

Executive Summary:

The ventilation system of the Student Services Building at Howard Community College was evaluated using ASHRAE 62.1-2004. The results of this evaluation are that the designed system meets and exceeds the ventilation required by the latest ASHRAE ventilation standard. The 6 air handling systems in the Student Services Building are typical Variable Air Volume with reheat type systems except AHU #6 which is a Constant Volume Variable Temperature with reheat. AHU #1 has a capacity of 36,300 cfm and serves the 1st floor, atrium, 2nd floor, and 3rd floor. AHU #2 has a capacity of 32,300 cfm and serves the south wing 2nd and 3rd floors. AHU #3 has a capacity of 11,000 cfm and serves the south wing 4th floor. AHU #5 has a capacity of 15,000 cfm and serves the south wing 1st floor dining room. AHU #6 has a capacity of 5700 cfm and serves the South wing first floor kitchen.

The difference in the designed outdoor air requirements verses the required OA requirements per ASHRAE Standard 62.1-2004 is due to the fact that the design team used the ventilation requirements of ASHRAE Standard 62.1-2001. The majority of the spaces were designed for 20 cfm per person and the new Standard typically only calls for 5 cfm per person in addition to 0.06cfm/ft^2 .