

**INTERPRETATION IC 15-2007-3 OF
ANSI/ASHRAE STANDARD 15-2007
SAFETY STANDARD FOR REFRIGERATION SYSTEMS**

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Request from: Norman L. Nelson, PE (norman.nelson@hilton.com), Hilton Worldwide, 8311 Brier Creek Pkwy Ste 105-505, Raleigh, NC 27617.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 15-2007, Section 7.3.2, regarding ventilated spaces and volume calculations.

Background: Most hotel/motel guest rooms include a bathroom connected to the guest room with a door. Toilet exhaust systems may be continuous or intermittently operated depending on the design. ASHRAE Standard 62.1-2007 allows continuous ventilation rates of 25 CFM (12.5 LPS) that could be considered for increasing the allowable limits of refrigerant R-410A in variable refrigerant flow systems. Similarly, the guest room may be equipped with ventilation supply air (0.04 CFM/ft² 0.3 LPS/m²) from a dedicated outdoor air system that would also increase the allowable limits. However, these supply and exhaust air systems are typically never provided with emergency power or supervised monitoring systems to maintain their operation continuously, and may be inoperative or shut off for various reasons.

Interpretation: It is Hilton Worldwide's interpretation that increasing the allowable refrigerant limits for R-410A in a variable refrigerant flow system due to dilution by supply and/or exhaust air ventilation should not be considered due to risk of asphyxiation of the occupants.

Question: Is this Interpretation correct?

Answer: Yes.

Comment: The RCL is calculated on the basis of the room volume and permanently connected spaces, see Section 7.3.