow Diagram is intended to depict the distribution and conditioning of all central HVAC air systems.
- All heat addition, humidification, dehumidification and cooling components are to be incorporated into the System Airflow Diagram.
- Terminal devices or multiple air handling equipment are to be appropriately presented in typical form to communicate expectations for repetitive component types.
- Instrument identifiers are intended to be cross referenced to the Sequence of Operation descriptions presented on the drawings or the specifications.