August 10, 2022

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


Dear Mr. Anderson:

The Window and Door Manufacturers Association (WDMA) appreciates the opportunity to comment on EPA’s ENERGY STAR Version 7.0 Residential Windows, Doors, and Skylights Final Draft Specifications (Final Draft) and Response to Comments on Version 7.0 Draft 2 Specification (Draft 2 Comment Responses). WDMA represents the leading producers of commercial and residential doors, windows, and skylights for domestic and export markets and have been committed supporters of the ENERGY STAR Window, Door and Skylight Program since its inception. Our members have contributed greatly in growing the ENERGY STAR brand in the window, door and skylight sector because of the great benefit it has been to consumers and energy savings. ENERGY STAR Windows are consistently a top 5 feature, and the number one green feature as listed in NAHB’s annual survey of What Home Buyers Really Want. WDMA and our members are very interested in the continued success of the ENERGY STAR program.

WDMA reviewed the Final Draft Specification and the Draft 2 Comment Responses EPA provided. We appreciate the effort EPA has made to date in developing Version 7.0 and providing those documents. Although we remain unresolved on many of our Draft 1 and Draft 2 comments, WDMA believes that there are some small changes that can be made to improve Version 7.0 prior to finalizing the specifications.

Remaining concerns we believe should be considered before finalizing Version 7.0:

- Change to the North-Central Window U-factor from 0.24 to 0.25 still results in a more stringent requirement than one of the Northern Zone window Equivalent Energy Performance options
- The U-Factor limit for >½-lite doors remains too stringent in the North-Central and Northern climate zones and are not cost justified
- The Version 7.0 implementation date would be more appropriately timed to be at the beginning of a calendar year
- ENERGY STAR market data accuracy and completeness

We believe the changes that were made in the Final Draft were in the right direction, but some of the changes should go further.

Final Draft Unresolved Concerns

Window equivalency criteria for windows in the Northern Zone:
In the Final Draft, one of the window equivalency values in the Northern Zone can still have a less stringent U-factor than what is permitted in the North-Central Zone. With the Final Draft, it is still
possible to have a window with a 4% worse U-factor (0.26 vs. 0.25) and the same SHGC (0.40) meet the proposed ENERGY STAR requirements in the colder climate zone. If EPA believes it is important to maintain the Equivalent Energy Performance for Windows in the Northern Zone (which the EPA data does not support), to rectify this, it is logical to modify the North-Central requirements from the proposed 0.25 to 0.27 (which would mean taking the current Version 6.0 Northern Zone U-factor and dropping it down to the North Central. EPA should, at a minimum, set the North Central Zone Window U-factor to no lower than 0.26 to at least match the highest allowable U-factor in the Northern Zone. This will still be a sizable improvement from Version 6 without the inconsistency of having worse performing windows in the Northern Zone as compared to the North Central Zone. In no case should the North Central Zone U-factor be more stringent than any option in the Northern Zone. Winter design temperatures in the North-Central Zone can be over 60 degrees higher than the Northern Zone (i.e. Knoxville, TN: 20F to Fairbanks, AK: -40F), be justified to have a lower U-factor in the Northern Zone. Additionally, this anomaly will be very confusing to consumers.

**Adjusting the U-factor requirement for > ½ lite doors:**

WDMA thanks EPA for adding in regional considerations for > ½ lite doors in the Final Draft and resolving our concern of too aggressive U-factors in the Southern and South-Central Zones. However, we still believe that it is important to set the U-factor for > ½-Lite doors in the North-Central and Northern Zones from 0.25 to 0.27 or at least no lower than 0.26. This will allow a large number of high performing patio doors to still be compliant with the Version 7.0 specifications.

**Implementation Date:**

WDMA strongly recommends that EPA set an effective date of January 1, 2024 for Version 7.0, not only is this important to the manufacturers, providing them time to make necessary changes in product design, testing, certification, as well as time necessary for marketing and other operational changes that need to be made with a new version; it also is a cleaner transition related to reporting ENERGY STAR shipment data, coordinating (potential) Federal energy tax credits. It would also closely coincide with the likely publication date of the 2024 edition of the International Energy Conservation Code (IECC) which appear to be incorporating requirements fairly close to ENERGY STAR Version 6.0. If EPA’s current implementation plan of 12 months from finalization is followed, the effective date for Version 7.0 will likely be sometime in September or October of 2023. This 4th quarter time frame will be challenging for manufacturers, skew shipment data and add confusion to potential ENERGY STAR related tax credits all for implementing the next version just a couple months earlier.

Additionally, it was stated in the Draft 1 specification that “EPA recognizes stakeholder interest in a specification transition at the end or beginning of a calendar year and will aim to accommodate this”. WDMA therefore encourages EPA to honor this intent and set an effective date of January 1, 2024, accordingly.

**Questions about the accuracy of ENERGY STAR market share data for windows in the Northern Zone and lacking explanation for how that was determined:**

We are pleased that EPA intends to change the way they collect unit shipment data for windows, doors, and skylights. This will give EPA additional control and enforcement ability to ensure a more complete dataset of ENERGY STAR shipments.

WDMA is requesting to become a pre-approved trade association to collect shipment data from our members and provide aggregated information to EPA on an annual basis. Our members represent a majority of the window, door and skylight shipments and we believe our access to them will improve the accuracy, consistency, and completeness of the shipment data. We are also willing to work with EPA to help improve the methodology and accuracy of the market share analysis for future ENERGY STAR updates.
Unresolved Concerns
We have a number of unresolved concerns with the development of ENERGY STAR Version 7.0 that do not appear that they will be addressed prior to finalizing the new version. Below is a bulleted list of our ongoing concerns that have been detailed in previously submitted WDMA comments. WDMA wanted to be clear that we remain unresolved with these issues and would like to discuss these with EPA at a later date and prior to any further revisions to the finalized Version 7.0:

- Modeling assumptions that result in inaccurate energy and cost savings findings
- Only using vinyl-framed products for setting criteria is too limiting and inappropriate
- Using two different baselines to justify setting criteria skews actual energy and cost savings and resulting payback periods.
- Payback periods based on length of time a home is owned are not what consumers consider acceptable:
- Move IECC Climate Zone 5 into the ENERGY STAR North-Central climate zone:

WDMA Recommendations
In review of the Final Draft specification, WDMA strongly recommends the following changes to the final ENERGY STAR Version 7.0 Specification:

- Adjust the North-Central Climate Zone Window criteria to 0.27 (which would take the current Version 6.0 Northern Zone U-factor and drop it down to the North Central), or at least no lower than 0.26;
- Adjust the U-factor for > 1/2-Lite doors for the Northern/North Central Zones to 0.27, or at least no lower than 0.26;
- Set the implementation date for ENERGY STAR Version 7.0 to January 1, 2024, and;
- Include WDMA as an approved fenestration industry association to submit aggregated unit shipment data to EPA

In addition, WDMA would like to meet with the ENERGY STAR window, door and skylight team and discuss our unresolved concerns.

WDMA would also like EPA to clearly note in their materials and on their website that ENERGY STAR is intended to be an aspirational and above code program. We realize that EPA has no control over what other organizations or individuals do with any ENERGY STAR requirements, however, if EPA clearly indicates the intentions of the program it will help others understand that the program is not intended to be the energy code.

Again, we appreciate this opportunity to provide WDMA’s comments on EPA’s ENERGY STAR Version 7.0 Final Draft Specifications. We believe that our requests can be reasonably incorporated into Version 7.0 prior to being finalized. WDMA is as interested as anyone in seeing ENERGY STAR Version 7.0 be successful and believe the actions we are requesting will help maintain significant participation, substantial national energy savings and energy cost savings for consumers. We believe that the actions we are requesting EPA to take will result in a more sound Version 7.0 Specification, and one that is more in-line with ENERGY STAR’s Strategic Vision and Guiding Principles.

Please let me know if you would like clarification on any comment we have provided or if there is additional information we may be able to provide as EPA moves toward finalizing the Version 7.0 Specification.

Sincerely,

Craig Drumheller
Vice President of Technical Activities