INTERPRETATION IC 62.1-2007-22 OF ANSI/ASHRAE STANDARD 62.1-2004 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

Transfer Approved: June 26, 2011

Originally issued as interpretation of Standard 62.1-2004 (IC 62.1-2004-19) on June 20, 2009 and transferred to Standard 62.1-2007 on June 26, 2011.

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<u>Reference</u>: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2007 Section 6.2.2.1 and the relevance of using local exhaust fans in high-rise residential projects to provide mechanical ventilation.

Background: ASHRAE Standard 62.2-2007, Section 4.1 states "a mechanical exhaust, supply or combination thereof shall be installed for each dwelling unit to provide whole building ventilation with outdoor air..." Section 4.2 goes further to state "the whole-house ventilation system shall consist of one or more supply or exhaust fans and associated ducts and controls. Local exhaust fans shall be permitted to be part of a mechanical exhaust system." Based upon the referenced sections above including Table 4.1a of 62.2-2007, it is quite clear that ASHRAE Standard 62.2-2007 allows the use of local exhaust fans to provide ventilation for the dwelling units.

ASHRAE Standard 62.1-2004 does not specifically state the use of local exhaust fans is permissible within high-rise residential projects to provide mechanical ventilation as in ASHRAE Standard 62.2-2004. We are aware that each standard contains different calculations to determine ventilation requirements (ASHRAE 62.2-2007, Table 4.1a and ASHRAE 62.1-2007, Section 6.2.2.1 Breathing Zone Outdoor Air Flow).

Interpretation: Local exhaust fans to provide mechanical ventilation to occupiable spaces may be used for high-rise residential projects to adhere to ASHRAE Standard 62.1-2007.

Question: Is this Interpretation correct?

Answer: Yes, provided the other requirements of the Standard are met.

<u>Comments</u>: The standard does not state whether outdoor air must be "pulled" or "pushed" into the breathing zone. However, there are requirements of the Standard that may preclude the use of exhaust fans only for mechanical ventilation, such as 5.10.2 and 6.2.1.

For example, to comply with 5.10.2 more outdoor air must be supplied to the building than is exhausted.