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Mr. Brian Killins
Natural Resources Canada

Dear Brian,

Thank you for the opportunity to participate in the recent teleconference and in this comment opportunity.

RenewAire supports the HVI position as worked out with all member manufacturers of heat-recovery and energy-recovery ventilators.

Additionally I feel I should bring to your attention a few items that, while discussed in the development of the previous Canada only draft and in your response to comments now posted on the Energy Star web site, I do not feel they were adequately addressed. These include:

1. Regarding Program scope - The current specification requires HVI Certification based on CSA-439. The HVI lab can not currently test units over 400 CFM and HVI procedures say their Certification program is for residential units only. I believe everyone that has commented and worked on this specification has pictured it as a residential specification. The specification does not say it is for residential H/ERVs only. I believe this should be made clear right up front in the title.
2. Regarding inclusion of low-temperature performance criterion –
    a. I believe the low temperature test is an abnormal operating test in the C439 HRV standard. This abnormal test is not required; it is optional, for HVI Certification because it is abnormal and does not widely apply to the North American market.
    b. The heat pump example given is a good one because there is a low temperature test requirement. In actually, the AHRI Certification program requires performance at 17 degrees F. There is no lower requirement. AHRI performance is also the requirement for Energy Star Qualified split-system and central packaged AC and heat pumps. I do not believe there are any abnormal temperature requirements for these systems. There should not be abnormal operating requirements for H/ERVs.
    c. The comments do not address the issue that SRE performance at -25 C is a meaningless representation of the energy savings of an H/ERV operating in any location in North America. Relatively there are almost no weather hours anywhere where the temperature has been below -25 C for 72 hours straight. Conversely there are many hours in a year, and more hours the further north the location, where the temperature is below -4 to -7 C, the temperature that HRVs must begin defrost (insuring the exhaust air leaving temperature is above 0 C. There is no performance criteria that measures this important effect. (Compare this to our ERV where the exhaust air leaving air temperature can fall far below 0 C without hitting saturation, at HVI cold weather test conditions corresponding to an outside air temperature of approximately -18 C. This effect insures on a seasonal basis much more energy is recovered and is not represented, by the -25 C, SRE at all.

d. The comments do not address the questionable accuracy of the -25 C SRE values. Average performance, during the last 12 hours of the 72 hour test is highly dependent on very minor variations in defrost timing cycle, air flow, humidity content of the airstreams, to name a few of the most significant variables. Not enough is known about the precision, reproducibility, and accuracy of the -25 C SRE values.

Thank you again for your interest and support of energy efficient ventilation. I believe the direction that you are moving toward will prove valuable to help manufacturers improve their products, help contractors select more efficient products and help homeowners enjoy better indoor air quality in an efficient manor.

With best wishes,

Douglas Steege
V.P. Marketing & Sales
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