

August 10, 2023

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Dear Doug and others responsible for the U.S. ENERGY STAR Most Efficient program for fenestration:

On behalf of the Fenestration and Glazing Industry Alliance (FGIA), our organization is commenting on the proposed 2024 ENERGY STAR Most Efficient Specifications for Windows, Sliding Glass Doors (SGDs) and Skylights as shown below.



Residential Windows, Sliding Glass Doors (SGD), and Skylights

• 2024 Proposal:

- Changes proposed for Windows and SGDs

| Most Efficient 2023 | | | Proposed Most Efficient 2024 | | |
|---------------------|----------|--------|------------------------------|----------|--------|
| Climate Zone | U-factor | SHGC | Climate Zone | U-factor | SHGC |
| Northern | ≤ 0.20 | ≥ 0.20 | Northern | ≤ 0.20 | ≥ 0.20 |
| North-Central | ≤ 0.20 | ≤ 0.40 | North-Central | ≤ 0.20 | ≤ 0.40 |
| South-Central | ≤ 0.20 | ≤ 0.25 | South-Central | ≤ 0.20 | ≤ 0.23 |
| Southern | ≤ 0.20 | ≤ 0.25 | Southern | ≤ 0.21 | ≤ 0.23 |
| | | | | ≤ 0.22 | ≤ 0.21 |

Change to = V7
Change to allow more flexibility
Should be an =

- Remove Performance Grade requirement from criteria
- Changes proposed for Skylights and Tubular Daylighting Devices (TDDS)
 - No changes proposed for thermal performance criteria
 - Remove Performance Grade requirement from criteria

FGIA provides these comments for your consideration to help encourage greater consumer acceptance of the program, and greater potential energy savings in the process.

FGIA now represents more than 420 member companies who manufacture and market windows, doors, skylights, tubular daylighting devices (TDDs), and the glazing and components that go into them for residential and commercial applications. In addition to member companies, FGIA also represents hundreds of professional and technical members.

To help drive greater energy savings through ENERGY STAR programs, provide a realistic starting point

FGIA believes the following recommendations for EPA's consideration represent a more realistic starting point for the 2024 ENERGY STAR Most Efficient specifications for fenestration.

FGIA's comments focus on several key areas:

1) Recommended changes for U-factors and Solar Heat Gain Coefficients (SHGC)

- **Apply the same criteria to both the Southern and South-Central Zones. We propose a U-factor ≤ 0.25 and a SHGC ≤ 0.23 .** Implementing those specifications will provide a practical approach that will make it easier for consumers to select from a wider range of readily-available, affordable, energy-saving products. This approach will also help EPA move closer to its realistic goal of encouraging Americans to save greater levels of energy.
- While FGIA appreciates EPA's intent in relaxing specifications in the Southern and South-Central Zones to allow for the use of dual-paned products, in reality, EPA's proposal will not accomplish that goal. The proposed 2024 ENERGY STAR Most Efficient criteria for windows and sliding glass doors will still, for most practical purposes, require the use of triple-pane glazing in the Southern and South-Central Zones, and/or greater fortification of fenestration products through foam-filled frames, super spacers, and room-side Low-E coatings, adding significantly to the cost of ENERGY STAR Most Efficient products, producing the unintended consequences of pricing many consumers out of the market.
- While FGIA members appreciate the desire for ENERGY STAR programs to educate and to inspire Americans on how to make energy-saving choices for their homes, if program specifications are set too high, particularly for the Most Efficient program, it can hamper future program participation and potential energy savings.
- If few Americans buy ENERGY STAR Most Efficient products, the program won't accomplish EPA's goal to help save greater levels of energy. That's why it's important to establish levels that will help save energy, but which won't drive consumers away from purchasing ENERGY STAR or ENERGY STAR Most Efficient products.

⊖ **Retain Performance Grade (PG) requirements**

- Although EPA proposes to remove the Performance Grade (PG) requirements as listed in the North American Fenestration Standard, formally known as AAMA/WDMA/CSA 101/I.S.2/A440 (NAFS), FGIA members oppose the move.
- FGIA members believe the current PG requirement should be retained. Although EPA states that building codes reference NAFS, the fact is that code adoption and enforcement can be inconsistent across the United States, and therefore the PG requirement should be retained. Retaining this requirement is not overly burdensome and provides consumers with assurance of a minimum degree of product safety, durability and viability. Since replacement products or replacement construction projects are not often regulated by building codes, it's important to include the PG requirements from NAFS.
- When fenestration products are proposed for ENERGY STAR Most Efficient consideration, manufacturers provide a copy of the applicable documentation (cover page) of the test report that includes the product Performance Grade. If EPA doesn't want to share the applicable PG information on its public-facing website for consumers at energystar.gov, that is EPA's choice, but FGIA encourages EPA to retain the PG requirement. EPA and its contractors can simply review the data that fenestration manufacturers provide when they are submitting their application(s) for ENERGY STAR Most Efficient product(s). FGIA members believe the review of information does not result in significant additional effort for EPA or its contractors as part of the review process.

Refer to FGIA's proposed recommendations for the 2024 ENERGY STAR Most Efficient program on the following table.

FGIA’s Proposed U.S. ENERGY STAR Most Efficient 2024 Specifications

The new proposed criteria is shown below in bold in red blocks.

| Climate Zone | U-factor | Solar Heat Gain Coefficient (SHGC) |
|--|-------------------------------|------------------------------------|
| Northern | ≤ 0.20 | ≥ 0.20 |
| North-Central | ≤ 0.20 | ≤ 0.40 |
| South-Central and Southern Zone | ≤ 0.25 | ≤ 0.23 |

- **RETAIN the PG requirement.**

FGIA members promote interest in ENERGY STAR, provide energy-efficient products

- To remain a viable, voluntary guideline that Americans “buy into,” the program must deliver value through affordable, cost-effective consumer choices, and realistic payback returns. It’s essential to balance the competing needs of performance, cost and energy savings, and affordable paybacks for consumers as the specifications for the ENERGY STAR Most Efficient program for 2024 are developed and implemented.
- In addition, FGIA members recognize that the ENERGY STAR Most Efficient program is designed to encourage even higher levels of energy-savings than the base ENERGY STAR program itself.

Use actual data to help inform future ENERGY STAR and ENERGY STAR Most Efficient specifications

As the new ENERGY STAR 7.0 program goes into effect across the U.S. October 23, 2023, FGIA encourages EPA to use the actual data gleaned from sales of products complying with the new specification to make even more informed decisions in the ENERGY STAR and ENERGY STAR Most Efficient programs in future years.

- Since it will become a requirement for fenestration manufacturers to report actual unit shipment data of ENERGY STAR products sold, starting with the 2023 year data to be filed by March 1, of 2024, EPA can access sales data on which to base future decisions for both the base ENERGY STAR and the ENERGY STAR Most Efficient programs.
- That reported sales data will be particularly important in better understanding ENERGY STAR adoption in all U.S. Climate Zones, but especially in the Southern and South-Central Zones, for which specifications have changed little in the past decade.

While FGIA recognizes that some products now exist on the market today that may meet the proposed more stringent specifications, our industry’s concern is that overall, there has been little consumer demand for fenestration products in the ENERGY STAR Most Efficient program, which is a niche segment. If 2024 Most Efficient criteria as proposed by EPA is implemented, that can further drive up the cost of qualifying products, which in turn, can decrease program participation and product adoption by consumers.

It's a fact that the ENERGY STAR Most Efficient program and the offering are not as well-recognized as the ENERGY STAR brand itself. It's also important to recognize that despite EPA's and fenestration manufacturers' best efforts and best intentions, the ENERGY STAR Most Efficient program presently and historically has experienced a low adoption rate on the part of consumers. If Americans are to be more likely to choose to purchase ENERGY STAR Most Efficient fenestration products, there must be reasonable, cost-effective options available to encourage greater adoption by consumers.

FGIA looks forward to partnering with EPA in the development of the ENERGY STAR Most Efficient program for 2024 to strike a reasonable balance to drive greater energy savings by advancing the ENERGY STAR Most Efficient specifications for fenestration products, while still continuing the goal of advancing the ENERGY STAR brand and market share over time.

FGIA members continue to be longtime leaders in providing the finished products, components and expertise that has helped stimulate demand for the ENERGY STAR and ENERGY STAR Most Efficient brands in windows, doors, and skylights. We look forward to our continued partnership with EPA and ENERGY STAR to help advance the program and its adoption by Americans.

If you have questions about the information provided by FGIA, or wish to discuss it further with our stakeholders, please contact me at kkrafka@fgiaonline.org.

Sincerely,



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