

Current ENERGY STAR Qualified Homes Policy Record

How to Use This Document

EPA regularly receives partner questions and comments regarding various aspects of the program documents. This document is a record of the issues that have been received since the release of the last revision to the program documents. These issues are either pending resolution by EPA or have been resolved, sometimes resulting in modifications that will be incorporated into the next revision of the program documents. The primary purpose of this document is to allow all partners to have equal access to the latest policy issues and resolutions.

For Version 2.5 and Version 3, EPA intends to formally incorporate policy modifications into the next revision of the program documents. Those edits will then be enforced for homes permitted after a specified transition period, typically 60 days from the release of the revised guidelines. Partners may, at their discretion, use the determinations in this document immediately, in advance of the formal implementation dates. If they do so, they should be sure to document the permit dates of the affected homes and to include a copy of the policy record in the files retained by the Home Energy Rater. Should the need arise, this will allow partners to demonstrate that they acted with the best information available.

Definitions

Each issue listed here is classified as a Change, Clarification, Refinement, Comment, or as an Issue Under Review. 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, IECC 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.
- *Comment* – A comment provided by EPA in response to a question, which results in no change to the program documents. This may occur, for example, if the question can be answered by referring to already established policy. Aside from the partner asking the question, such comments will typically have no impact on the way that partners comply with the program.
- *Issue Under Review* – An issue that has been submitted and that EPA is still evaluating. Once EPA has evaluated the issue, it will offer a resolution and reclassify the issue using one of the four categories above.

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ID	Log Date	Program Document	Classification	Topic
00008	07/25/2011	National Program Requirements (Version 3, Rev. 03)	Issue Under Review	Performance Path – Modeling requirements for multifamily buildings
				Issue: Partners have asked if each unit in a multifamily building must be modeled, or if either the entire building as a whole or some subset of units can be modeled under the Performance Path. Partners have also asked what HERS Index should be assigned to units that are not modeled, if it is acceptable to not model each unit.
				Response: [Issue under review.]
00017	07/25/2011	Thermal Enclosure System Rater Checklist (Version 3, Rev. 03)	Issue Under Review	Use of infrared thermography
				Issue: Partners have asked if infrared thermography can be used to complete the Thermal Enclosure System Rater Checklist.
				Response: [Issue under review.]
00095	10/13/2011	Thermal Enclosure System Rater Checklist (Version 3, Rev. 04)	Clarification	Footnote 13. Reduced thermal bridging in mass walls
				Issue: Partners have raised a question regarding the reduced thermal bridging requirements for mass walls that are not part of a passive solar design. Specifically, partners have asked if the thermal resistance of each material in the mass wall assembly is permitted to contribute to the component insulation level referenced in Footnote 13 of the Checklist (“... shall provide \geq 50% of the applicable component insulation requirement in the 2009 IECC..”) or if only some subset of insulating materials may be used to meet this requirement.
				Response: The thermal resistance of each material in the mass wall assembly is permitted to contribute towards meeting the intent of this requirement. In order to clarify this intent, the second paragraph of Footnote 13 of the Checklist will be revised to reference the mass wall equivalent U-factors defined in Table 402.1.3 of the 2009 IECC rather than the component insulation requirements defined in Table 402.1.1 of the 2009 IECC. The second paragraph of the footnote will be revised to read as follows: “Mass walls that are not part of a passive solar design (e.g., CMU block or log home enclosure) shall either utilize the strategies outlined in Section 4.4 or the pathway in the assembly with the least thermal resistance, as determined using a method consistent with the 2009 ASHRAE Handbook of Fundamentals, shall provide \geq 50% of the applicable assembly resistance, defined as the reciprocal of the mass wall equivalent U-factor in the 2009 IECC – Table 402.1.3.” For example, in CZ 2, the inverse of the mass wall equivalent U-factor in the 2009 IECC – Table 402.1.3 is $1 / 0.165 = 6.06$. As long as the path through the assembly with the least resistance provides at least 50% of this value (i.e., R-3.0), then the mass wall would meet the intent of the thermal bridging requirements in Item 4.4 of this Checklist. The resistance of the

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				path would be determined using a method consistent with the 2009 ASHRAE Handbook of Fundamentals, such that air layers and all other assembly layers are included.
00096	10/31/2011	Thermal Enclosure System Rater Checklist (Version 3, Rev. 04)	Clarification	<p>Item 5.3.1 and 5.3.2 – Attic access insulation</p> <p>Issue: Partners have asked several questions about insulating and air sealing attic accesses, including which surfaces must be insulated for various types of access on ceilings and walls, whether non-uniform insulation levels can be used to meet the intent of the checklist items, and whether insulation may be attached to access panels or if only prefabricated covers are acceptable.</p> <p>Response: Attic access panels on vertical surfaces (i.e., walls) are required to meet the requirements for doors contained in Item 5.3.1. In contrast, Item 5.3.2 applies to attic access panels and drop-down stairs located in ceilings, where ceilings are defined as all non-vertical surfaces, regardless of slope (e.g., cathedral ceilings, tray ceilings, conditioned attic roof decks, flat ceilings, sloped ceilings). Item 5.3.2 requires that accesses be insulated to at least R-10, while attic accesses on vertical surfaces are not required to be insulated to any particular level by Item 5.3.1. Footnote 24 recognizes several examples of acceptable insulation approaches that meet the intent of Item 5.3.2, including adhering insulation to an access panel: “Examples of durable covers include, but are not limited to, pre-fabricated covers with integral insulation, rigid foam adhered to cover with adhesive, or batt insulation mechanically fastened to the cover (e.g., using bolts, metal wire, or metal strapping).” The insulation requirement in Item 5.3.2 applies to the surface area bounded by the gasketing material. Examples of surfaces required to be insulated for different kinds of attic accesses are available at http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_v2_v3_training_resources. Partners can meet the requirement in Item 5.3.2 for a cover insulated to at least R-10 in one of two ways. <u>Compliance Option 1: Continuous \geq R-10 Insulation</u> One option to demonstrate compliance is to insulate 100% of the applicable surface area with \geq R-10 insulation. <u>Compliance Option 2: Alternative Equivalent U-Factor</u> A second option to demonstrate compliance is to achieve an alternative equivalent U-factor that is less than or equal to 0.10, which shall be calculated using the following parameters:</p> <ol style="list-style-type: none"> 1. The parallel path methodology outlined in Chapter 25 - <i>Heat, Air, and Moisture Control in Building Assemblies -Fundamentals</i> 2009 ASHRAE Handbook of Fundamentals

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				<p>shall be used;</p> <ol style="list-style-type: none"> Material U-factors shall be taken from Chapter 26 - <i>Heat, Air, and Moisture Control in Building Assemblies -Material Properties</i> of the 2009 ASHRAE Handbook of Fundamentals; The calculation shall be performed moving from the interior surface to the exterior surface (heat transfer under winter conditions) to ensure consistent results; A minimum of 75% of the applicable surface area shall be insulated to at least R-10. <p>Footnote 24 will be revised as follows: “Examples of durable covers include, but are not limited to, pre-fabricated covers with integral insulation, rigid foam adhered to cover with adhesive, or batt insulation mechanically fastened to the cover (e.g., using bolts, metal wire, or metal strapping). In all cases, the surface area bounded by the gasketing material shall either be insulated to $\geq R-10$ or achieve an alternative equivalent U-factor ≤ 0.10 using the methodology defined in EPA’s guidance on attic entrances available at http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_v2_v3_training_resources.”</p>
00054	07/25/2011	HVAC System Quality Installation Rater Checklist (Version 3, Rev. 03)	Issue Under Review	<p>Item 1.2.9 – Sizing requirements for heat pumps in cold climates</p> <p>Issue: Partners have asked whether the listed total cooling capacity limits noted in Item 1.2.9 contain exemptions for heat pump systems in cold climates, as these systems are typically sized to the heating load.</p> <p>Resolution: [Issue under review]</p>
00056	07/25/2011	HVAC System Quality Installation Rater Checklist (Version 3, Rev. 03)	Issue Under Review	<p>Item 2.8 – Position of bedroom doors during pressure balancing test</p> <p>Issue: Partners have asked EPA to clarify what position bedroom doors should be in when conducting the pressure balancing diagnostic test.</p> <p>Resolution: [Issue under review]</p>
00078	07/25/2011	Water Management System Builder Checklist (Version 3, Rev. 03)	Issue Under Review	<p>Item 3.2 – Gutters and downspouts</p> <p>Issue: Partners have requested that EPA allow alternatives to gutters and downspouts where a complete drainage system consistent with the International Residential Code (e.g., sloped sod with sand and swales) has been provided.</p> <p>Resolution: [Issue under review]</p>