



**Department of Energy**  
Washington, DC 20585

May 8, 2002

Dear ENERGY STAR<sup>®</sup> Windows Stakeholder:

On March 20, 2002, the Department of Energy held a public meeting to discuss potential revisions to the criteria for ENERGY STAR Windows, Doors and Skylights. During the course of the meeting, and in written comments received subsequent to the meeting, the Department received stakeholders' comments on the goals and objectives of the ENERGY STAR program, as well as the issues they believe are the most important for the Department to consider in adjusting the program criteria. Based on a review of the analysis and the comments received, the Department has determined that slightly revising the criteria issued in October 2001 provides the best solution for ENERGY STAR Windows, Doors and Skylights. The proposed criteria are shown below and on the attached sheet and map.

In evaluating alternative criteria, the Department considered a range of factors, including: potential increase in energy efficiency of the product; national energy savings potential; relationship of the ENERGY STAR criteria to applicable building codes; performance impacts; cost effectiveness; and impact on product availability.

In setting ENERGY STAR criteria, the Department recognizes not all products will qualify for the label, and that this is appropriate for a voluntary partnership. At the same time, it is intended that the ENERGY STAR criteria will be at a level that will allow a robust mix of products, reflecting a range of technologies from both performance and economic viewpoints.

After much consideration, the Department has decided the proposed criteria present the best combination of meeting the overall goals of the ENERGY STAR program. The proposed criteria meet or exceed the International Energy Conservation Code (IECC), and will help manufacturers, home builders, remodeling contractors and consumers in code compliance. In addition, the increased emphasis on reducing cooling energy demand will help to significantly reduce summer energy costs to consumers and alleviate some of the peak load energy problems faced in some areas of the country.

*Northern Region* ( $\leq 0.35$  U-factor, any SHGC): The criteria for windows in the Northern Region remains the same as in the current ENERGY STAR criteria and the current IECC requirements. The Department believes that more stringent criteria in the Northern Region would result in significant price increases (30 to 50 percent) that would not be economically justified. DOE believes that setting a U-factor of 0.35, with no maximum solar heat gain, remains an appropriate way to encourage the sale of windows that reduce heating loads in the northern part of the country.

*Central Region* ( $\leq 0.40$  U-factor,  $\leq 0.40$  SHGC): The Central Region contains the most significant change from the current ENERGY STAR criteria. The Central Region has been redefined to approximately represent those parts of the country between 2,000 and 6,000 Heating Degree Days (HDD). This climate region takes into consideration the requirements of state codes (including Title 24 in California) and the IECC (adopted as state code in several southern states). While alternative criteria would save more energy, the Department was swayed by the fact that more cooling energy would be saved in this region due to the increased stringency of the SHGC requirement. Furthermore, this will help alleviate summer peak load cooling loads, which is a major consideration of many ENERGY STAR utility partner programs.

*Southern Region* ( $\leq 0.65$  U-factor,  $\leq 0.40$  SHGC): The major new features of this part of the criteria are the new definition of the Southern Region below 2,000 HDD and the reduction of the U-factor requirement. One technology the Department gave particular attention was aluminum products. DOE believes that aluminum product manufacturers will be able to supply products meeting this requirement. The emphasis on Southern Region criteria is on reducing cooling load demands for the extreme south.

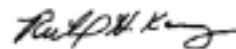
*Doors*: The criteria for ENERGY STAR doors will be the same as for windows in each of the regions. Any door that meets the windows' requirements for its respective climate region, as long as it is NFRC certified, may qualify for the ENERGY STAR label.

*Skylights*: The criteria for ENERGY STAR labeled skylights have been adjusted to reflect new rating procedures being instituted by NFRC and which will take effect in 2003.

The Department will extend the comment period to 45 days, with comments being due to the Department by Friday, June 21, 2002. Comments on the new criteria and your suggestions for the transition to the new criteria should be sent to Ms. Brenda Edwards-Jones, Office of Building Technologies Program, 1000 Independence Avenue, SW, Washington, DC 20585. After review of the comments, the Department will issue the final criteria. The final criteria are proposed to take effect on January 1, 2003.

A revised energy analysis, along with a more detailed discussion on decision process are currently posted on the Internet at <http://www.energystar.gov/opie/windowspec/> for your review. Please direct any questions on the proposal to me by email at [Richard.Karney@ee.doe.gov](mailto:Richard.Karney@ee.doe.gov) or by fax at 202-586-5954. We look forward to your comments.

Sincerely,



Richard H. Karney, P.E.  
Manager, ENERGY STAR Program  
Office of Building Technology  
Assistance Building Technology,  
State and Community Programs

Attachment

## Proposed Final Criteria to ENERGY STAR Window, Door and Skylight Requirements

Windows and Doors			
Zone	Approximate HDD Coverage	U-Factor	SHGC
Southern	≤ 2000 HDD	≤0.65	≤0.40
Central	2,000 - 6,000 HDD	≤0.40	≤0.40
Northern	≥6000 HDD	≤0.35	Any
Skylights			
Zone	Approximate HDD Coverage	U-Factor	SHGC
Southern	≤ 2000 HDD	≤0.75	≤0.40
Central	2,000 - 6,000 HDD	≤0.55	≤0.40
Northern	≥6000 HDD	≤0.55	Any

