

**INTERPRETATION IC 90.1-2004-11 OF  
ANSI/ASHRAE/IESNA STANDARD 90.1-2004  
Energy Standard for Buildings Except Low-Rise Residential Buildings**

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**Request from:** Heather Camden (E-mail: [camden@eceng.com](mailto:camden@eceng.com)), E&C Engineers & Consultants Inc., 1010 Lamar, Suite 650, Houston, Texas 77002.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IESNA Standard 90.1-2004, Section 6.5.2.1, regarding the reduction of zone air volume before reheat is allowed.

**Background:** The 6.5.2.1 exemptions for the allowance of reheat in a zone include

- (a) *Zones* for which the volume of air that is reheated, recooled, or mixed is no greater than the larger of the following:
1. the volume of *outdoor air* required to meet the ventilation requirements of Section 6.1.3 of ASHRAE Standard 62 for the *zone*,

ANSI/ASHRAE/IESNA Addendum *s* to ANSI/ASHRAE/IESNA Standard 90.1-2004 (published in the 2006 Supplement to 90.1-2004) changed the reference to Section 6.1.3 of Standard 62 (1999) in this exception to reference Section 6.2 of Standard 62.1 (2004), but addenda are not acknowledged by some governing bodies/jurisdictions. In addition, not all types of occupancies are listed in Standard 62.1, such as research animal holding rooms.

**Interpretation:** When ASHRAE Standard 62.1 does not give a minimum air change rate for a specific type of occupancy, the most recent ASHRAE HVAC Applications Handbook (2007) may be used as a guideline. With regards to research animal housing Chapter 14 – Laboratories, under the section on Ventilation (page 14.15) it states, "In certain types of animal rooms, usually those used for long-term studies involving high-value work or animals, the outside air change rate is maintained at the 10 to 15 per hour..."

Therefore, if the research animal holding room is designed to reduce flow to 10-15 air changes in the animal room before reheating, the exemption 6.5.2.1 (a) 1. can be taken.

**Question:** Is this interpretation correct?

**Answer:** No

**Comment:** Exception 6.5.2.1 (a) 1, modified by Addendum S, is specific to Section 6.2 of Standard 62.1-2004. Exception 6.5.2.1 (a) 1 cannot be interpreted to allow usage of other standards to satisfy this particular exception.