

Candler Hall

Candler Hall is a three story (with a partially occupied basement), 15,658 square foot administrative office and classroom building that was originally constructed in 1902 as a residence hall. Candler was renovated and re-purposed in 1966 to become an office building and then underwent a major renovation to include its HVAC systems in 2003.

The HVAC system consists of two Variable Air Volume Air Handling Units (AHUs) serving 32 variable air volume (VAV) terminal units on the three floors and the basement. The two systems are separated to serve the North and South portions of the building independently. The primary mechanical equipment is located in the basement and the terminal units are located in the basement and attic, rather than the ceiling spaces of occupied floors. Each Air Handling Unit is capable of air side economizer function and is equipped with disposable MERV-8 air filters.

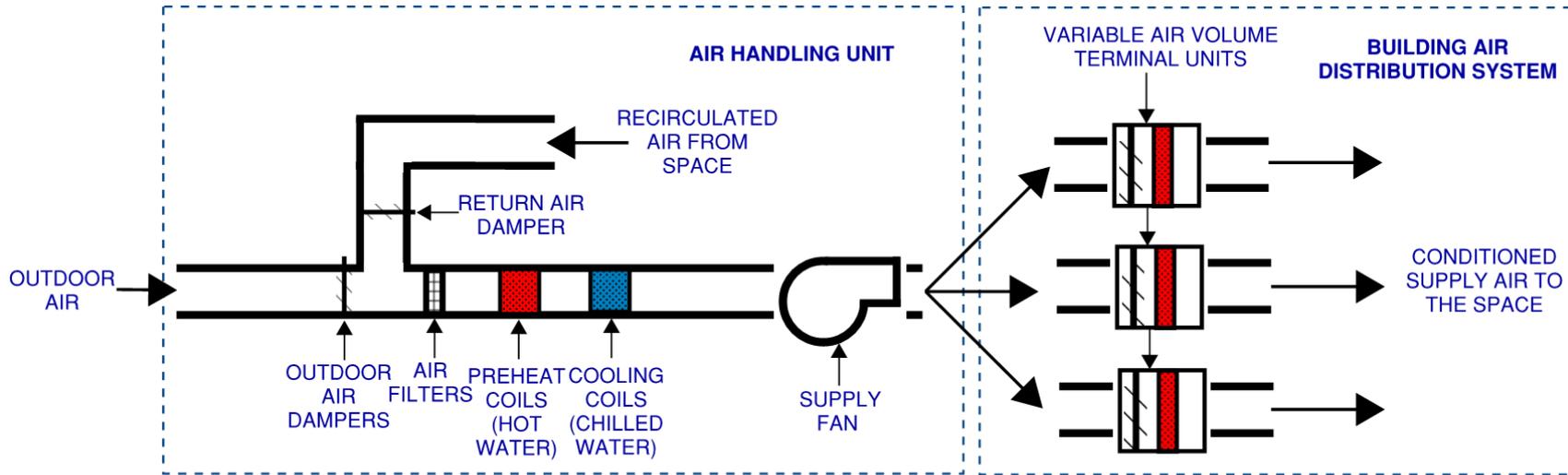
The basement and attic are provided with several unit heaters and the data closet in the basement utilizes a refrigerant based split Air Conditioning unit. The systems are controlled by an ALC control system. The building utilizes campus chilled water for cooling at each of the two AHUs. For heating provided in both AHUs and the VAV terminal units, the building utilizes campus steam through a heating hot water heat exchanger.

VARIABLE AIR VOLUME AIR HANDLING UNITS

The facility's two Variable Air Volume Air Handling Units are equipped with a bank of MERV-8 filters installed upstream of the heating coils, cooling coils and supply air fan, which remove large particulate matter from the airstream continuously. Air from the spaces is recirculated via the above ceiling plenum space and mixed with ventilation air from outside the building within the AHUs. This mixed air is drawn through the bank of filters and then cooled and dehumidified as needed as it passes through a chilled water, cooling coil. The cool, dehumidified air is then distributed throughout the spaces served by each AHU in ductwork. Each Variable Air Volume Air Handling Unit is capable of operating with air side economizer controls which bring in additional quantities of outdoor air when the ambient temperature and humidity conditions are appropriate.

Prior to being delivered to individual spaces, duct mounted terminal units vary the volume of air to each zone and provided heating as required based on the current space temperature using an air damper and hot water, reheat coil.

AIR HANDLING UNIT	UNIT LOCATION	AREA SERVED
AHU-1	Basement Mechanical Room	Level Basement, 1, 2 & 3 South
AHU-2	Basement Mechanical Room	Level Basement, 1, 2 & 3 North



VARIABLE VOLUME AIR HANDLING UNIT SCHEMATIC