

**INTERPRETATION IC 90.1-2004-19 OF  
ANSI/ASHRAE/IESNA STANDARD 90.1-2004  
Energy Standard for Buildings Except Low-Rise Residential Buildings**

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**Request from:** Rory S. Beville, PE ([rbeville@gray.com](mailto:rbeville@gray.com)), Gray Construction, 10 Quality Street, Lexington, KY 40507.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IESNA Standard 90.1-2004, Sections G2.2, G2.5 and G3.1, regarding the application of exceptional calculation methods and nonstandard efficiency measures to model energy for systems utilizing elevated air speed to increase the maximum temperature for acceptable comfort.

**Background:** Section G2.2 allows the use of “exceptional calculation methods requirements in G2.5” “for components that cannot be modeled by the simulation program.”

Table G3.1, under Proposed Buildings Performance, Design Model, requires that “temperature and humidity control setpoints and schedules be the same for proposed and baseline building designs. “ However, the exception listed in G3.1, under Baseline Building Performance, Schedules, allows them to “differ between the proposed design and baseline building design when necessary to model nonstandard efficiency measures.”

**Interpretation:** We feel that the requirement for consistent temperature and humidity control setpoints and schedules listed in Table G3.1, under Proposed Building Performance, Design Model, conflicts with the exception listed in Table G3.1, under Baseline Building Performance, Schedules, when modeling non-standard efficiency measures and with the exceptional calculation methodology described in Sections G2.2 and G2.5. Our interpretation is that the thermostat setpoints and schedules can change when modeling non-standard efficiency measures.

**Question:** Is this interpretation correct?

**Answer:** Yes.

**Comment:**

Non-standard efficiency measures must be modeled in accordance with the exceptional calculation method as described in Sections G2.2 & G2.5. The control setpoint and schedules can be altered provided that equivalent levels of occupant thermal comfort are demonstrated as part of the exceptional calculation method.

Note: The committee is currently working on changes to the standard to clarify the requirements of section G2.2 and Table G3.1 that will resolve the conflicting language problem.