October 18, 2019

To: windows@energystar.gov

Attention: Doug Anderson, Anderson.Doug@epa.gov

Mr. Anderson,

MI Windows and Doors thanks EPA for requesting our input on the ENERGY STAR® 7.0 revisions. ENERGY STAR has served the Country well by allowing clear choices for better energy efficiency. MI Windows and Doors is one of the top producers of high-quality, energy-efficient windows and sliding patio doors in the USA and welcomes improvements to the program. Our concerns are;

**U-value and true value**

ENERGY STAR market share has stabilized and not increased in the last five (5) years. This indicates a physical and economic barrier to increasing this share. Revising the limits in version 7 will not increase the use of Estar windows but decrease the incentive to buy these more efficient products. EPA should market study this barrier and find ways to increase share without changing U-values and costs to consumers. The real value in ENERGY STAR is how many products are purchased not a simple share gain or reduction.

EPA should also seek more detail for market share in the Northern and North Central zones where heating energy demand is prominent. Our study finds that share is much lower in these zones and simply reacting to the all zones average will hurt energy savings.

**2021 IECC**

MI believes EPA should delay V7 Estar until the 2021 IECC standards are set and approved. It’s important for ENERGY STAR to be more stringent than the latest published versions of model code.

**North-Central Climate Zone considerations**

MI advises that EPA strongly consider adding IECC Zone 5 into the North Central ENERGY STAR zone. This would allow large populated areas in the revised North Central Zone to have a maximum SHGC requirement that could help reduce solar gain and thus lower air conditioning demand to help save energy.
Minimum (SHGC) for Northern Climate Zone

MI does not agree with the proposal to add a minimum solar heat gain coefficient requirement in the Northern Zone. Most new and existing homes are not designed or oriented for use of higher Solar Gain. Overheating of Southern sections of these homes will then require more energy to cool them in the warmer months. Any proposal for high gain glazing must be accompanied by a requirement for passive solar building design.

Purchase payback period recommended at 6-8 years

ENERGY STAR buyers need to have clear and solid returns on their investment on new windows and doors. Most of these consumers are requiring better paybacks on this often large investment. Resale values of homes with newly replaced windows are 75-80% and with a typical replacement package cost at $8-$15,000, the homeowner is risking up to $3000 in the decision to spend extra dollars on more energy efficiency. According to 2019 NAHB data, nearly 40% of homeowners move in the first eight (8) years of homeownership. EPA must consider these buy factors when setting payback times. Six to eight (6-8) years is our recommendation.

NAFS Certification for all products

ENERGY STAR now requires NAFS certification for air leakage. For the current Most Efficient category, EPA requires NAFS certification to obtain a minimum PG rating. It is recommended that EPA require this certification to align with building codes and other EPA programs in the version 7.0 criteria. MI believes this will add to the program credibility and the safety of consumers.

Implementation time frames

MI recommends a longer implementation period of at least 12-15 months after the release of a final specification, starting at the beginning of a calendar year. The recommended nine (9) months does not allow enough time for all that’s required to update products to meet new ENERGY STAR specifications.

Qualification program changes

FenStar establishes performance verification procedures required for maintenance of ENERGY STAR qualification. These include a problematic feature by which an entire fenestration product line can be disqualified based on a single test failure (“one-strike”). The process should be revised to require, or permit at the request of the Participant, additional testing in response to an initial failure, with concurrent consideration of the overall product testing record, before initiation of the process for disqualification is authorized. An existing alternative is currently found in verification testing of DOE qualified products such as the Appliance and Equipment Standards Program. These products are not subject to disqualification based upon a single testing failure. There, in the event of an initial testing failure, additional units are tested, and the overall result is qualified before a disqualification decision is authorized. EPA, with FenStar, should revise the fenestration testing policy by harmonizing the verification testing among EPA product categories to allow the testing of an additional fenestration units with a formulaic consideration of all test results.

MI appreciates the EPA ENERGY STAR program and its positive effect on consumer information about efficient windows and doors. We look forward to continued dialog and information sharing with EPA to improve this important program.

Ray Garries

VP Engineering and Innovation