Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings

Approved June 20, 2009

Request from: Don Stevens (stevensd@us.panasonic.com) Panasonic Home and Environment Company, PO Box 398, Keyport, WA 98345.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.2-2007, Section 7.2, regarding the sone rating limit for whole building ventilation fans.

Background: The concept of limiting the sound level of ventilation fans was a strong component of the discussions within SPC 62.2 since its formation in 1996 and has continued within SSPC 62.2 since it replaced SPC 62.2 in 2004. Spot ventilation fans, typically operated intermittently for less than one hour a day, were limited to 3.0 sones and whole building fans, typically operating continuously, were limited to 1.0 sone because of their long operating cycle. SPC 62.2 used the concept of “continuous operation” of fans to cover both continuously-operating whole building fans and continuously-operating spot or source exhaust fans. However, some users have interpreted that a whole house fan operating for half the time at twice the required continuous flow and a fan operating for one-third of the time at three times the required airflow as an intermittent fan and therefore could be as loud as 3.0 sones. This has become an issue in California, which will be requiring compliance with ANSI/ASHRAE 62.2-2007 starting in August of this year. The 2008 Title 24 Compliance Manual from the California Energy Commission currently states that the whole house fan can be 3 sones if operated intermittently. As an original member of SPC 62.2 and current Vice Chair of SSPC 62.2, I feel that it was always the intent of the committee to limit fans that run for many hours a day to 1.0 sone, whether operated continuously or for one hour out of three at the required higher rate.

Interpretation: The intent of the sound rating limits in Section 7.2 is to have the specified whole building ventilation system required by Section 4.1 be limited to 1.0 sone, whether the fan is operated continuously or intermittently.

Question: Is this Interpretation correct?

Answer: Yes

Comments: None.