

**INTERPRETATION IC 90.1-1999-5 OF
ASHRAE/IESNA STANDARD 90.1-1999
Energy Standard for Buildings Except Low-Rise Residential Buildings**

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Reference: This request for interpretation refers to the requirements presented in ASHRAE/IESNA Standard 90.1-1999, Section 4.1.2.1, Additions to Existing Buildings, and Section 4.1.2.2, Alterations to Existing Buildings.

Question 1a: Does Section 4.1.2.1(b), Additions to Existing Buildings, require that trade-offs between measures be compared on the basis of energy consumption rather than energy cost?

Answer: Yes. Section 4.1.2.1(b) requires that the basis of comparison be energy consumption.

Question 1b: Does Section 4.1.2.2(b), Alterations to Existing Buildings, require that trade-offs between measures be compared on the basis of annual energy usage rather than energy cost?

Answer: Yes. Section 4.1.2.2(b) requires that the basis of comparison be annual energy usage.

Question 2a: Does Section 4.1.2.1(b), Additions to Existing Buildings, require the use of the ECB method for making trade-off calculations?

Answer: Yes. Compare the energy consumption using the energy analysis methodology of the ECB Chapter (Chapter 11).

Question 2b(1): Does Section 4.1.2.2(b), Alterations to Existing Buildings, require the use of the ECB method for making trade-off calculations?

Answer: No.

Question 2b(2): Are there any restrictions intended as to the method of calculation, or may the user apply any method acceptable to the authority having jurisdiction?

Answer: Yes. The comparison must be done using a substantially identical design; annual energy usage must be calculated; it must be verified by the design professional; and, the user may apply any method acceptable to the authority having jurisdiction.