INTERPRETATION IC 62.1-2007-24 OF
ANSI/ASHRAE STANDARD 62.1-2007
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

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Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2007, Section 6.3 Indoor Air Quality Procedure, and Table 6-2, relating to Zone Air Distribution Effectiveness (E_z).

Background: From Table 6-2 of Standard 62.1-2007:
Ceiling supply of cool air. $E_z = 1.0$
Ceiling supply of warm air 15°F or more above space temperature and ceiling return. $E_z = 0.8$

I have both of these at a glance but ceiling supply of cool air happens 95% of the time in South Florida. The system that I have is chilled water only with VAV reheat/heat. Ceiling supply of warm air only happens occasionally during reheat/heat or morning warm up. Florida has very few cold days.

Interpretation: South Florida utilizes cooling almost 100% of the time and heating is rarely used. Ceiling cooling with $E_z = 1.0$ should be used for this system.

Question: Is this Interpretation correct?

Answer: No

Comments: During periods of heating operation, E_z must be set in accordance with Table 6-2 and the outdoor air intake flow determined accordingly. However, Section 6.2.7, Dynamic Reset, explicitly includes resetting of the outdoor air intake flow based on variations in the efficiency with which outdoor air is distributed to the occupants under different ventilation system airflows and temperatures. This would allow outdoor airflows to be based on different values of E_z based on the system operating conditions at the time. During morning warm-up, prior to expected occupancy, no ventilation airflow is required.