

MOORE COLLEGE (0025)

Moore College was originally constructed in 1876. The most recent HVAC renovation occurred in 2004. At that time the existing zone terminal units were replaced and the controls for the air handling units were upgraded. The building is served by two, variable volume air handling units on the first floor with ventilation air ducted directly to each unit and space heating and air volume control provided by multiple, duct-mounted variable air volume zone terminal units (VAVs) with either hot water or electric heating coils.

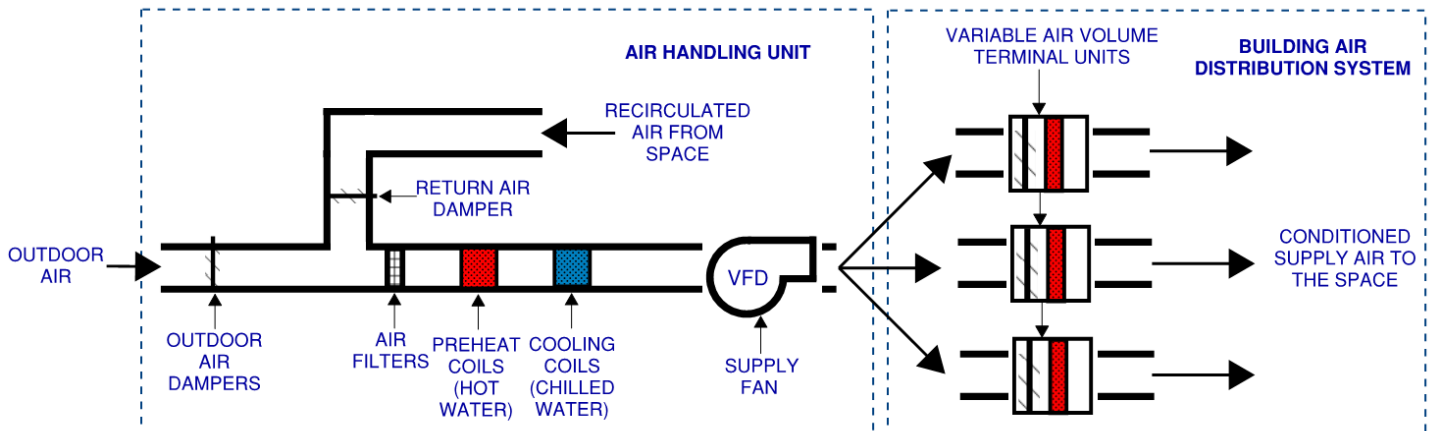
Chilled water is supplied throughout the building from a chiller located in the mechanical room or from the campus chilled water system. Heating hot water, distributed throughout the building for heating, is provided by a steam to water heat exchanger using steam from the campus steam system.

VARIABLE VOLUME AIR HANDLING UNITS

The air handling units deliver a variable volume of conditioned air consisting of a mixture of recirculated building air and fresh air from outside of the building. The building return air is filtered, mixed with outdoor air and cooled with chilled water coils in the air handling units before being supplied to rooms throughout the building via above ceiling ductwork.

The Variable Air Volume terminal units (VAVs) are equipped with an air damper to regulate the volume of air delivered from the central AHUs to the space based on the current space temperatures. For areas requiring heat, the VAVs also include a hot water coil or electric heating coil that reheats cool air from the AHU when the space requires heating.

Air is recirculated from the building back to the air handling unit through ceiling mounted air return registers located in each space. Return air is pulled from a plenum space above the ceiling. Exhaust is provided in restrooms on each floor to remove odors and to maintain a slightly positive building pressurization.



VARIABLE VOLUME AIR HANDLING UNIT SCHEMATIC