Date issued: September 15, 2006

Subject: Interpretation of ANSI/AHAM HRF-1 – Energy Consumption Test – Section 8

Background:
The AHAM Major Appliance Engineering Council (MAEC) established a task force to review ANSI/AHAM HRF-1:2004 to identify ways to clarify the intent of the standard with regard to the energy consumption test and to propose modifications accordingly. Members met on August 8, 2006 and September 15, 2006 and delivered the following statement of interpretation.

Statement of Interpretation:
AHAM’s position is that the following principles of interpretation should be applied to the existing refrigerator-freezer test procedure, and should apply to and guide any revisions to the test procedure. The intent of the energy test procedure is to simulate typical room conditions (approximately 70°F) with door openings, by testing at 90°F without door openings.

Except for operating characteristics that are affected by ambient temperature (for example, compressor percent run time), the unit, when tested under this standard, shall operate equivalent to the unit in typical room conditions. The energy used by the unit shall be calculated when a calculation is provided by the standard.

Energy consuming components that operate in typical room conditions (including as a result of door openings, or a function of humidity), and that are not exempted by this standard, shall operate in an equivalent manner during energy testing under this standard, or be accounted for by all calculations as provided for in the standard.

Examples:

1. Energy saving features that are designed to operate when there are no door openings for long periods of time shall not be functional during the energy test.
2. The defrost heater should not either function or turn off differently during the energy test than it would when in typical room conditions.
3. Electric heaters that would normally operate at typical room conditions with door openings should also operate during the energy test.
4. Energy used during adaptive defrost shall continue to be tested and adjusted per the calculation provided for in this standard.