

**INTERPRETATION IC 62-1989-12 OF**  
**ANSI/ASHRAE STANDARD 62-1989**  
**VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY**

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**Request from:** Donald C. Herrmann, Creighton & Associates, Inc., 611 East Broward Boulevard, Suite 207, Fort Lauderdale, Florida 33301

**Reference.** This request pertains to the requirements given in ASHRAE Standard ANSI/ASHRAE 62-1989 including Addendum 62a-1990, paragraph 6.1.3.4.

**Background.** Paragraph 6.1.3.4 reads as follows:

"Where peak occupancies of less than three hours duration occur, the outdoor air flow rate may be determined on the basis of average occupancy for buildings for the duration of operation of the system, provided the average occupancy used is not less than one-half the maximum."

**Case 1.** Creighton & Associates has established the following two possible interpretations for complying with 6.1.3.4

**1-A (Creighton & Associates interpretation).** The system designer may use an average occupancy value when determining the required outdoor air flow for variable occupancies to prevent over ventilating, providing it is not less than one-half the maximum listed in table 2 or one-half the anticipated peak occupancy load as referenced in 6.1.3.4.

**1-B (Alternative interpretation).** The system designer may use an average occupancy value when determining the required outdoor air flow for variable occupancies to prevent over ventilating, providing it is not less than one-half the maximum listed in table 2.

Creighton & Associates believes that Interpretation No. 1a above expresses the intent of Standard 62-1989.

**Question 1.** Is interpretation No. 1-A correct?

**Answer 1.** Yes

**Case 2.** Creighton & Associates has established the following two possible interpretations to define "peak occupancies of less than three hours duration."

**2-A (Creighton & Associates interpretation).** The term "peak occupancies" allows more than one peak period of less than three hours duration over the operation time of the system. Examples; auditoriums, conference rooms, special use classrooms, concert halls, etc.

**2-B (Alternative interpretation).** Only one peak occupancy may be used within a twenty four hour period.

Creighton & Associates believes that Interpretation No. 2a above expresses the intent of Standard 62-1989.

**Question 2.** Is interpretation No. 2-A correct?

**Answer 2.** Yes

**Case 3.** Creighton & Associates has established the following two possible interpretations for complying with 6.1.3.4.

**3-A (Creighton & Associates interpretation)** The system designer may, at his or her option, lead or lag the ventilation supply to the space. This is not a mandatory requirement.

**3-B (Alternative interpretation)** Lead/Lag ventilation is a mandatory part of the standard and shall be used in the design of ventilating systems for all occupied spaces of intermittent or variable occupancies.

**Question 3.** Is interpretation No. 3-A correct?

**Answer 3.** Yes

**Comment:** The concept of lag ventilation assumes no appreciable buildup of contaminants during the unoccupied hours. However, such a buildup may occur from materials or machines in the building, microbially contaminated areas, or activities of maintenance personnel. The designer should therefore not routinely presume that lag ventilation will result in acceptable indoor air quality.