

Via Electronic Transmission Only

February 8, 2013

Mr. Doug Anderson
ENERGY STAR Programs
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460-0001

Re: ENERGY STAR Version 6.0, Draft 2 Report (“Draft 2”)

Dear Mr. Anderson:

Thank you for the opportunity to comment on the proposed changes in Draft 2. We support many of the key modifications the EPA outlined in the January 7th letter regarding Draft 2, and applaud your responsiveness on these specific issues, but we still have work to do. The EPA’s willingness to discuss the ENERGY STAR proposals in order to establish the best program for product consumers and manufacturers is truly appreciated.

JELD-WEN would like to address four key points in response to EPA’s ENERGY STAR Version 6.0, Draft 2.

Implementation. The ENERGY STAR Version 6.0, Draft 2 criteria is best implemented in 2015.

Affordability. Affordability must remain a primary driver of the ENERGY STAR program.

Market Share. EPA’s measurement of ENERGY STAR’s market share should not be based on a market that has lost 50% of its total sales.

Qualification Criteria. A larger ENERGY STAR product offering is good for consumers because it offers more choice.

Window manufacturers and window buyers are currently caught in a perfect storm of market forces: a weak American housing economy recovering only in certain regions, consistent downward price pressure, and market-entry requirements for up-graded energy efficiency as recommended by ENERGY STAR. These three strong elements are placing the industry in a position of attempting to satisfy new requirements with lowered sales to fund the necessary design and machinery changes. Affordability for everyone must remain the primary factor of the ENERGY STAR program and that will allow the Program to achieve its core goals. Currently the payback for the customer is not there. In most regions of the U.S., the payback of upgrading to a triple-pane window is beyond practicality, while high performance dual pane windows needed for this proposal also have extended returns. Thus, if the ENERGY STAR qualification criterion maintains the correct balance of reasonable performance improvements and

affordability, manufacturers would have the time and funds to invest in developing new energy saving technology for the future. In consideration of these points JELD-WEN reiterates our position that the Draft 2 implementation moves to 2015, and be revisited at that time to ensure that sustained recovery is occurring in the housing industry. This would also align the U.S. ENERGY STAR program with the Canadian ENERGY STAR program (NRCan) for a truly North American effort to increase energy efficiency.

Today's window and door buyer is very informed. In response, the window industry is very competitive and diverse, creating windows in the marketplace will meet the ENERGY STAR requirements – no matter where they are set, damaging affordability when the criteria move too far. The Version 5 ENERGY STAR qualification criteria remain more stringent than the adopted codes in most states, thus the code pressure to change is exaggerated. The best possible scenario for the EPA, window buyers, and window manufacturers is to adopt the requirements at the proposed levels in Table 1, and change the implementation date to 2015.

The Version 6 Analysis Report states that the aggregate annual energy savings over Version 5 criteria is 45% in the Southern climate zone, and 24% in the Northern climate zone. The DOE 2003 ENERGY STAR criteria resulted in an aggregate national energy savings of about 12 trillion Btus. The 2009 revision resulted in 9.2 trillion Btus. The EPA Version 6 Report criteria will only result in savings of 2.2 trillion Btus, or about one-fourth of the savings of 2009 revision. The savings in the Northern zone only are 24% of the 2.2 TBtus or only 0.53 TBtus. Driving the Northern zone to have small, incremental energy savings coupled with poor affordability of products, does not help consumers nor encourage them to purchase energy efficient products, and therefore, defeats the purpose of changing the criteria to achieve additional national energy savings.

JELD-WEN believes that energy savings are the over-arching goal of the ENERGY STAR program, and that the largest energy savings will be realized by limiting the change in the Northern zone. The emphasis of the changes should be on the Southern and South-Central climate zones. Generally the cost of cooling is more than the cost of heating. This point is again reflected by our proposals illustrated in Table 1.

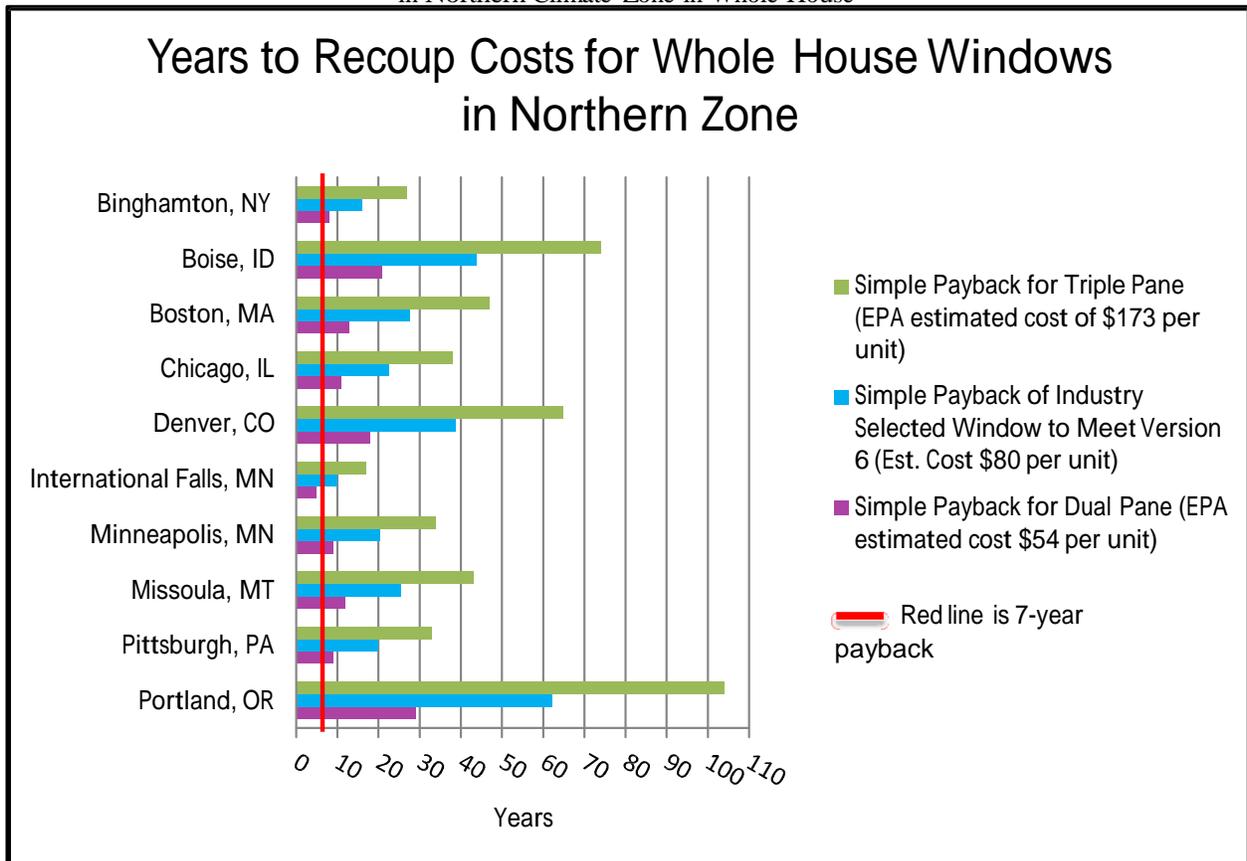
The EPA is also urged to reconsider the qualification criteria of the Version 6 Report. ENERGY STAR Products Program Strategic Vision and Guiding Principles (“Guiding Principles”), Guiding Principle 3, suggests that purchasers should be able to increase energy savings and recover their investment in a reasonable time. Using the EPA's own cost effectiveness methodologies this guiding principle is only met in the Southern climate zone. The industry agrees that reasonable simple payback time is 7 years or less.

JELD-WEN also continues to be concerned about the lack of feedback from EPA on our Version 6, Draft 1 comments. We are especially disappointed that our evidence regarding market share, seems to have been ignored. While the market share of ENERGY STAR qualified windows has increased since 2006, the number of ENERGY STAR windows sold has declined. If the EPA 25% share goal is achieved, consumers will be buying fewer ENERGY STAR windows than they did 16 years previously (2001), even considering that window sales are predicted to double by 2017.

The EPA must consider that the current basic assumptions of the Version 6 Report and ENERGY STAR Program goals conflict with each other -- significant savings on a national scale will not be realized if the criteria encompass only the top 25% of market. When more products are available, at affordable prices, and offer reasonable paybacks – everyone wins. Niche markets do not, generally, lend themselves to cost effectiveness. Real affordability must remain the primary driver of the ENERGY STAR program.

Figure 1 below, illustrates the payback years to recover the cost of replacing windows in the Northern climate zone. The average payback period for an industry selected window to meet Version 6 criteria in the Northern climate zone is 29 years. For example in Boston, which is a heating dominated climate, the payback period is 13 years for dual pane based on EPA estimated costs, 28 years to meet Version 6 based on industry estimate, and 47 years for triple pane based on EPA estimated costs. These paybacks do not represent a reasonable, consumer-acceptable time period, nor do they meet the ENERGY STAR Guiding Principles.

Figure 1: Years Required to Recover Costs of Window Replacement in Northern Climate Zone in Whole House¹



¹ Data based on Version 6, Draft 1 Report, Table 5, Table 8, and industry data.

Therefore we propose the following changes in U-Factor and SHGC criteria for each of the climate zones to help consumers realize energy savings with reasonable payback periods.

Table 1: Energy Efficiency Requirements for Windows

Table 1. Energy Efficiency Requirements for Windows, Compared with Proposed Changes				
Climate Zone	E*U-Factor ²	E* SHGC	JW ³ U-Factor	JW SHGC
Northern	≤0.27	Any	≤0.29	Any
Northern Equivalent Energy Performance	≈0.28	≥0.32	≈0.30	≥0.42
	≈0.29	≥0.37		
	≈0.30	≥0.42		
North-Central	≤0.29	≤0.40	≤0.31	≤0.40
South-Central	≤0.31	≤0.25	≤0.32	≤0.25
Southern	≤0.40	≤0.25	≤0.40	≤0.25

Comments on Version 6.0 Criteria for Doors

Considering the points EPA makes in the Version 6.0 Analysis Report, specifically that changes to the qualification criteria for opaque doors will offer no additional energy savings, and energy savings for full-lite doors were rounded down to zero by RESFEN. Based on this point, the U-value and SHGC changes proposed by EPA simply damage the affordability of the product without providing any payback to the consumer. This point alone should mitigate any changes to the Program.

In addition, EPA indicates there would be minimal incremental cost for half-lite doors changes, but the manufacturers' analysis have suggested the cost is more than double the EPA estimate. Less than half-lite doors should be in the same category as opaque, there are no additional savings with reasonable payback for the consumer. For example in Boston, which is a heating dominated climate, the payback period is 15 years for EPA estimated costs, 35 years to meet Version 6 based on industry estimates. These paybacks do not represent a reasonable, consumer-acceptable time period, nor do they meet the ENERGY STAR Guiding Principles.

While our preference is that the criteria stay at Version 5 levels, we understand EPA's need to keep pace with the window criteria. Thus when reviewing the proposed criteria, we suggest the SHGC maximum be modified to be no greater than 0.30 for >1/2 lite assemblies. Most door systems are shaded by overhangs and this change to SHGC will have minimal effect on energy consumption. We also offer the counter proposals in Table 2.

JELD-WEN urges the EPA to continue use of one climate zone for doors and use the practical U-factor and SHGC numbers suggested in Table 2. The door pre-hang industry is not prepared for the labeling complexity multiple climate zones would require. The door industry in general does not have the labeling capabilities of the window industry. Many pre-hangers are using an NFRC matrix label that will not allow

² E* denotes ENERGY STAR.

³ JW denotes JELD-WEN, inc.

conformity to this multi-zone proposal. Our goal is to keep things simple for maximum compliance. In addition, solar heat gain on doors has a very minimal impact and multiple climate zones would add extra confusion for consumers.

JELD-WEN continues to support one climate zone for door products.

Table 2: Energy Efficiency Requirements for Doors

Door Types	Version 5.0 ENERGY STAR		EPA Proposed Version 6.0 Draft 2 ENERGY STAR Criteria			JELD-WEN Suggested ENERGY STAR Criteria	
	U-Factor	SHGC	U-Factor	SHGC		U-Factor	SHGC
Opaque	≤0.21	n/a	≤0.17	n/a		≤0.19	n/a
≤ 1/2 lite	≤0.27	≤0.30	≤0.25	≤0.25		≤0.25	≤0.25
> 1/2 lite	≤0.32	≤0.30	≤0.30	Northern / North-Central	≤0.40	≤0.30	≤0.30
				Southern / South-Central	≤0.25		

In conclusion, JELD-WEN’s position is:

- ENERGY STAR market share indicators should not drive implementation of Version 6 at this time. Re-evaluation should happen in 2015.
- The Northern climate zone criteria should not be the primary driver of the program.
- Affordability must be the primary driver of the ENERGY STAR program.
- A larger ENERGY STAR market share is good for consumers because it offers more choice.
- Better feedback to ENERGY STAR partners is needed from the EPA on stakeholder suggestions.

JELD-WEN, inc. has been an ENERGY STAR partner since ENERGY STAR’s beginning in 1998 and is a multi-year Partner of the Year award winner. JELD-WEN is the largest builder and certifier of energy efficient windows and doors globally. We will continue to advocate strongly for our customers and our market.

We continue to advocate the multi-tier system for Energy star that will help to solve the current conflict of affordability and transformation. The Most Efficient program is the start of the tier program, let us work together to complete this initiative.

Again, we want to convey our appreciation for the opportunity the EPA has created to promote industry, and Agency cooperation. The only way the consumer wins is if we all work together to create the best system.

Sincerely,

Ray Garries
JELD-WEN, inc.

