

**INTERPRETATION IC 62.1-2004-08 OF
ANSI/ASHRAE STANDARD 62.1-2004
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY**

Transfer Approved: June 25, 2006

Originally issued as interpretation of Standard 62-1999 (IC 62-1999-38) on January 27, 2001, transferred to Standard 62-2001 (IC 62-2001-39) on January 12, 2002 and subsequently to Standard 62.1-2004. Even though Standard 62.1-2004 includes some changes to relevant sections of Standard 62-2001, only minor revisions (related to referenced sections, new rates and new calculation procedures) were made in transferring this interpretation to apply to Standard 62.1-2004

Request from: Troy G. McWilliams, P.E. (e-mail:tgm@bellsouth.net). McWilliams Engineering, 1739 Saulter Road, Birmingham, AL 35209.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2004, Table 6-1, Minimum Ventilation Rates in Breathing Zone- Commercial Facilities.

Background: In the design of office facilities, the basic design premise utilized in most instances is as follows. Where the space should be treated as a toilet space, i.e., minimum of 50 cfm per wc or urinal, the air is typically supplied by transfer air and using local mechanical exhaust to the outdoors with no recirculation recommended. Where the space is typical office space, 20 cfm/person of outdoor air is adequate. Each restroom requires 50 cfm/wc transfer air, to compensate for the 50 cfm/wc air exhausted to the outdoors.

Interpretation: For an office building with 20 people, a male and female restroom each with one water closet supplied entirely by transfer air from the adjacent office space, served by a single zone rooftop unit, the total outside air required would be calculated as: $5 \text{ cfm/person} \times 20 \text{ people} + 0.06 \text{ cfm/ft}^2 \times 5000 \text{ ft}^2 = 400 \text{ cfm}$.

Question: Is Mr. McWilliams Interpretation correct?

Answer: Yes, but with the caveats in the Comment below.

Comment: Section 6.2.8 Exhaust Ventilation states explicitly that “exhaust airflow may be any combination of outdoor air, recirculated air, and transfer air.” The outdoor air intake may need to be increased if the exhaust requirement exceeds the outdoor air requirement based on the Table 6-1 rates, but the standard does not specifically require the provision of outdoor air to meet exhaust air requirements.

It is important to note that the method of determining the outdoor air requirements has changed significantly in ANSI/ASHRAE Standard 62.1-2004. Refer to Section 6.2 Ventilation Rate Procedure.