INTERPRETATION IC 62-2001-04 OF
ANSI/ASHRAE STANDARD 62-2001
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

Transfer Approved: January 12, 2002

Originally issued as interpretation of Standard 62-1999 (IC 62-1999-2) on February 5, 2000, but transferred to Standard 62-2001. Since no changes were made to the relevant sections of Standard 62-2001, no revisions were made to the interpretation as part of this transfer.

Request from: Charles A. Lane, Environmental Process, Inc., 1220 Glenwood Avenue, Minneapolis , MN 55405, (612) 377-8316 (email: calane@rconnect.com).

Reference: This request refers to ASHRAE Standard 62-2001, Table 2.1, Outdoor Air Ventilation Requirements - Institutional Facilities and section 6.1.3.4.

Background: The HVAC system serving an existing school classroom is to be renovated to provide 15 cfm of outdoor air per occupant. The existing unit ventilator will be replaced with a new "heat wheel" energy recovery unit ventilator (ERUV). The ERUV has a supply air fan to induce outdoor air through the heat wheel and a second fan to induce recirculated/exhaust room air through the heat wheel. Both fans operate continuously during all occupied periods. During very cold weather, the outdoor airflow through the heat wheel must be shut off for a maximum of 15 minutes per hour to defrost the heat wheel. This is accomplished by closing the outdoor air damper. However, both ERUV fans continue to operate during the defrost cycle. To compensate for the time that the outdoor air damper is closed during defrost, the engineer has increased the designed outdoor air supply rate for the ERUV to 20 cfm per occupant. Therefore, the time-weighted outdoor airflow over one hour is 15 cfm per occupant, based on a 15 minute defrost time.

Question: Does this design violate the intent of the Standard?

Answer: No

Comment: The standard does not directly address the issue of the time period over which the ventilation rates determined using Table 2 must be provided. There is nothing in the standard that would not allow the proposed design.