UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460



OFFICE OF AIR AND RADIATION

July 19, 2022

Dear ENERGY STAR® Residential Window, Door, and Skylight Partner or Other Interested Stakeholder,

With this letter, the U.S. Environmental Protection Agency (EPA) is pleased to share the ENERGY STAR Version 7.0 Residential Window, Door, and Skylight Final Draft Specification. Comments on this final draft may be submitted to windows@energystar.gov by August 10, 2022. The ENERGY STAR Version 7.0 Residential Windows, Doors, and Skylight's specification will take effect 12 months after the criteria are finalized.

EPA appreciates stakeholders' feedback on the Draft 2 specification. EPA's responses to stakeholder feedback are reflected in the accompanying Draft 2 Response to Comments document. Highlights of key changes since the Draft 2 specification are summarized below and are discussed in more detail in the Response to Comments and within the Final Draft specification. Accompanying this letter, EPA is providing two (2) data packages (Results and Assumptions; Savings Data) that provide EPA's updated datasets associated with the Final Draft analysis.

EPA reviewed all comments on Draft 2 and considered all expressions of support and proposed changes. Specific to the criteria, EPA adjusted the North-Central zone U-factor requirement moving it from \leq 0.24 to \leq 0.25. EPA adjusted the > ½-Lite door criteria in the South-Central and Southern zones, changing the U-factor requirement from \leq 0.25 to \leq 0.28. In both cases, this will allow greater selection with only a minimal change to savings.

EPA is also making changes that impact program administration and data quality. Specifically, EPA is proposing to align with the National Fenestration Rating Council's current policy to require product U-factor recertification every 5 years and air leakage recertification every 10 years. This requirement will now be independent of the NFRC requirements.

In addition, EPA has updated the provisions of the Partner Commitment document specific to shipment data. While all partners have previously been required to submit unit shipment data as part of the program, EPA is no longer using Ducker International as the data aggregator and report provider for this effort. Instead, all partners will be required to submit their data to EPA, consistent with what ENERGY STAR manufacturer partners for other product categories have done for over ten years. Manufacturers will have the option to submit through a trade association willing to act as an aggregator.

Finally, while considering comments, in the context of our payback analysis, EPA found that 6 cities had been inadvertently assigned to historical ENERGY STAR zones. The corrected analysis increased the payback period for windows in some zones by less than a year. The recalculated results table can be found in the Appendix of the Draft 2 Response to Comments. Also, given recent increases in energy prices, EPA recalculated the payback results for 50% and 100% higher natural gas prices than originally used, in line with more recent pricing. These results are also found in the Draft 2 Response to Comments Appendix as a comparison.

Summary of Key Criteria Changes:

Windows: EPA proposes to revise the North-Central zone U-factor criteria moving it from ≤ 0.24 to ≤ 0.25 .

| Energy Efficiency Prescriptive Requirements for Windows | | | |
|---|-----------------------|-------------------|--|
| Climate Zone | U-Factor ¹ | SHGC ² | |
| Northern | ≤ 0.22 | ≥ 0.17 | |
| North-Central | ≤ 0.25 | ≤ 0.40 | |
| South-Central | ≤ 0.28 | ≤ 0.23 | |
| Southern | ≤ 0.32 | ≤ 0.23 | |

¹ Btu/h ft².°F

• **Doors:** EPA proposes to move the criteria South-Central and Southern zone > ½-Lite door criteria U-factor from ≤ 0.25 to ≤ 0.28.

| Energy Efficiency Requirements for Doors | | | | |
|--|-----------------------|-------------------|--------|--|
| Glazing Level | U-Factor ¹ | SHGC ² | | |
| Opaque | ≤ 0.17 | No Rating | | |
| ≤ ½-Lite | ≤ 0.23 | ≤ 0.23 | | |
| > ½-Lite | ≤ 0.25 | Northern and | ≤ 0.40 | |
| | | North-Central | | |
| | ≤ 0.28 | South-Central | ≤ 0.23 | |
| | | and Southern | | |

¹ Btu/h ft².°F

Schedule:

Stakeholders are requested to provide comments on the Version 7.0 Final Draft Specification no later than August 10, 2022. Please send comments via e-mail to windows@energystar.gov. All comments received will be posted to the ENERGY STAR Residential Window, Door, and Skylight Version 7.0 Specification Development webpage.

Please contact <u>windows@energystar.gov</u>, myself at <u>anderson.doug@epa.gov</u>, or Rowan McCarthy at <u>rmccarthy@drintl.com</u> with any questions or concerns about the draft specification. Thank you for your continued support of the ENERGY STAR program.

Sincerely,

Douglas W. Anderson

Product Manager for Windows, Doors, and Skylights

ENERGY STAR Labeled Products

² Solar Heat Gain Coefficient

² Solar Heat Gain Coefficient

Enclosures:

Response to Comments on Version 7.0 Draft 2 Specification

https://energystar.gov/sites/default/files/asset/document/Response%20to%20Comments%20on%20Version%207.0%20 <u>Draft%202%20Specification.pdf</u>

ENERGY STAR Version 7.0 Residential Windows, Doors, and Skylights Final Draft Specification

https://energystar.gov/sites/default/files/asset/document/ENERGY%20STAR%20Version%207.0%20Residential%20Windows%2C%20Doors%2C%20and%20Skylights%20Final%20Draft%20Specification.pdf

Final Draft Data Package 1a - Results and Assumptions

https://energystar.gov/sites/default/files/asset/document/WDS_V7_Final%20Draft_Data%201a%20Results%20and%20Assumptions.xlsx

Final Draft Data Package 1b - Savings Data

https://energystar.gov/sites/default/files/asset/document/WDS_V7_Final%20Draft_Data%201b%20Savings%20Data.xlsx

Links:

Residential Windows, Doors, and Skylights Partner Page (see "In Development" tab):

https://www.energystar.gov/products/res_windows_doors_skylights/partners