

**INTERPRETATION IC 90.1-2004-17 OF
ANSI/ASHRAE/IESNA STANDARD 90.1-2004
Energy Standard for Buildings Except Low-Rise Residential Buildings**

Date Approved: 12 April 2008

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Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IESNA Standard 90.1-2004, Section 2.3(c), regarding the Scope and the applicability of the Standard to Commercial Datacom Facilities.

Background: Section 2.3(c) of the Standard states that it does not apply to "equipment and portions of building systems that use energy primarily to provide for industrial, manufacturing, or commercial processes."

Interpretation: Even though most equipment and processes associated with datacom facilities (i.e. electrical gear, transformers, IT equipment racks, etc.) are commercial processes and are not covered by the Standard, it is assumed that the Standard would still apply to the building lighting and mechanical systems that serve or house these areas or processes.

For example, the electrical rooms contain the gear that primarily serves the datacom processes. The load associated with the electrical gear would be exempt, but the space lighting power allowances, mechanical requirements (i.e. no simultaneous heating and cooling, individual zone control, mandated equipment efficiencies for the AHUs, fans, chillers etc.), and the building envelope requirements would still fall under the requirements of the Standard. The same would hold true for all similar equipment areas.

In turn, a single constant volume system serving these spaces, with no means of individual zone control while workable from a process standpoint, would be untenable from the Standards perspective. Further, if you were seeking compliance with the Standard using the Energy Cost Budget Method for a building that had office areas in addition to datacom areas the entire building and its systems would have to be modeled with the only caveat being that the specific process loads would be equal in both models.

If this interpretation is incorrect and the Standard does not apply to datacom facilities, then seeking LEED Certification is not possible since meeting beating the Standard is now a prerequisite. We recognize that ASHRAE does not administer the LEED program, but the implication is worth noting considering the drive to have more buildings meet LEED.

Question: Is this interpretation correct?

Answer: No.

Comment:

As the scope of Std. 90.1-2004 is written, your interpretation is partly correct. The building envelope and systems must meet all requirements of Std. 90.1-2004, with the exception of the space conditioning system installed specifically to support the datacom equipment. (However, as these spaces use a great deal of energy, SSPC 90.1 strongly recommends that the systems serving datacom equipment be designed and operated to the highest energy efficiency performance that is justifiable.) Lighting systems in the datacom process space are covered by the standard because they are installed not as part of the process, but rather for people when in the space.

It is not the responsibility of the SSPC 90.1 to interpret questions on the LEED standard. We suggest that such issues should be brought to USGBC for interpretation.