



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

June 13, 2011

Dear ENERGY STAR® Furnace Manufacturer or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) is pleased to share with you the attached Final Version 3.0 and 4.0 ENERGY STAR Furnace specifications, test method and labels. EPA would like to acknowledge the many ENERGY STAR stakeholders who have invested substantial time and effort over the past several months to contribute detailed feedback to inform the specification development process. This letter lays out the Agency's final decisions regarding these new requirements and outlines the schedule for qualifying products under the new Version 3.0 and 4.0 specifications.

Minor Edits and Clarifications

A series of minor edits have been incorporated into these final specification documents as a result of additional stakeholder feedback on the Final Draft specifications. Changes to the Eligibility Requirements include:

- **Document Management.** Creation of two separate specification documents for Versions 3.0 and 4.0.
- **Definitions.** Revisions to the definitions of Furnace Fan Efficiency and Heating Degree Days to provide better clarity. The AFUE definition is now harmonized with the definition in 10 CFR Appendix N Subpart B.
- **Product Family.** Under the Test Requirement's section, replacement of the term "Basic Model" with "Product Family" throughout the specification where applicable.
- **Excluded Products.** Clarification of Section 2B: Excluded Products, that furnaces intended only for commercial installation and/or with a rating of 225,000 Btu per hour energy or higher are not eligible for ENERGY STAR.
- **Energy Efficiency Requirements.** Clarification of performance levels to clearly indicate significant digits are to tenths of a percent. For example, U.S. North/Canada $\geq 95.0\%$.
- **Test Requirements.**
 - Removal of the reference to E_{AE} and E_F from Table 2, Test Methods for ENERGY STAR Qualification, as these requirements are not part of the furnace specification.
 - Clarification regarding the sampling plan options for purposes of testing.
 - Addition of new Interim Test Method "Interim Approach for Determining Furnace Fan Energy Use". Changes to the Interim Test Method include:
 - Title change to "Interim Approach for Determining Furnace Fan Energy Use"
 - New Term, $E_{Furnace}$
 - "e" Calculation. In the October 2010 final rule for test procedure on Residential Furnaces and Boilers, DOE included the annual electric standby mode and off mode energy consumption metric (E_{SO}) in the calculation of the Annual Electrical Energy Consumption metric (E_{AE}).

EPA understands that the addition of E_{SO} metric would affect the number of the models that would meet the proposed 2% ENERGY STAR Furnace Fan Efficiency requirement. As the proposed 2% requirement was not intended to include the standby and off mode electric energy consumption, DOE has revised the calculation of e to use $E_{Furnace}$ instead of E_{AE} .

ENERGY STAR Regional Label

Those furnaces that meet requirements for the U.S. South but not the U.S. North may only be labeled with the following U.S. South ENERGY STAR mark which clearly shows the unit only meets requirements for Southern states.



This applies to the units themselves, all product literature and collateral material. Products that meet the requirements for the U.S. North or Canada may be labeled using the general ENERGY STAR certification mark.

Effective Date and Deployment Timeline

EPA shares its Partners' desire for a smooth transition from one ENERGY STAR specification version to the next, with the objective of meeting consumer expectations that ENERGY STAR labeled products fully meet the latest requirements in effect upon their date of manufacture.

With this in mind, EPA has established the following timeline:

- Effective immediately, manufacturers may elect to have their Certification Body (CB) certify their eligible products to the Version 3.0 or Version 4.0 requirements for purposes of ENERGY STAR qualification.
- From October 1, 2011, CBs will be asked to stop certifying new product submittals to the existing ENERGY STAR Version 2.0 specification requirements. Note, however, that existing certifications to Version 2.0 will remain valid for the purposes of ENERGY STAR qualification until January 31, 2012.
- As of February 1, 2012 any product manufactured and labeled as ENERGY STAR must meet Version 3.0 requirements. At this time, all certifications of products to the Version 2.0 specification will be invalid for purposes of ENERGY STAR qualification and CBs will only submit product models certified to Version 3.0 to EPA.

Third-Party Certification

As a reminder, as of January 1, 2011 all new products must be certified by an EPA-recognized Certification Body (CB) before being labeled and marketed as ENERGY STAR. Upon satisfactory completion of all certification requirements, a CB will notify the Partner that the product is ENERGY STAR qualified and will submit qualified product data to EPA for listing on the ENERGY STAR website. For more information on the Third-party Certification program please visit www.energystar.gov/3rdpartycert.

Please direct any specific questions to Abigail Daken at EPA, daken.abigail@epa.gov or (202) 343-9375 and Sarah Medepalli, ICF International, at smedepalli@icfi.com or (202) 862-1268. Thank you for your continued support of ENERGY STAR.

Sincerely,

A handwritten signature in cursive script, appearing to read "Abigail Daken".

Abigail Daken
U.S. Environmental Protection Agency
ENERGY STAR HVAC Program