

Executive Summary

Technical Assignment 1 is an evaluation of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Standard 62.1-2007. Standard 62.1 focuses on ventilation for acceptable indoor air quality. In this assignment, Sections 5 and 6 were reviewed for compliance of the DASCO Medical Office Building mechanical system with this standard.

This building was designed as a shell and core, open-plan for medical office use by future tenants. As the four story building found tenants, different phases of fit-outs started, and the open space was built into offices, exam rooms, waiting rooms, and specialty imaging and cancer treatment spaces.

The building mechanical system is a fan powered variable air volume system with a return air plenum. Three (3) air handling units, two (2) are located on the roof and one (1) above a linear accelerator bunker on the rear side of the building. Each AHU was designed to deliver approximately 20% outdoor air to the spaces. AHU-1 serves the ground floor and part of the first. AHU-2 serves the second and third floors, and AHU-3 serves only the first floor.

As per the assignment requirements, the ventilation rate procedure was used to evaluate the buildings outdoor air needs based on occupancy and square feet of usable space. It should be noted that Standard 62.1 outlines an Indoor Air Quality Procedure that was not looked at as part of this assignment.