

**INTERPRETATION IC 62.1-2007-03 OF
ANSI/ASHRAE STANDARD 62.1-2007
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY**

Transfer Approved: January 20, 2008

Originally issued as interpretation of Standard 62.1-2004 (IC 62.1-2004-01) on January 22, 2006, but transferred to Standard 62.1-2007. Even though Standard 62.1-2007 includes some changes to relevant sections of Standard 62.1-2004, only minor revisions related to referenced sections were made in transferring this interpretation to apply to Standard 62.1-2007.

Request from: Dick Bourne (dbourne@davisenergy.com), Davis Energy Group, 123 C Street, Davis, CA 95616.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2007, Section 6.2.6.2 Short-Term Conditions, specifically the interruption of ventilation air.

Background: Equation 6-9 in Section 6.2.6.2 of 62.1-2007 is used to calculate the period T over which ventilation air supply must average to the minimum outdoor air intake as determined by Equation 6-3, 6-4 or 6-8 as appropriate.

Interpretation No. 1: The value of T in Equation 6-9 and the period of interruption of ventilation can be very large (6 hours or more and 5 hours or more, respectively) depending on occupancy and building type. For example, by my calculations, in a 10,000 ft² building with 10 ft ceilings specified as office space (5 people/1000 ft²), $T = 353$ minutes, and the supplied ventilation air must average to 850 cfm. If the HVAC equipment provides 6000 total cfm, I interpret this to mean that the equipment could run for $(850/6000) \times 353 = 50$ minutes out of every 353 minutes in 100% outside air mode at 6000 cfm, and the remainder of the time (nearly 5 hours) in 100% recirculation mode.

Question No. 1: Is this interpretation correct?

Answer No. 1: No

Comments No. 1: Five out of six hours is not a short term condition

Interpretation No. 2: This interpretation holds true for both ANSI/ASHRAE Standard 62.1-2007, ANSI/ASHRAE Standard 62.1-2004, and Addendum “n” to ANSI/ASHRAE Standard 62-2001 (Section 6.2.5.2).

Answer No. 2: No.

Comments No. 2: Five out of six hours is not a short term condition.