

Richard Karney
Program Manager
Energy Star Programs
Department of Energy
Washington, DC

Mr. Karney,

This letter is in response to the Energystar draft criteria for windows, doors and skylights of August 2008, and the additional criteria of last week.

First, we want to thank the Department for the opportunity to review and respond to the new criteria and the Departments willingness to change the final criteria to improve the program.

JELD-WEN is constantly striving to provide increased energy efficient products to the mass market at a reasonable and affordable price point. Our customers have many options to choose from inside our product lines, and must balance style, performance and affordability to fit their needs. With this in mind, we offer the following changes to the proposal:

1. We cannot ignore the customers' current market conditions and the cost of implementing Phase one of the new programs. Based on this the program should adjust the Phase one date to March 1, 2010, to allow the display signage and literature turnarounds to occur with less cost.
2. The current map and zone proposal for ten zones in North America and six in the USA is too complex and does not yield significant energy savings over other alternatives. The program should accept the four zone approach we have proposed. This approach greatly simplifies the program for our customers and actually yields better total energy savings based on the WDMA proposal.
3. The embodied energy calculations to accurately and fully state the energy impact and cost savings are not a consideration of this proposal. A recent letter from Senators Wyden and Clinton previously supplied to the Department clearly asks for a full consideration of these factors prior to the Department setting limits on any Energystar program.

Our initial work has revealed a potential embodied BTU increase of 3 million per home to use triple glazed low E glass. This alone could increase the payback three years in the Northern zone. This evaluation must be done prior to setting the Phase two criteria.

4. The payback analysis has many assumptions that inflate the benefits of the proposed windows. WDMA has supplied the evidence for the need to recalculate the savings totals. These calculations must be redone and limited to 7 years maximum payback. Any longer payback period is not justifiable and will result in consumers choosing to deselect Energystar.
5. The normal variation of window designs that are chosen for a complete house package can cause one product to disqualify the entire house. The program should combine grid, lamination, and tempered glasses into one rating to allow the approval of normal house fenestration packages.
6. The program should not set trade offs of SHGC in the Northern zone due to the continued foundational problems with the high heat gain benefits argument. Our customers comfort will influence the energy savings much more than assessed in any of these arguments. The night-time heat loss will more than offset the daily gain in a normal, non-solar designed home. With that in mind, the phase one criteria should use the four zone map and set the levels as shown :

Climate Zone	U	
	FACTOR	SHGC
North	≤ 0.30	NR
North Central	≤ 0.32	NR
South Central	≤ 0.35	≤ 0.30
South	≤ 0.50	≤ 0.25

7. The door criteria analysis has unearthed many problems with the database that records the simulation results. With this in mind, we submit that the proposal must be amended. The base proposal to utilize one climate zone for simplification is acceptable and encouraged, but the performance limits for phase one should be set at the following levels:

Climate Zone	Glazing	U	
		FACTOR	SHGC
	Opaque	≤ 0.21	NR
ALL ZONES	≤ 1/2 Lite	≤ 0.28	≤ 0.40
	> 1/2 Lite	≤ 0.34	≤ 0.40

8. The timing of the phase two criteria must be delayed to consider all the previous points but the deadline for the implementation is recommended for January, 2015 with the criteria setting segment

extended until January, 2010. Phase Two should remain unset until this date.

9. The basis for most low U value units is exotic gas filled insulating glass components. These components cannot be used in high altitude environments due to pressure differential and stress. These units must be vented which precludes exotic gas use. The program should include an exemption for these units allowing air filled insulating glass units to qualify only in these applications.
10. The estimate of one billion outdated and energy wasting existing windows must be addressed by the program. We must find the right balance of affordability and energy performance to allow replacement of these products. For this reason the program should separate the new construction, code driven products from the replacement window products. A different criterion should be set for each product type with the replacement product criteria designed to promote much better affordability.
11. The recently released additional criteria now place three requirements on product manufacturers that are not trivial. We will continue to pursue the best answers to these new concepts, but the deadline is too soon. Three weeks of analysis overlapping this deadline does not allow sufficient time. We must, among other activities, restructure the national product market study, rethink how we could simplify labeling, and decide if allowing the ICC to over-ride industry debate is appropriate. This simply requires that the additional criteria deadline be delayed until January 15, 2009.

Our lengthy response is yet insufficient to fully reply to all the factors that must be carefully considered. We must continue to evaluate the many points addressed here and insure that the Phase Two requirements fit the technology, market and affordability criteria our customers need.

Again, we want to convey our appreciation for the system the Department has created to promote industry, consultant and Department of Energy co-operation. The only way the consumer wins is if we all work together to create the best system

Ray Garries
JELD-WEN Corporation