

**Comments Received Regarding
ENERGY STAR Certified Homes, Version 3 Proposed Alternative Compliance
Pathways for Homes Undergoing a Gut Rehabilitation**

This is a compilation of all comments received by EPA during the comment period for Proposed Alternative Compliance Pathways for Homes Undergoing a Gut Rehabilitation to Earn the ENERGY STAR label, ending October 10, 2012.

The following comments have been compiled from the Comment Forms submitted by respondents. The Environmental Protection Agency is not responsible for any typographical errors or omissions.

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ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: ENERGY STAR certification of homes undergoing a 'gut rehabilitation" (National Program Requirements)

Organization Name: Habitat for Humanity of Whitley County

Respondent Last Name: Siler

Respondent First Name: Carl

Comments: Exterior drainage is a killer issue. If the grade slopes away from the structure (no matter how much) or if the run-off water is controlled by swale, pipe or whatever I feel that it should be considered ok.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: ENERGY STAR certification of homes undergoing a ‘gut rehabilitation” (National Program Requirements)

Organization Name: Compiled Comments from HUD and USDA representing the Energy Alignment Working Group

Respondent Last Name:

Respondent First Name:

Comments: Consider adding language regarding where it is possible to verify through spot checking, rather than requiring across the board removal and subsequent replacement. See the following comments:

- 1) If home is performing (based on history and no observable leaking), then verification of proper construction should require removal of exterior siding and/or outer surface of roof only in particularly vulnerable locations – structural intersections, edges, for example. Please consider such a protocol for existing homes and the amount of verification that would be required. Also, if it can be verified that the same builder built all parts of the roof, then it should be easier to assume consistent building practices from one location to the next on that roof.
- 2) There should be testing of systems before requiring replacement.
- 3) Site drainage also may only need to be altered in a limited number of locations, as necessary. A verification process/protocol is needed.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: ENERGY STAR certification of homes undergoing a 'gut rehabilitation" (National Program Requirements)

Organization Name: Energy Services Group

Respondent Last Name: Butner & Marston

Respondent First Name: Thiel & Thom

Comments: 4) Modify the existing slab to meet the intent of the Water Management Checklist.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: ENERGY STAR certification of homes undergoing a 'gut rehabilitation" (National Program Requirements)

Organization Name: Vermont Energy Investment Corp / Efficiency Vermont

Respondent Last Name: Curtis

Respondent First Name: Neil

Comments: 1) Vermont has considerable experience in retrofitting historic buildings into energy efficient, multi-unit affordable housing. The proposed requirement to "Remove exterior cladding and the outer surface of roof" conflicts with the historical requirements of affordable housing funders. Additionally, removing an existing slate roof system that has served a building well for literally decades and decades would not be in the best interest of the buildings longevity. For historic buildings that have not demonstrated roof or siding drainage deficiencies undergoing gut rehabilitation, Efficiency Vermont recommends an option for architectural/engineering analysis of existing roof and siding conditions and provide sign off in place of a blanket requirement. (Sign off could be similar to the existing HVAC installer checklist).

2) No Comment

3) No Comment



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: ENERGY STAR certification of homes undergoing a 'gut rehabilitation" (National Program Requirements)

Organization Name: Steven Winter Associates

Respondent Last Name: Zoeller

Respondent First Name: William

Comments: Below grade moisture management may represent the largest obstacle, so should be included in the introductory narrative above along with items 1, 2, and 3.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: ENERGY STAR certification of homes undergoing a ‘gut rehabilitation” (National Program Requirements)

Organization Name: Steven Winter Associates

Respondent Last Name: Klocke

Respondent First Name: Steve

Comments: Most of our gut rehab projects have load-bearing, double-brick walls, and removing the exterior wythe of bricks in entirely unfeasible. Potential alternatives for meeting the thermal and water checklist requirements not mentioned in this document include:

- 1) 4.4 Reduced Thermal Bridging: Install interior wall framing to allow for continuous Grade I insulation between the brick wall and the studs;
- 2) 2.3 Water-Managed Wall Assembly: Install flexible, self-adhering flashing around window/door rough openings.

Our gut rehab projects are also usually in urban areas where sidewalk/curb levels are predetermined, which doesn't allow for re-grading. Potential alternatives for meeting the water checklist requirements include:

- 1) 1.1 Water-Managed Site and Foundation: Install trough drain installed between brick wall and concrete sidewalk OR chamfer strip topped with self-leveling caulk installed between brick wall and concrete sidewalk.

Comments on the items mentioned in the webinar have been including below.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 4.2 – Slab edge insulation alternative for existing homes (Thermal Enclosure System Rater Checklist)

Organization Name: Habitat for Humanity of Whitley County

Respondent Last Name: Siler

Respondent First Name: Carl

Comments: This needs to be more open. To insulate an existing slab will drive up cost much more than will ever be saved in energy costs.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 4.2 – Slab edge insulation alternative for existing homes (Thermal Enclosure System Rater Checklist)

Organization Name: Compiled Comments from HUD and USDA representing the Energy Alignment Working Group

Respondent Last Name:

Respondent First Name:

Comments: This section is an example of an area that could benefit from allowing developers/owners to select the best modification for their building from a variety of options, rather than an overly prescriptive approach that may not be necessary for each building type.

The alternative proposed could be prohibitive for some properties types that are common in public housing and would therefore create a barrier to entry to the ENERGY STAR program. A monolithic walled structure (masonry or concrete) with electrical and/or plumbing pipes encased in terrazzo flooring is an example of a common structure in public housing for which adding a minimum of 1" to the finished floor elevation would be problematic. The increased floor elevation would potentially affect door openings, window sills, railings, electrical routing, plumbing, and flooring material selection.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 4.2 – Slab edge insulation alternative for existing homes (Thermal Enclosure System Rater Checklist)

Organization Name: Energy Services Group

Respondent Last Name: Butner & Marston

Respondent First Name: Thiel & Thom

Comments: Next sentence: If slab insulation is installed on top of the slab in occupiable space it shall be protected by a durable floor surface.

Another suggestion: If slab insulation continuously covers the slab, it has a lower U-value than if it is used in an assembly that includes sleepers or other framing. As well, using sleepers or an additional bottom plate would result in a floor assembly that is raised 3/4" or 1.5". According to the Dow website, 3/4" XPS is R-3.8; 1" is R-5; 1.5" is R-7.5. So 1.5" XPS would be required if that material were chosen. Thermax polyisocyanurate board is 1/2" for R-3.3; 3/4" for R-5; 1" is R-6.5; 1.5" is R-9.8. If we consider that a rehab may not be able to implement a perfect solution, then can we accept R-3 continuous (1/2" polyiso) and R-3.8 or R-5 with sleepers (3/4" XPS or 3/4" polyiso) as an acceptable level of insulation, given that we are installing 1/2" to 3/4" of material over the existing slab? Builders may not be able to take 1.5" plus substrate and finish material away from the floor height as would be required to reach the R-5 value suggested, if using XPS. Builders may be able to take a total of 1.5" (3/4" + 1/2" plywood substrate + 1/4" finish surface).

<http://building.dow.com/na/en/products/insulation/squareedge.htm>

<http://building.dow.com/na/en/products/insulation/thermaxsheathing.htm>



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 4.2 – Slab edge insulation alternative for existing homes (Thermal Enclosure System Rater Checklist)

Organization Name: Steven Winter Associates

Respondent Last Name: Klocke

Respondent First Name: Steve

Comments: Our gut rehab projects predominantly have cellars, so the slab edge insulation requirement isn't a problem. Regardless, the suggested change seems reasonable.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 5.2.1 – Foam gasket beneath an existing sill plate (Thermal Enclosure System Rater Checklist)

Organization Name: Habitat for Humanity of Whitley County

Respondent Last Name: Siler

Respondent First Name: Carl

Comments: Sounds reasonable though if spray foam insulation is used (example flash & batt) it should be considered ok for the top of the plate.

The caulk is a reasonable solution for the plate to concrete intersection.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 5.2.1 – Foam gasket beneath an existing sill plate (Thermal Enclosure System Rater Checklist)

Organization Name: Compiled Comments from HUD and USDA representing the Energy Alignment Working Group

Respondent Last Name:

Respondent First Name:

Comments: This alternative measure does not address the performance of the existing structure. As written, its universal applicability and effectiveness are unclear. Is there an alternative protocol that could be adopted to first verify leakage and then implement measures to resolve if needed?

A common construction type in public housing, for example, uses plaster finish wall construction that is often very successful at mitigating air infiltration into occupied space with sealing behind interior baseboards. The effectiveness of the construction at mitigating air infiltration can be verified by existing available tests and instruments.

Also, this measure has a relationship to Integrated Pest Management (IPM). For example, activities can be coordinated and the materials selected to discourage infestation (non-edible etc) and incorporate IPM strategies such as a termite shield.

Finally, what is the applicability of this measure to a monolithic wall construction type?



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 5.2.1 – Foam gasket beneath an existing sill plate (Thermal Enclosure System Rater Checklist)

Organization Name: Energy Services Group

Respondent Last Name: Butner & Marston

Respondent First Name: Thiel & Thom

Comments: Next sentence: If gaps under the sill plate are $\geq 1/4$ " , install backer rod before using caulk or seal the gap with expanding foam.

Another comment: The top exterior edge of the bottom plate cannot be sealed to the sheathing if the building is a masonry structure or in other situations where the cladding is not removed. Air sealing and providing a drainage plane for above grade walls in masonry buildings needs to be addressed somewhere and may satisfy the intent of Item 5.2.1 (see suggestion for WMC Item 2.2).



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 5.2.1 – Foam gasket beneath an existing sill plate (Thermal Enclosure System Rater Checklist)

Organization Name: Steven Winter Associates

Respondent Last Name: Klocke

Respondent First Name: Steve

Comments: This detail doesn't apply to most of our gut rehab projects, since the wood structure is built within the masonry structure rather than on top of it. Regardless, the suggested change seems reasonable.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.3 – Capillary break beneath existing slabs (Water Management System Builder Checklist)

Organization Name: Compiled Comments from HUD and USDA representing the Energy Alignment Working Group

Respondent Last Name:

Respondent First Name:

Comments: This is an area where we have some concerns about the approach to meeting this measure. It is very important to examine the slab and determine if a vapor barrier is in place. Installing another vapor barrier on top of the slab could have the unintended consequence of trapping water in the slab.

The selection of appropriate flooring material should be the first consideration, whether or not a vapor barrier is installed. The rationale is that it is better to do it without the vapor barrier and install ceramic, porcelain or stone tile over the current slab, than to trap the moisture and make the house vulnerable to the indoor air quality issues. Also, problems could arise if the owner/occupant later removes or covers over that compatible flooring material and installs carpet or a pergo-like material that wicks moisture. This could also result in indoor air quality issues related to mold or moisture propagation.

In the event that there is a problem with the slab, it may prove more beneficial to remove the entire slab and replace it with one that has its vapor barrier below the slab.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.3 – Capillary break beneath existing slabs (Water Management System Builder Checklist)

Organization Name: Vermont Energy Investment Corp / Efficiency Vermont

Respondent Last Name: Curtis

Respondent First Name: Neil

Comments: We should expect that there will be interior walls on slabs which will not be removed as part of a gut rehabilitation. To be consistent with 4.2 (above): Up to 10% of the slab surface is not required to meet the vapor retarder requirement to accommodate existing structural details (e.g., sleepers, sill plates).



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.3 – Capillary break beneath existing slabs (Water Management System Builder Checklist)

Organization Name: Steven Winter Associates

Respondent Last Name: Zoeller

Respondent First Name: William

Comments: Bullet point 3, crystalline water-proofing, was found to be not appropriate for physically contacted surfaces such as walkable slabs. We would recommend it not be included in the proposed language at this time



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.4 – Capillary break at all existing crawlspace floors (Water Management System Builder Checklist)

Organization Name: Compiled Comments from HUD and USDA representing the Energy Alignment Working Group

Respondent Last Name:

Respondent First Name:

Comments: This language of this section could be modified to clarify whether it is discussing the walls of the foundation around the crawlspace, or the floor or ceiling of the crawlspace. It is somewhat confusing as written.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.4 – Capillary break at all existing crawlspace floors (Water Management System Builder Checklist)

Organization Name: Vermont Energy Investment Corp / Efficiency Vermont

Respondent Last Name: Curtis

Respondent First Name: Neil

Comments: We should expect that there will be interior walls on slabs which will not be removed as part of a gut rehabilitation. To be consistent with 4.2 and 1.3 (above): Up to 10% of the slab surface is not required to meet the vapor retarder requirement to accommodate existing structural details (e.g., sleepers, sill plates).”



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.4 – Capillary break at all existing crawlspace floors (Water Management System Builder Checklist)

Organization Name: Steven Winter Associates

Respondent Last Name: Zoeller

Respondent First Name: William

Comments: Change last sentence to read "If Class I Vapor Retarders are installed, they shall installed in direct contact with the interior side top surface of the existing slab."



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.5 – Finishing of exterior surface of existing below-grade walls (Water Management System Builder Checklist)

Organization Name: Habitat for Humanity of Whitley County

Respondent Last Name: Siler

Respondent First Name: Carl

Comments: I spent 30 years of my life as an engineer. One of the first things I learned when I went to work was that if you dig a hole water will try to fill it in. In my experience water management is much more effective & less costly than trying to rework an existing structure to prevent infiltration. Sumps & pumps are a cost effective solution. Yes it is important to also control humidity.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.5 – Finishing of exterior surface of existing below-grade walls (Water Management System Builder Checklist)

Organization Name: Compiled Comments from HUD and USDA representing the Energy Alignment Working Group

Respondent Last Name:

Respondent First Name:

Comments: Developers/owners should be instructed to ensure that there is not also an external vapor barrier in place before installing an interior vapor barrier (to avoid the problem of a vapor barrier on both sides of the wall).

The language should also be clarified to reflect the drawing that is included in the webcast. It is unclear how the system would be designed, and ultimately function. Are there any examples you could offer? Why would a below slab drain tile be required, for instance, when a sump pump would perform the same function?

This is another example of an area where testing with moisture meter readings and/or infrared cameras should be able to verify the existence of moisture and possibly eliminate the need to make costly, unnecessary modifications.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.5 – Finishing of exterior surface of existing below-grade walls (Water Management System Builder Checklist)

Organization Name: Energy Services Group

Respondent Last Name: Butner & Marston

Respondent First Name: Thiel & Thom

Comments: In the list of applicable existing below-grade wall materials, include “stone.” Question: Is 2” polyisocyanurate foam board considered enough of a drainage plane?



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.5 – Finishing of exterior surface of existing below-grade walls (Water Management System Builder Checklist)

Organization Name: Vermont Energy Investment Corp / Efficiency Vermont

Respondent Last Name: Curtis

Respondent First Name: Neil

Comments: For historic buildings undergoing gut rehabilitation, Efficiency Vermont recommends an option for architectural/engineering analysis of existing or proposed foundation and site conditions and provide sign off in place of a blanket requirement. (Sign off similar to the existing HVAC installer checklist).



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.5 – Finishing of exterior surface of existing below-grade walls (Water Management System Builder Checklist)

Organization Name: Steven Winter Associates

Respondent Last Name: Klocke

Respondent First Name: Steve

Comments: We suggest adding an alternative method for below-grade spaces that aren't conditioned and do not require insulation (taped/sealed polyethylene, for example).



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.8 – Drain tile (Water Management System Builder Checklist)

Organization Name: Habitat for Humanity of Whitley County

Respondent Last Name: Siler

Respondent First Name: Carl

Comments: I spent 30 years of my life as an engineer. One of the first things I learned when I went to work was that if you dig a hole water will try to fill it in. In my experience water management is much more effective & less costly than trying to rework an existing structure to prevent infiltration. Sumps & pumps are a cost effective solution. Yes it is important to also control humidity.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.8 – Drain tile (Water Management System Builder Checklist)

Organization Name: Compiled Comments from HUD and USDA representing the Energy Alignment Working Group

Respondent Last Name:

Respondent First Name:

Comments: This raises significant concern over bringing the drain tile inside the home. It is generally unwise to bring water inside buildings to drain. We suggest including the possibility of using sump pumps to deal with this situation as an alternative. If the necessity of a power source is a concern, these systems should be tied to a backup generator for extreme weather conditions/ flooding and the potential for power outages during storms.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 1.8 – Drain tile (Water Management System Builder Checklist)

Organization Name: Vermont Energy Investment Corp / Efficiency Vermont

Respondent Last Name: Curtis

Respondent First Name: Neil

Comments: For historic buildings undergoing gut rehabilitation, Efficiency Vermont recommends an option for architectural/engineering analysis of existing or proposed foundation and site conditions and provides sign off in place of a blanket requirement. (Sign off similar to the existing HVAC installer checklist).



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 2.1 – Flashing at bottom of exterior walls (Water Management System Builder Checklist)

Organization Name: Energy Services Group

Respondent Last Name: Butner & Marston

Respondent First Name: Thiel & Thom

Comments: Load-bearing masonry walls need to be addressed. We propose requiring a robust drainage plane in above grade and below grade walls and requiring that the band board area also be addressed.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 2.1 – Flashing at bottom of exterior walls (Water Management System Builder Checklist)

Organization Name: Steven Winter Associates

Respondent Last Name: Zoeller

Respondent First Name: William

Comments: In last sentence change 5" to 1". Sheathing never extends much more than 1" below the top elevation of the foundation. 5" sheathing lap over the foundation is unheard of.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 2.1 – Flashing at bottom of exterior walls (Water Management System Builder Checklist)

Organization Name: Steven Winter Associates

Respondent Last Name: Klocke

Respondent First Name: Steve

Comments: The suggested change seems reasonable for projects with veneer/cladding. However, the load-bearing, double-brick exterior walls in most our gut rehab projects predominantly do not have a cavity between the wythes of brick, and the installation of a drainage plane behind the exterior whthe is entirely unfeasible. See Item 2.2 comments below.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 2.2 – Drainage plane compliance for existing homes (Water Management System Builder Checklist)

Organization Name: Habitat for Humanity of Whitley County

Respondent Last Name: Siler

Respondent First Name: Carl

Comments: Valid concern by renovators. Brick has been used successfully for centuries without using the same drain plane products that are now common.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 2.2 – Drainage plane compliance for existing homes (Water Management System Builder Checklist)

Organization Name: Energy Services Group

Respondent Last Name: Butner & Marston

Respondent First Name: Thiel & Thom

Comments: Load-bearing masonry walls need to be addressed. We propose either leaving the existing plaster intact if there are no apparent pre-existing moisture problems or applying a waterproofing membrane/ moisture barrier to the inside surface of the masonry walls, behind all wood studs or directly attached to the exterior side of the wood studs. Often floor joists are pocketed into the masonry, so this detail may not be able to be addressed. For example, perhaps cementitious waterproofing material, house wrap, closed cell sprayfoam, XPS, polyisocyanurate board, each of a particular thickness, could be specified. Bulk moisture would then either evaporate back out of the bricks or move down to the foundation drain.

As well, if wood cannot be isolated in a wood frame building with siding, either waterproof on top of the siding and add new siding on top or, maybe, treat with an antifungal. The detail above about a brick veneer wood frame building is indeed difficult to address.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 2.2 – Drainage plane compliance for existing homes (Water Management System Builder Checklist)

Organization Name: Vermont Energy Investment Corp / Efficiency Vermont

Respondent Last Name: Curtis

Respondent First Name: Neil

Comments: For historic buildings undergoing gut rehabilitation, Efficiency Vermont recommends an option for architectural/engineering analysis of existing or proposed foundation and site conditions and provides sign off in place of a blanket requirement. (Sign off similar to the existing HVAC installer checklist).



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 2.2 – Drainage plane compliance for existing homes (Water Management System Builder Checklist)

Organization Name: Steven Winter Associates

Respondent Last Name: Klocke

Respondent First Name: Steve

Comments: For load-bearing, double-brick exterior walls that do not show signs of water intrusion, we suggest offering an option to install a vapor-permeable air/water barrier on the interior side of the wall. Since these walls usually extend continuously to the footing, the air/water barrier on the above-grade walls could be integrated with the drainage plane and foundation drain suggested for Item 1.5.

To avoid potential effects of moisture on the insulation, EPA could exclude the use of insulation materials prone to water damage.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: Item 4.4 – Building materials with visible signs of water damage or mold (Water Management System Builder Checklist)

Organization Name: Habitat for Humanity of Whitley County

Respondent Last Name: Siler

Respondent First Name: Carl

Comments: Probably ok but needs closer examination. You can treat a small areas of non-critical rot to prevent further damage for much less expense than replacing them.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: General

Organization Name: Habitat for Humanity of Whitley County

Respondent Last Name: Siler

Respondent First Name: Carl

Comments: The spirit of energy star is to reduce energy usage by a structure. If for example a before & after blower door test documents that there has been some acceptable level of increased performance that should be the major test. Yes in a gut and rehab insulating walls& ceilings and using rated components for replacement should be completed. Also HVAC & water usage along with code compliant electrical also needs to be addressed. However some of the check the box thermal enclosure items just do not result in a structure that is life cycle cost efficient. For rehabs (and E-star) the spirit is to lower energy bills, enhance performance & reduce environmental impact. If this can be done some way there should be a great deal of latitude given in how it is accomplished.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: General

Organization Name: U.S. Green Building Council

Respondent Last Name: Foss

Respondent First Name: Asa

Comments: Hey, general comment on this ACP. You guys have taken a really conservative approach to the ACP – I don't think many projects will realistically go forward with it. My concern is that the groups that have asked you to create an ACP for existing homes (like HUD) will see it as still too restrictive and come up with their own alternative - and it will be not as well done as what you all can do.

So, I would urge you to talk with these stakeholders to determine what their goals are, and to create an ACP based on those.

At this point, USGBC is going to stick with our exemptions rather than use the list that you guys came up with.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: General

Organization Name: Compiled Comments from HUD and USDA representing the Energy Alignment Working Group

Respondent Last Name:

Respondent First Name:

Comments: As noted throughout, there are a number of areas where developers/owners should be able to choose from a variety of options that would ultimately yield the same result. Is there a possibility of rating gradations or tradeoffs for existing homes that would still enable certification? (For example: if adding 1" or more to the elevation of a finished floor is prohibitive, are there improvements addressed by other measures that could be implemented to compensate, such as higher R values in walls, ceilings, or windows?)

Another concern is that the measures assume universal applicability across all types of existing homes. In several of these measures, there is no allowance made for the successful performance of homes that can be tested by common protocols and equipment and certified by subject area professionals such as architects and engineers. (Why regrade a successfully performing site? Why implement water and air infiltration measures on a structure that can be demonstrated is highly performing as constructed?)

Some of the descriptions are difficult to understand without viewing a construction detail drawing. It is very important that the measures be described visually and offer clear examples of their application to existing homes.

Finally, these alternatives should be carefully reviewed and vetted by experts in healthy homes and indoor air quality.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: General

Organization Name: Energy Services Group

Respondent Last Name: Butner & Marston

Respondent First Name: Thiel & Thom

Comments: TERC, Item 5.2: Masonry structural walls need to be addressed. We have found that masonry walls are leaky and cracked mortar makes them even leakier. However, when the original plaster that was installed directly over the masonry is left intact, the walls become relatively airtight. If the existing plaster or concrete block is left in place, we propose that that be considered airsealed. Either all of the joints need to be repaired (very difficult to complete by parging), or an air-tight, water-tight product should to be applied directly over the masonry or be attached to the exterior of the new framing. If these exterior walls and common walls are not airsealed, the house will be very leaky at Final. These walls could be treated like kneewalls since they are protected from the weather on the exterior side but the insulation is not effectively located inside of a sealed framing cavity. Perhaps cementitious waterproofing material, house wrap, closed cell sprayfoam, XPS, polyisocyanurate board, each of a particular thickness, could be specified for airtightness.

Propose revision to TERC, Item 5.2.7 footnote: In gut rehabilitated multifamily buildings without drywall shaft walls, common walls sealed, per item 5.2.8.

Propose TERC, Item 5.2.8: In gut rehabilitated buildings, exterior walls fully sealed with air barrier materials. (Or, In gut rehabilitated buildings, exterior walls and common walls fully sealed with air barrier materials.)

WMC, Item 2.3: Window flashing details for replacement-style windows in masonry walls need to be addressed.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: General

Organization Name: Vermont Energy Investment Corp / Efficiency Vermont

Respondent Last Name: Curtis

Respondent First Name: Neil

Comments: Please refer to separate memorandum dated 10/10/2012.



ENERGY STAR Certified Homes Proposed Alternatives Comment Form

Topic: General

Organization Name: Steven Winter Associates

Respondent Last Name: Klocke

Respondent First Name: Steve

Comments: Thank you for considering alternative compliance pathways for gut rehab projects! Otherwise, many of our affordable, urban projects would be excluded from earning the ENERGY STAR label.