

RECA

RESPONSIBLE ENERGY CODES ALLIANCE

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August 19, 2005

VIA E-MAIL

Mr. Jonathan Passe
ENERGY STAR Homes Program
US Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

RE: RECA Comments on EPA's 7/27/05 Draft of Proposed Changes to the ENERGY STAR Homes Program

Dear Mr. Passe:

RECA provided comments on your first draft of proposed changes to the ENERGY STAR Homes program. I am writing to provide our comments regarding your second draft (July 27, 2005) of a proposed revision to the ENERGY STAR Homes criteria. While we continue to support your proposed revision (because it is a vast improvement over the existing program), we are concerned that it is not as fully linked to the *2004 International Energy Conservation Code* as it should be or as previously proposed. Specifically, we recommend that:

- the program specifically require compliance with the most recent version of the *IECC* in addition to the requirement to “meet all state and local codes;”
- the insulation levels in the Builder Option Package be the R-values from Table 402.1, not equivalent U-values from the HERS Reference Home (the best course would be to simply repeat the insulation values from Table 402.1 in the actual specification to avoid any chance of confusion); and
- the HERS expanded score minimum performance requirements be explicitly tied to some percentage improvement over the *2004 IECC* (like the tax credits under the new Energy Policy Act of 2005).

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Our comments below are intended to further explain our proposed improvements to the proposal and the need for such changes. As an aside, given RECA's mission to promote adoption of the *IECC* (and specifically the *2004 IECC*), these comments are aimed at issues related to the energy code; however, many of our members plan to submit separate comments on other issues of interest to them.

As you know, our organization supports adoption of the *IECC* nationwide and, with the improvements incorporated in the 2004 code, we believe that jurisdictions will view it even more positively than earlier versions. We have carefully evaluated this version of the code and are advocating its adoption. In particular, the code has been improved by the development of a single prescriptive path with a reduced set of climate zones, simple but reasonable envelope requirements, and no window area restrictions (but reasonable maximum limits on the performance of windows). These improvements promote ease of compliance without sacrificing energy efficiency.

Proposed Mandatory Requirement: Comply with the *IECC*

Our first recommendation is intended to promote use and understanding of the latest version of the *IECC*. While this may not be a primary goal of your program, it goes without saying that the minimum requirements of energy codes work hand in hand with advanced programs like ENERGY STAR to ensure continued improvements in building energy efficiency and market transformation. In this regard, the energy codes look to programs like ENERGY STAR to lead the market transformation process so that codes can eventually follow and mandate improvements for all homes. By explicitly requiring all ENERGY STAR Homes to meet the most recent version of the *IECC*, ENERGY STAR Homes will be performing a valuable service of acquainting builders and others in states as to the requirements of these codes, easing the ability of states to eventually adopt these codes. This is particularly important in jurisdictions with outdated or no energy codes. In short, a specific requirement that ENERGY STAR Homes meet the most recent *IECC* is an opportunity to provide leadership for the next set of energy code adoptions.

Proposed Insulation Levels for National BOP: R-Values from *IECC* Table 402.1

The advantages of the simple prescriptive path approach now contained in the 2004 *IECC*, although modified, are also captured to a degree by your proposal to establish a simplified prescriptive path (National Builder Option Package) for ENERGY STAR Homes. We think that this is a very important new feature for your program. It is in this regard that our second recommendation is so crucial. EPA's original proposal referenced the insulation requirements of the *2004 IECC*. Now the proposal simply references "Insulation Levels Equivalent to HERS Reference Home." We think that this will lead to confusion, result in incorrect values and reduce ease of application. At this point, we do not even know what insulation levels will be in the HERS Reference Home. In addition, the equivalent U-factors in the *2004 IECC* (Table 402.1.2) are unfortunately less stringent than the R-values (Table 402.1) although we expect that this issue will be corrected at some point in the future. Finally, in our view, a simple prescriptive path should call out specific R-values.

The simplest approach to address these issues would be to directly incorporate the R-values from Table 402.1 of the 2004 IECC in the National BOP specification. Alternately, Table 402.1 should be specifically referenced. The R-values in Table 402.1 are as follows:

Climate Zone	Ceiling	Wood Frame Wall	Mass Wall	Floor	Basement Wall	Slab	Crawl Space
1	30	13	3	13	0	0	0
2	30	13	4	13	0	0	0
3	30	15	5	19	0	0	5/13
4 except Marine	38	15	5	19	10/13	10, 2 ft	10/13
5 and Marine	38	21 or 15+5	13	30	10/13	10, 2 ft	10/13
6	49	21 or 15+5	15	30	10/13	10, 4 ft	10/13
7 and 8	49	21	19	30	10/13	10, 4 ft	10/13

Proposed Performance Requirement: Explicitly Tie Expanded HERS Score to Some Percentage Improvement Over the 2004 IECC

Our third concern is the lack of an explicit tie between the proposed performance path and either the IECC or the prescriptive path (National BOP). First, in our view, the performance path should be generally equivalent with the prescriptive path. Second, we think it is important that the minimum performance levels for ENERGY STAR Homes be explicitly tied to some percentage improvement over the IECC. At one point, the ENERGY STAR Homes program used a 30% improvement over the MEC as the standard. Given the adoption of the IECC as the updated residential building standard in the Energy Policy Act of 2005, including the decision to

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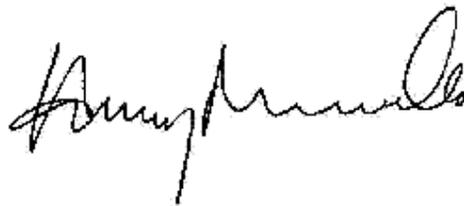
base tax credits on percentage improvements over *IECC* compliant homes, we do not recommend departing from the general, long-standing EPA policy that ENERGY STAR Homes reflect a designated percentage improvement over the national model building code. Ideally, at some point, EPA would also offer an ENERGY STAR PLUS home program at 50% better than the *IECC* consistent with the Energy Policy Act of 2005.

Conclusion

RECA is a broad-based consortium of energy efficiency professionals, product and equipment manufacturers, and trade associations with expertise in the adoption, implementation and enforcement of building energy codes nationwide. RECA is dedicated to improving the energy efficiency of homes throughout the U.S. through greater use of energy efficient practices and building products. RECA is administered by the Alliance to Save Energy, a non-profit coalition of business, government, environmental and consumer leaders that supports energy efficiency as a cost-effective energy resource under existing market conditions and advocates energy-efficiency policies that minimize costs to society and individual consumers. A list of our members is enclosed.

We urge you to adopt the recommendations that we set forth above for the ENERGY STAR Homes program. We appreciate the opportunity to provide our comments on this important program. Please contact me at (202) 530-2214 if you have any questions or comments or would like us to provide further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Harry Misuriello". The signature is fluid and cursive, with a large initial "H" and "M".

Harry Misuriello
THE RESPONSIBLE ENERGY CODES ALLIANCE

Enclosure

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Alliance to Save Energy
American Chemistry Council
American Council for an Energy-Efficient Economy
American Plastics Council
Cardinal Glass Industries
CertainTeed Corporation
Chemical Industry Council of Illinois
Guardian Industries Corporation
Hogan & Hartson LLP
Johns Manville
Knauf Insulation
Midwest Energy Efficiency Alliance
National Fenestration Rating Council
Northeast Energy Efficiency Partnerships, Inc.
North American Insulation Manufacturers Association
Owens Corning
Pactiv Corporation
Polyisocyanurate Insulation Manufacturers Association
PPG Industries, Inc.