August 21, 2023

Doug Anderson - Program Manager ENERGY STAR for Windows, Doors, and Skylights U.S. Environmental Protection Agency Sent via email: <u>Anderson.doug@epa.gov</u> and <u>MostEfficient@energystar.gov</u>

RE: ENERGY STAR Most Efficient Windows & Sliding Glass Doors 2024 Proposal – Marvin Comments

Dear Doug,

Marvin appreciates the opportunity to review and submit comments on the proposed 2024 ENERGY STAR Most Efficient Criteria for Windows and Sliding Glass Doors.

Changes propos		2024 Proposal:								
onunges propos	ed for Win	dows an	d SGDs							
Most Efficient 2023 Proposed Most Efficient 2024							ł			
				Climate Zone	U-factor	SHGC				
	U-factor	SHGC		Northern	≤ 0.20	≥ 0.20	1			
Northern	≤ 0.20	≥ 0.20		North-Central	≤ 0.20	≤ 0.40	1			
North-Central	≤ 0.20	≤ 0.40		South-Central			Change to = V7			
South-Central	≤ 0.20	≤ 0.25		South-Central	≤ 0.20	≤ 0.23	change to = v/			
Southern	≤ 0.20	≤ 0.25			≤ 0.21	≤ 0.23	Change to allow			
ooution	- 0.20	- 0.20		Southern	≤ 0.22	≤ 0.21	more flexibility			

Marvin comments focus on two key issues:

- The suggested change in the Southern Zone Criteria for Windows and Sliding Glass Doors does not go far enough and should include a change to the South-Central Zone criteria, to gain wider acceptance of ENERGY STAR Most Efficient. Marvin suggests making U-factor changes in the South-Central and Southern Zones by changing the U-Factor criteria to ≤0.25 U-factor and keeping the same ≤0.23 SHGC. There are several reasons for supporting this change:
  - a. Implementing the recommended criteria for the South-Central and Southern Climate Zones will make it easier for consumers to select from a wider range of readily-available, more affordable, energy-saving products.
  - b. While Marvin appreciates EPA's intention of relaxing criteria in the Southern Zone to allow for the use of dual-paned products, EPA's proposal will not accomplish that goal.
    - i. The proposed 2024 ENERGY STAR Most Efficient criteria for windows and sliding glass doors will require the use of triple-pane glazing in the Southern and South-Central Zones (foam-filled frames, more efficient spacers and triple silver and room-side low-E coatings), adding significantly to the cost of ENERGY STAR Most Efficient products where U-factor is much less of a concern than SHGC. In hurricane prone regions in the south and southeast, where laminated glazing is needed to meet impact requirements, airspaces are reduced and lead to higher U-Factors.
    - ii. If the Most Efficient criteria are too restrictive, especially for the South-Central and Southern Zones, it will hamper consumers demand for these products. This

will reduce the incentives for manufacturers to market these products with little to no ROI and hamper the overall goal of energy savings. That's why it's important to establish levels that will lead to saving energy.

- iii. This will prevent consumers from leveraging important 25C Energy Efficiency tax credits recently approved in the Inflation Reduction Act (IRA).
- 2. Marvin recommends removing the Northern Zone SHGC requirement. There are many triplepane, triple-silver products that have difficulty meeting the ≥0.20 SHGC requirement.
  - a. Consider that triple-pane windows (without dividers) with triple-silver low-e coatings, are not going to comply with the proposed Northern Zone criteria for SHGC (≥0.20). These same products with dividers get even lower SHGC. Therefore, ENERGY STAR needs to consider changing the requirement to NR (No Requirement).

Marvin would like to see the following changes in the 2024 ENERGY STAR Most Efficient Criteria table for Windows and Sliding Glass Doors:

Marvin Suggested Revisions for 2024 ENERGY STAR Most Efficient Criteria						
Climate Zone	U-factor	SHGC				
Northern	≤0.20	NR (No Requirement)				
North-Central	≤0.20	≤0.40				
South-Central	≤0.25	≤0.23				
Southern	≤0.25	≤0.23				

Again, Marvin appreciates the opportunity to review and comment on the 2024 ENERGY STAR Most Efficient Criteria for Windows and Sliding Glass Doors Criteria.

We look forward to our continued partnership with ENERGY STAR.

Respectfully submitted,

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