

DIVISION 15 - MECHANICAL

Section 15855 - Air Handling Systems

Introduction

Equipment associated with:

CENTRAL STATION AIR CONDITIONING AND DISTRIBUTION.

See related Sections	15540 Heat Transfer Equipment
	15860 Fans
	15885 Filters

Part 1 - General

- *Preferred system design based on Dual Duct VAV Concept complete with dual fans. Discuss all system selections with UA Facilities Design & Construction.*
- AHU to be 'draw-thru' type.
- Size AHU to meet latest edition of ASHRAE Standard 62-1989.
- In new construction utilize AHU to 'flush' building to reduce off-gasing of interior furnishings prior to occupancy. Fit AHU with temporary filters during this period.
- Replace filters before system balancing.
- Preferred location of OA intakes is above roof level - not ground level. However, avoid location of AHU outside air intake in vicinity of plumbing vent stacks, emergency generator stacks, loading dock areas and areas where people might congregate to smoke cigarettes.
- OA intakes to be hard ducted through Mech. Rooms unless a separate AHU room is provided.
- Ensure access is provided to both sides of AHU fans to allow bearing replacement.
- Ensure smooth, uniform inlet and discharge flow conditions to and from AHU.
- Provide 'minimum' of one fan impeller diameter upstream of fan.
- Ensure flexible connections are taut.
- Provide vibration safety switches on all Vane Axial type fans.
- When Vane Axial fans are used ensure suitable access is provided for servicing/removal.
- Control valves shall be located outside of air handler enclosure.

Part 2 - Products

- Provide hinged access doors to both sides of coils, fans, filters and damper sections.
- Provide removable side panels in fan sections to allow for fan and shaft removal/replacement.
- AHU shall not be constructed using porous or semi porous materials.

- AHU shall be double walled casing - minimum 18 gauge.
- AHU shall have interior inspection lights.
- Large AHU to have inspection windows in access doors.
- Utilize only 'premium efficiency' motors in AHU's. See Section 15050.

Part 3 - Execution

- Ensure coil drain pans and condensate pipework is pitched to drain, (minimum pitch ¼" per foot).

End of Section 15855