

**Interpretation IC 32.1-2004-1 OF  
ANSI/ASHRAE Standard 32.1-2004  
Methods of Testing for Rating Vending Machines for  
Bottled, Canned, and Other Sealed Beverages**

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**Request from:** Rebecca M. Duff ([RDuff@icfconsulting.com](mailto:RDuff@icfconsulting.com)), Project Manager, ICF Consulting, 1725 Eye Street NW, Suite 1000, Washington, DC 20006.

**Reference:** This request for interpretation refers to the requirements in ANSI/ASHRAE Standard 32.1-2004, Sections 7.1.1(d) and 7.2.1, regarding the operational requirements for vending machines during testing.

**Background:** The ENERGY STAR Refrigerated Beverage Vending Machine specification requires manufacturers to measure a model's daily energy consumption according to ASHRAE Standard 32.1 using the test conditions provided in Section 6, and the test procedures provided in Section 7, of the standard. New energy management devices are coming to market that are installed in such a way that the operator will not be able to adjust the settings. These devices respond to external conditions, such as product sales and temperature, to control the refrigeration cycle of the machine. We would like clarification as to whether the results of testing with these new energy management devices installed and enabled are valid given the test requirements of Standard 32.1 below:

7.1.1 (d) the vending machine shall be "operated with normal lighting and control settings, using only those energy management controls that are permanently operational and not capable of being adjusted by a machine operator."

7.2.1 "The purpose of this test is to determine the stabilized daily and unit product energy consumption of the vending machine operating over a 24-hour period, without the use of energy management systems that are adjustable by the operator."

**Interpretation:** Vending machines that have energy management devices permanently installed, such that the operator is not able to adjust the settings, meet the requirements of Sections 7.1.1(d) and 7.2.1 of ANSI/ASHRAE Standard 32.1-2004. As such, the test results for these machines are valid.

**Question:** Is this interpretation correct?

**Answer:** Yes.

**Comments:** Vending machines that have energy management devices permanently installed and not adjustable by the operator meet the requirements of Sections 7.1.1(d) and 7.2.1 of the referenced standard.