
**Request from:** Pedro J. Camejo (pcamejo@aes-pe.com), Applied Engineering Solutions, 440 Martin Luther King Jr. Blvd, Suite 101A, Macon, GA 31201.

**Reference:** This request for interpretation refers to Addendum “n” to ANSI/ASHRAE Standard 62-2001 that incorporates a new Ventilation Rate Procedure in Section 6.2, specifically related to the calculation of system average population in Sections 6.2.2.1, 6.2.5.3 and 6.2.6.2.

**Background:** Equation 6-7 is used to calculate the [system] occupancy diversity (D) which is then used in Equation 6-6 to calculate the system uncorrected outdoor air intake (Vou). One of the variables used to calculate D is the sum of zone population (Pz) for all the zones served by the system. The other variable used to calculate D is the system population (Ps). In Section 6.2.2.1 the definition for Pz states that each Pz can be averaged as described in Section 6.2.6.2 if the expected zone population fluctuates with time.

**Interpretation No. 1:** The individual zone Pz to be used in Equation 6-7 may be averaged based on the averaging method described in Section 6.2.6.2 provided that averaging time T of Equation 6-9 is calculated based on the individual zone volume and on the individual zone breathing zone outdoor airflow (Vbz).

**Question No. 1:** Is this Interpretation correct?

**Answer No. 1:** Yes.

**Comments No. 1:** None.

**Interpretation No. 2:** In the case where the individual zone populations (Pz) used in Equation 6-7 are averaged the system population (Ps) is also averaged.

**Question No. 2:** Is this Interpretation correct?

**Answer No. 2:** No.

**Comments No. 2:** System population Ps is the total population in the area served by the system. If this population changes over time it may be averaged over the time period found using Equation 6-9, but such averaging is not a requirement whenever average zone population values are used in Equation 6-7. Note that the averaging adjustments applied to zone population and those applied to system population account for two different effects. Zone population averaging (average Pz) accounts for fluctuating population within a ventilation zone (due to occupants entering and leaving the zone), which does not necessarily affect the system population. System population averaging (average Ps), on the other hand,
accounts for fluctuating population within the ventilation system as a whole (due to occupants entering and leaving the system).

**Interpretation No. 3:** The system population \((Ps)\) is averaged over time period \(T\) where \(T\) is calculated from Equation 6-9 based on the total volume of all the zones served by the system in question and the sum of all the zone outdoor airflows \((Vbz)\) of the zones served by the system.

**Question No. 3:** Is this Interpretation correct?

**Answer No. 3:** Yes.

**Comments No. 3:** None.