

**Version Tracking Document for  
ENERGY STAR Certified Homes, Program Requirements for the State of Massachusetts, Revision 01  
6/01/2013**

In the time since the Version 3.1 ENERGY STAR Certified Homes guidelines for the state of Massachusetts were released, EPA has modified, clarified and refined various aspects of the program documents. This document is a summary of these edits. EPA has also posted the revised program documents, labeled (Rev. 01) on its Web site at [www.energystar.gov/newhomesguidelines](http://www.energystar.gov/newhomesguidelines).

All revisions are categorized as a Change, Clarification, or Refinement. These are defined as follows:

**Change** – The addition, deletion, or modification of a program requirement. A change will typically result from a partner question or feedback indicating that EPA’s original intent is not being met or due to changes in relevant standards (e.g., ENERGY STAR labeled product requirements, NAECA standards, ICC codes). A change is the most significant type of edit for partners because it is likely to change the way that partners comply with the program.

**Clarification** – The clarification of a program requirement, typically resulting from a partner question indicating confusion or ambiguity. Clarifications are not intended to significantly change the scope of the program guidelines, but rather to clarify the original intent of the requirement. A clarification is secondary in importance to a change; it should not significantly alter the way that most partners comply with the program.

**Refinement** – A minor revision, such as an improved choice of words, a grammatical correction, or a correction to a typographical error. A refinement is the least important type of edit; it should have no impact on the way that partners comply with the program.

### **Massachusetts ENERGY STAR Version 3.1 Guidelines**

1. **Clarification – Prescriptive Path: Use of sampling protocol**

To clarify that Raters who operate under a Sampling Provider are permitted to verify the Minimum Rated Features of the home using the RESNET-approved sampling protocol, the following sentence has been added to the end of Footnote 8:

“Raters who operate under a Sampling Provider are permitted to verify the Minimum Rated Features of the home using the RESNET-approved sampling protocol.”

2. **Clarification - Exhibit 1: Infiltration rate**

To ensure that envelope leakage is being determined by a Rater using a RESNET-approved testing protocol, the following Footnote has been added to the maximum allowable infiltration rate in the Envelope Section of Exhibit 1:

“Envelope leakage shall be determined by a rater using a RESNET-approved testing protocol.”

3. **Refinement - Exhibit 1: Minimum Water Heater Efficiencies by Fuel Type and Tank Size**

To ensure water heaters are meeting the minimum efficiency requirements by fuel type and tank size, the table containing this information in Footnote 17 has been moved to the Water Heater Section of Exhibit 1.

4. **Change - Exhibit 2 & Footnote 21: Removal of Indoor airPLUS Checklist as compliance option**

Because all ENERGY STAR Certified Homes must complete the Water Management System Builder Checklist regardless of the home’s participation in the Indoor airPLUS program, the phrase “(or Indoor airPLUS Verification Checklist)” has been removed from Exhibit 2 as has Footnote 21, which describes how to use an Indoor airPLUS Verification Checklist as an alternative to the Water Management System Builder Checklist.

5. **Refinement – Footnote 13: Improved word choice**

Footnote 13 stated that Grade II cavity insulation installation was acceptable if “continuous rigid insulation sheathing” was used. The use of the word “sheathing” was unnecessary and has been removed to avoid confusion.

6. **Clarification - Footnote 18: Applicability of thermostats with ‘Adaptive Recovery’ technology**

To clarify that any home with an air-source or ground-source heat pump with an electric resistance heating element used to supplement the capacity of the heat pump is required to have a thermostat with ‘Adaptive Recovery’ technology, Footnote 18 has been revised as follows:

"For homes with heat pumps that contain an electric resistance heating element used to supplement the capacity of the heat pump, the thermostat shall have 'Adaptive Recovery' technology to prevent excessive use of the heating element."

Note that a home with an air-source or ground-source heat pump that only includes an electric resistance heating element used during compressor failure (i.e., emergency heat) is not required to have a thermostat with 'Adaptive Recovery' technology.

7. **Refinement** – Footnote 20: Improved word choice

The phrase "only after all components of the system have been installed (e.g., air handler and register grilles)" has been deleted to avoid potential redundancy or misalignment with the guidance on duct testing contained in the HVAC System QI Rater Checklist.

**ENERGY STAR HERS Index Target Procedure for Massachusetts**

8. **Refinement** - Exhibit 2, Service Water Heating Systems: Addition of oil water heater Energy Factors

The following rows have been added to the Service Water Heating Systems Section of Exhibit 2 to address the configuration of the ENERGY STAR Reference Design for homes with oil water heating:

**"Oil Storage Tank Capacity: 30 Gallon 40 Gallon 50 Gallon 60 Gallon 70 Gallon 80 Gallon**

**Oil DHW EF:                                    0.55      0.53      0.51      0.49      0.47      0.45"**

9. **Change** - Exhibit 2, Service Water Heating Systems: Tank size

To address the tank size to be modeled, the System Type definition in the Service Water Heating Systems Section of Exhibit 2 has been revised as follows:

"System Type: Conventional storage water heater with tank size equal to that of Rated Home, unless Rated Home uses instantaneous water heater in which case select 40 gallon tank for gas systems and 60 gallon tank for electric systems. Select applicable efficiency from below using tank size of Reference Home."