

## **Executive Summary:**

This purpose of this report is to examine South Jefferson High School, a two story 230,000 s.f. facility, to verify its compliance with ASHRAE Standard 6.21-2004 minimum ventilation requirements at design conditions.

Supply air is delivered to the school by 14 roof top units (RTU), which range in size from 4,500 cfm to 25,500 cfm. The amount of minimum outside air to the 14 RTU's varies between 1,200 cfm and 14,000 cfm. The ventilation effectiveness is 1.0 based on the air distribution configuration with ceiling supply of cool air. A comprehensive summary of the building's HVAC systems' design is located in the Systems and Equipment Summary section.

As described in the Conclusions section, all 14 roof top units comply with Standard 62.1-2004. RTU-5 exceeds the minimum outdoor air quantity significantly by requiring the unit to supply 100% outside air. The remaining 13 roof top units closely follow the calculated outdoor air rates for ASHRAE Standard 62.1-2004.