

January 31, 2008

Chris Gekas  
California Energy Commission  
1516 Ninth Street, MS 25  
Sacramento, CA 95814-5512

Subject: Residential Indoor Air Quality Ventilation, 2008 Building Energy Efficiency Standards

Dear Mr. Gekas,

This is in reference to some of the recent comments related to Ventilation for Indoor Air Quality, specific to central-fan integrated (CFI) mechanical ventilation systems.

One of the technical presentations at the IAQ 2007 conference discussed “field test data of room-to-room distribution of outside air with two residential ventilation systems”.<sup>1</sup> Test results indicated that ventilation supplied through a central fan integrated system was distributed much more uniformly than a single-point exhaust system. Even the findings from recent LBNL study concluded that air distribution systems like the CFI system can have non-energy benefits in the form of increased comfort, fresh air distribution, air filtration, and improved indoor air quality over other types of mechanical ventilation systems.<sup>2</sup>

While energy efficiency is desirable, it should not be at the cost of Indoor Air Quality. Let’s not forget that this part of the standard is primarily written for better Indoor Air Quality. My recommendation is to allow for all types of mechanical ventilation systems that promote better indoor air quality. Even ASHRAE 62.2 recognizes that and does not limit the use of any specific type of ventilation system.

Best Regards

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1. Hendron, R., Rudd, A., Anderson, R., Barley, D., Hancock, E., Townsend, A. IAQ 2007. “Field Test of Room-to-Room Uniformity of Ventilation Air Distribution in Two New Houses”.
  2. Sherman, M. and Walker, I. 2007. “Energy Impact of Residential Ventilation Standards in California”, LBNL 61282. Lawrence Berkeley National Laboratory, Berkeley, CA.