## INTERPRETATION IC 62-1999-24 OF ASHRAE STANDARD 62-1999 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

## TRANSFER TO 62-1999 APPROVED: August 14, 2000

Originally issued as interpretation of Standard 62-1989 (IC 62-1989-16) on June 26, 1994, but transferred to Standard 62-1999. Since no changes were made to the relevant sections of Standard 62-1999, no revisions were made to the interpretation as part of this transfer.

**<u>Request from</u>**: Bruce F. Kimball, Marshall Erdman and Associates, Inc., 5117 University Avenue, Madison, WI 53705

**<u>Reference</u>**. This request refers to the requirements given in ASHRAE Standard 62-1989, paragraph 6.1.3 and 6.1.3.1.

Background. Paragraph 6.1.3 Ventilation Rate Requirements states in part:

"Indoor air quality shall be considered acceptable if the required rates of acceptable outdoor air in Table 2 are provided for the occupied space."

Paragraph 6.1.3.1 Multiple Spaces states in part:

"Where more than one space is served by a common supply system, the ratio of outdoor to supply air required to satisfy the ventilation and thermal control requirements may differ from space to space. The system outdoor air quantity shall then be determined using Equation 6.1."

Mr. Kimball's letter opines that it is not necessary to apply equation 6.1 if the required rates of acceptable outdoor air in Table 2 are provided to each space.

Question. Is Mr. Kimball's interpretation correct?

Answer. Yes

<u>**Comment**</u>. The project committee has found the issue of how and when to apply Table 2 and Equation 6.1 difficult to resolve and will consider proposals for clarifying/modifying the requirements in the next revision of Standard 62.

<u>**Case 3**</u>. 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

<u>**Comment</u>**: 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.</u>