

November 14, 2008

Richard H. Karney, P.E.
ENERGY STAR[®] Program Manager
Department of Energy
Washington, DC 20585

RE: Proposed Revisions to *ENERGY STAR*[®] Program Requirements

Dear Mr. Karney:

The American **Architectural Manufacturers Association** (AAMA) and the **Window & Door Manufacturers Association** (WDMA) appreciate the opportunity to provide additional comments and suggestions related to the most recent proposed revisions to the *ENERGY STAR*[®] Program for fenestration products as presented in the *Windows, Doors, and Skylights Draft Criteria and Analysis*, ('Draft Analysis') dated August 6 2008.¹

AAMA and WDMA are trade associations representing the manufacturers of fenestration products in the U.S. Our members are active in responsible advocacy on a wide variety of issues affecting the industry, and energy efficiency is one the most important of those issues.

Related to energy efficiency, it is the intention of AAMA and WDMA to collaborate with the Department of Energy (DOE) to reduce energy consumption in existing and new homes, recommend increased enforcement of model energy codes (particularly the 2006 IECC), support the use of *ENERGY STAR*[®] as a means to communicate more energy-efficient choices for builders and homeowners, and to work with the DOE to drive innovations and technologies to develop affordable and efficient fenestration products.

During the period provided to review the *ENERGY STAR*[®] Program, AAMA and WDMA have held a series of meetings and conference calls to study the proposed criteria for the Program. In our efforts to provide meaningful feedback on the Draft Analysis and to support the recommendations cited herein, AAMA staff, WDMA staff and members of both associations have logged hundreds of hours performing analyses of the criteria and the reported energy savings.

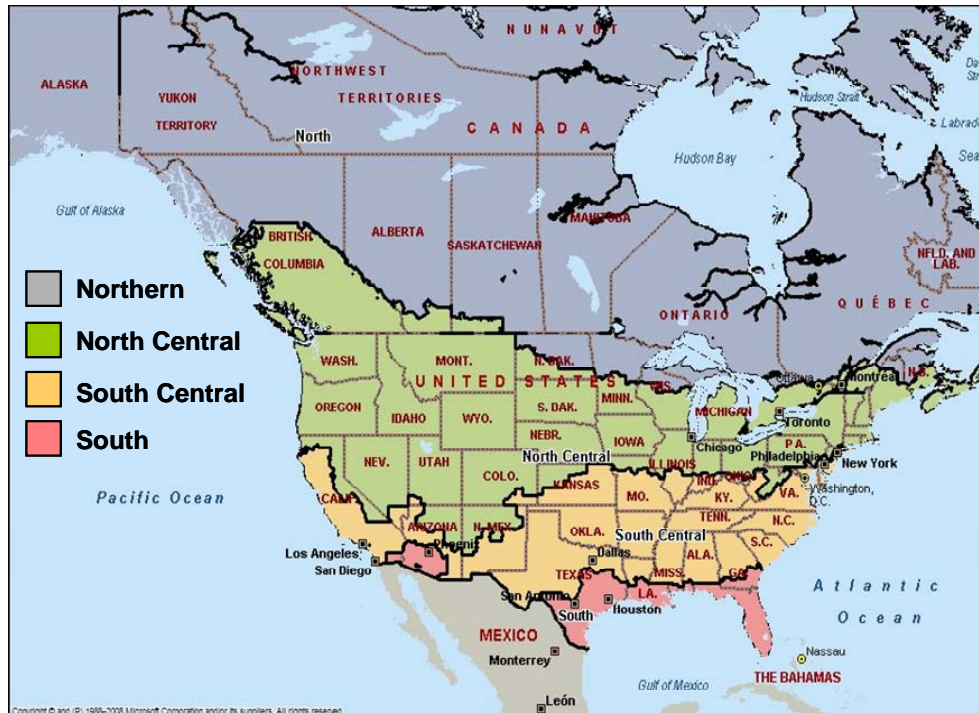
Our comments to the proposed criteria include the following:

1. Guiding Principles
2. Timing and implementation
3. *ENERGY STAR*[®] zone maps
4. Performance criteria for doors (side hinged doors and sliding patio doors)
5. Performance criteria for windows

¹ This letter, representing the shared recommendations of AAMA and WDMA, will be accompanied by separate letters from both associations (including a letter from AAMA's Skylight Council) that further define the positions of each specific organization.

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1. **Guiding Principles.** AAMA and WDMA's participation in the *ENERGY STAR*[®] Program criteria development is based upon the following guiding principles:
 - **Focus on that which will yield the greatest impact.** Reducing the heat loss and unwanted solar heat gain associated with the existing stock of single-pane windows, skylights and glass doors in the U.S. represents the single-greatest opportunity to decrease energy use in the fenestration portion of the building envelope.
 - **Affordability is critically important.** Affordability should be regarded as one of the foundational elements of the process used to determine Program parameters, and is necessary to achieve the desired consumer-driven outcome (i.e., the purchase of reasonably-priced high-performance fenestration products).
 - **Return-on-Investment matters.** Closely related to affordability is the delivery of energy savings; such savings must translate into immediate reductions of consumer utility expenditures if the criteria are intended to drive consumer behavior. Without the benefit of a reasonable return-on-investment, the *ENERGY STAR*[®] Program will lose any relevance to the consumer.
 - **Do not look past daylighting and ventilation.** Windows, skylights and glass doors are an important element of residential construction in the U.S., providing natural light and ventilation to the occupants. Continued reductions in SHGC requirements will result in unacceptably low visible light transmittance. The *ENERGY STAR*[®] requirements should provide a lower limit to SHGC coefficients in order to maintain the performance of glazing packages and provide an acceptable value for VT.
 - **Simplicity trumps complexity.** All other things being equal, a simpler Program more readily understood by the consumer is superior to an overly-complex program.
2. **Timing and Implementation.** The dates of implementation of the new criteria must take into consideration the logistics and seasonality of product manufacturing as well as the timing of new product launches. We recommend January 1, 2010 for phase I roll-out, and January 1, 2015 for phase II.
3. ***ENERGY STAR*[®] Zone Maps.** We recommend removal of Zone 5A from 2009 phase I criteria and the establishment of four climate zones for North America that closely follow the IECC climate zone map (see *Proposed Climate Zone Map*, next page).



Proposed Climate Zone Map

- Performance Criteria, Doors.** We support the DOE proposal for a single climate zone for doors as well as the proposal to set the qualification criteria by percent glazing. However, we feel that the definition of amount of glazing should be consistent with the NFRC definition. We also feel that DOE should include sliding doors in the same table as side-hinged doors. *ENERGY STAR*[®] criteria should consider all door assemblies in like manner and not distinguish them by operation.
- Performance Criteria, Windows.** We recommend ignoring grids (muntins); if a product without grids qualifies, then the same product with grids should also qualify. This significantly reduces the complexity of the program for manufacturers and results in a negligible difference in the amount of realized energy savings.

We also recommend that products manufactured before the phase I effective date should not be required to be re-labeled.

Finally, we propose to work with DOE to form a solution for IG units shipped through or installed in high altitude regions.

Conclusions: AAMA and WDMA request that additional analysis of alternatives to the proposed *ENERGY STAR*[®] Program be completed before finalizing the criteria. AAMA and WDMA would like the opportunity to provide input to the analysis and to the selection of window criteria used as the basis of the analysis. Given our inability to access the calculations used to derive the Program parameters, further analysis and comparison by AAMA and WDMA is not feasible; this work will have to be completed in partnership with LBNL.

The American Architectural Manufacturers Association and the Window & Door Manufacturers Association look forward to partnering with the Department of Energy in finalizing the revisions to the



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performance parameters and other key considerations of the highly-successful *ENERGY STAR*[®] Program for windows, doors, and unit skylights.

Sincerely,

A handwritten signature in blue ink that reads 'John W. Lewis, Jr.' with a stylized flourish at the end.

John W. Lewis, Jr.
Technical Director
American Architectural
Manufacturers Association

A handwritten signature in blue ink that reads 'Jeff Lowinski'.

Jeff Lowinski
VP - Advocacy & Technical Services
Window and Door Manufacturers
Association