Hot Food Holding Cabinet (HFHC) Analysis

In an effort to ensure that the ENERGY STAR mark remains relevant in the marketplace and continues to offer significant energy and cost savings to consumers, the U.S. Environmental Protection Agency (EPA) has spent several months reviewing the current ENERGY STAR Hot Food Holding Cabinet’s (HFHC) efficiency criteria and current market availability.

According to the North American Association of Food Equipment Manufacturer’s (NAFEM) 2010 Size and Shape of the Industry report, sales estimates for HFHCs are made up of approximately 58% insulated and 42% uninsulated. The efficiency criteria of the initial 2003 ENERGY STAR Version 1.0 HFHC specification separated insulated from non-insulated with the primary objective of using ENERGY STAR to drive the market towards insulated cabinets. All of the current ENERGY STAR certified HFHC models are insulated cabinets.

EPA used the current ENERGY STAR HFHC certified product listing and augmented it with additional insulated cabinet data from the California Energy Commission (CEC) database. The data set used for this analysis consisted of 192 unique models (insulated),

- 82 of which meet the current Version 2.0 levels (43% of all models in the data set)
  - 61 from the ENERGY STAR Qualified Products List
  - 21 from the CEC data set meet the Version 2.0 levels but are not currently ENERGY STAR certified.

EPA also included an additional 110 unique models which exceed the current Version 2.0 levels, 97 models from CEC and 13 additional models from additional performance reports.

Based on this data and current market segmentation, EPA has concluded that the current version of the ENERGY STAR efficiency criteria continues to provide product differentiation and energy savings of up to 500 Watts (equating to about 1,460 kWh/year, assuming operation of 8 hours/day) within the insulated sub-category. Even greater savings can be achieved when compared to un-insulated cabinets. Since insulated cabinets represent just over one-half of total sales, and the Version 2.0 criteria represents 43% of currently available insulated cabinets, it is estimated that the actual market penetration of ENERGY STAR HFHCs is closer to 25%.

The following chart, below, shows where the data lies in comparison to the current Version 2.0 ENERGY STAR levels for HFHCs:
Idle Energy Consumption Rates (Watts)

Internal Volume (Cu. ft)

HFHC Dataset

V2.0 Level, 0-13
V2.0 Level, 13-28
V2.0 Level, 28+
Models