HVAC - Piping & Instrumentation Diagram (P&ID) Guidelines
Division 230000-5

The Facilities Services Subgroup designer shall clearly communicate the piping and instrumentation concepts and requirements for applicable systems. The P&ID is the preferred method for conveying this information. The following guidelines reflect the Owner’s P&ID content preferences for Heating, Ventilation and Air Conditioning (HVAC).

**Division 23 HVAC P&ID Guidelines:**

- The P&ID should utilize industry recognized symbols and abbreviations.
- A schedule should be presented on the P&ID or other referenced drawing, identifying all symbols, abbreviations and instrumentation function identifiers.
- System directional flow arrows should be utilized on the P&ID.
- Design flow quantities and temperature and pressure setpoints are to be presented on the P&ID or corresponding schedule.
- P&ID components are to be labeled with unique tags or identifiers.
- Piping system lines are to be labeled at regular intervals to better facilitate the following of the lines on the drawing. Where P&ID 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 piping system line.
- The P&ID may be used to present line sizes and type information, insulating requirements, heat tracing requirements, etc. where scale or complexity prohibit such presentation on the plans.
- The HVAC P&ID is intended to depict the Facilities Services systems including the distribution and generation of all HVAC water and steam systems.
- All heat addition and rejection components are to be incorporated into the P&ID as well as heat exchanger components.
- Terminal devices or multiple air handling equipment heat exchangers 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.