

**INTERPRETATION IC 62.1-2010-7 OF  
ANSI/ASHRAE STANDARD 62.1-2010  
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY**

Approved: January 24, 2016

**Request from:** Mike Moore, Newport Ventures, Inc., ASHRAE SSPC 62.2 IAQ Subcommittee Chair, 22 Jay Street, Schenectady, NY 12305.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2010, Section 6, regarding outdoor air requirements.

**Background:** Outdoor air ventilation systems that use exhaust-only fans are regularly specified in multi-family dwelling units. Such systems are valued for their low-cost, reliability (e.g., no outdoor air intakes to maintain or outdoor air filters to change), energy efficient performance, and ease of maintenance. These systems are specified based on the assumption that the exhaust fan's depressurization of a dwelling unit will introduce outdoor air into the dwelling unit at the same rate as exhausted.

The California Energy Commission recently issued a code interpretation that would require exhaust-based ventilation systems with outdoor air intakes and to have their outdoor air flow field-verified at the dedicated outdoor air inlet. This requirement has resulted in a de-facto ban of outdoor air exhaust ventilation systems for multi-family dwelling units in California. Unless the dwelling unit is hermetically sealed, the volume of outdoor air entering through a dedicated inlet will never equal the air leaving a dwelling unit through an exhaust fan moving the design cfm; and, upsizing the exhaust fan to achieve the outdoor air through the dedicated outdoor air inlet is not tenable due to the resultant high flow rates, large energy penalty, high equipment cost, high depressurization levels, etc.

In response to CEC's interpretation, the ASHRAE SSPC 62.2 committee unanimously approved Addendum r to 62.2-2013, which will be published with the 62.2-2016 version. Addendum r states that the outdoor air required for dwelling units with exhaust-only ventilation systems may be verified at the exhaust fan's intake grille. ASHRAE Standard 62.2 also clearly states that exhaust-only systems can be used to provide outdoor air for dwelling unit ventilation, and no dedicated outdoor air inlets are required for such systems.

CEC staff rightly contends that their current ventilation code requirements for high-rise dwelling units are based on ASHRAE Standard 62.1 (not on ASHRAE 62.2 which has current jurisdiction over ventilation of dwelling units), and so they have requested that SSPC 62.1 provide clarification on 62.1's requirements for outdoor air requirements associated with dwelling units in previous versions of ASHRAE Standard 62.1.

**Interpretation:** An exhaust-only ventilation system is an acceptable system for meeting the outdoor air ventilation requirements of high rise multifamily dwelling units under ASHRAE Standard 62.1-2010, regardless of whether a dedicated outdoor air inlet is provided or whether the outdoor air flow rate is confirmed at an outdoor air inlet.

**Question:** Is this interpretation correct?

**Answer:** No.