



Design Standard Air Handling Units

Purpose:

Air handling units are an essential element of the mechanical space ventilation, cooling, and heating systems. This design standard has the purpose of creating a consistent application of air handling unit requirements throughout the South San Francisco Unified School District therefore achieving a standard of quality for maintenance, energy efficiency, and reliability throughout all renovation and new building projects.

Design Standard:

Design and specify work to include materials, installation and testing of central station air handling unit for a complete and operating system

- All air handling units shall have, at minimum, a dedicated set of two-position outside air dampers for ventilation requirements plus a second set of modulating outside air dampers, as required, for economizer operation or tracking with exhaust air.
- Coils shall be copper coils with copper fins.
- Insulated casings and plenums shall be specified for all units, including those serving heat and vent applications. Provide double wall casings at all locations.
- Units shall be installed to allow removal of all coils and filters. Clearance equal to full-finned width of coil shall be provided to facilitate removal.
- Units shall be mounted on internal vibration isolators and concrete housekeeping pads.
- Units shall have a mixing box and filter box or a combination filter/mixing box properly sized so as not to exceed the filter manufacturer's recommended face velocities. Low leakage dampers (2%) shall be provided for mixing box dampers.
- Variable speed drives shall be installed on the air handlers in a separate conditioned vestibule.

Approved Manufacturers:

- Carrier Corporation



South San Francisco Unified School District



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Substitutes Allowed:

- No Substitutions

Associated Design Standards

- 23 05 29 – Design Standard Hangers and Supports for HVAC Piping and Equipment
- 23 05 48 - Design Standard Vibration and Seismic Controls for HVAC Piping and Equipment
- 23 05 53 - Design Standard Identification for HVAC Piping and Equipment
- 23 05 93 - Design Standard Testing, Adjusting and Balancing
- 23 31 00 – Design Standard Ductwork

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