



May 4, 2017

Doug Anderson
ENERGY STAR Residential Branch
Climate Protection Partnership Division
Environmental Protection Agency
U.S. EPA (Mail Code 6202A)
Washington, DC 20460-0001

Via Electronic Submission

Subject: Exterior and Interior Storm Windows program - the Environmental Protection Agency's (EPA) response to stakeholder comments on Draft 1 documents and Draft 2 specification and Consumer Checklist.

The Window and Door Manufacturers Association (WDMA) appreciates this opportunity to comment on the EPA's response to comments submitted by stakeholders on the Draft 1 specification, Criteria Analysis Report, Consumer Checklist, and, Draft 2 specification and Consumer Checklist for the Exterior and Interior Storm Windows program.

On the whole, we appreciate EPA's responses to the comments it received on the Draft 1 documents and believe the changes it has made accordingly have improved the program as currently proposed. However, we believe that EPA has still not provided a sufficiently thorough cost effectiveness analysis based on the proposed 0.22 emissivity criteria, and maintain that if there is to be an ENERGY STAR program for low-e storm windows, it should do more than simply distinguish between a storm window with low-e glass versus a clear glass storm window. In addition, we have further comments on the proposed Consumer Checklist.

Cost effectiveness analysis

We appreciate the additional analysis EPA performed to demonstrate the cost effectiveness of low-e storm windows with emissivity values up to 0.22. However, the methodology used in that additional analysis only further evaluated low-e storm windows installed over single-pane wood framed windows and excluded double-paned wood and metal framed windows which were included in the PNNL analysis EPA has relied upon to justify cost effectiveness. Based on comments from EPA, this was because EPA wanted to focus on comparing different glass options rather than be fully consistent with the original PNNL analysis based on the single emissivity value of 0.15, and three primary window types.

While further analysis that includes double-pane wood and metal framed windows conducted in-line with what EPA has already done may show low-e windows with emissivity values up to 0.22 are cost effective in all climate zones, we don't believe EPA should make that determination until it has conducted a further analysis that includes double-pane wood and metal framed windows, and should not finalize the criteria until it has done so.

Low-e storm windows as the basis for ENERGY STAR® qualification

As you know, WDMA's window, door, and skylight manufacturer members are charter partners in the long standing, highly successful, and highly credible ENERGY STAR® for Windows, Doors, and Skylights program. WDMA and our manufacturer members have worked hard with both EPA and the Department of Energy for nearly two decades to ensure the success and credibility of that program, and likewise, ensure the ENERGY STAR® brand does not fail in its promise to consumers.

In that regard, we maintain that if EPA is to have a meaningful ENERGY STAR® program for low-e storm windows, the criteria should be set more broadly to differentiate between low-e storm window products and not just to differentiate storm windows with low-e glass from storm windows with clear glass. While there is the additional criteria for solar transmission and air leakage, EPA has made clear throughout the development process that it believes the most appropriate specification level is one that differentiates storm windows with low-e glass from storm windows with clear glass. We do not believe an ENERGY STAR® program is needed to accomplish an understanding of those differences by consumers in the marketplace, but if there is to be one, it should help them choose a more energy-efficient low-e option by providing better differentiation between low-e storm window products available to them. At the very least, the performance information that the qualification is based on should appear on the ENERGY STAR® label. It is a disservice to consumers to force them to go the ENERGY STAR storm window Web page to search for this information when making a purchasing decision.

Certifying Products – Plant Inspections

We appreciate that EPA has provided additional details on the certification and verification process for storm windows. However, that process still has no provisions for ensuring plant inspections occur as they do for primary windows under the certification processes they follow. Plant inspections are a critical component of a certification program to ensure products meet the performance levels claimed by the manufacturer. We urge EPA to reconsider its current position on this issue and address it in the final specification.

Consumer Checklist

We appreciate the revisions EPA has made to the Consumer Checklist based on comments it received and recommend the following additional revisions (strikethrough/underline).

Under “**What else should I consider in my purchase decision**”?:

Revise as follows:

Are your current windows still in good condition? Storm windows work best when installed over working primary windows that are in good condition. If your current windows are rotted, not operating properly or damaged beyond reasonable repair, adding low-e storm windows may not be appropriate. Instead, consider replacing them with new ENERGY STAR certified windows.

Reason: Proper operation of an operable window is a critical safety factor. If primary windows are not operating properly, the addition of a storm window could further impede emergency escape or rescue in a fire or other emergency. The addition of “not operating properly,” will

help ensure consideration is given to that important aspect of a window. Regarding “reasonable,” while it’s important to avoid steering people away from “easy-to-resolve issues,” it is important to indicate that thought should also be given to whether or not a repair makes sense.

Revise as follows (or with something in-line with the proposed revision):

~~Are your current windows single-pane or double-pane with clear (not low-e) glass?~~

~~Low-e storm windows offer the most savings potential when installed over single-pane windows and double-pane windows that have only clear glass.~~

What type of window will the storm window will be installed over and what is your location? Low-e storm windows offer the most savings potential when installed over single-pane windows and double-pane metal framed windows that have only clear glass, and to a lesser extent over double-pane wood frame windows. They also offer more energy savings in the northern climate zones versus the southern climates zones as identified by ENERGY STAR® for low-e storm windows.

Reason: All of the data EPA has relied upon to justify the program clearly shows there is a substantial difference in energy savings potential based on the type of primary window the low-e storm window is being installed over, and also the climate zone where the installation is located. Given EPA’s emphasis that the primary intent of the program is to help consumers choose a more energy-efficient low-e option, this information should also be provided to them to better ensure they are making informed decisions.

Revise as follows:

Do your current windows open and close? Interior and exterior storm windows are available in both operable and fixed models. Choose a storm window that matches the operability of your current windows. This is especially important when installing storm windows in bedrooms and other places where an emergency exit (or egress) escape and rescue windows may be needed or are required by building codes in the event of a fire or other emergencies. ~~Local building codes may require egress in certain locations.~~

Reason: Better clarity that there are applicable building codes and further emphasis of the importance of emergency and escape rescue windows and not compromising them in anyway.

Thank you again for this opportunity to comment further on EPA’s proposed low-e storm window program. Please let me know if you have any questions on any of the matters discussed the comments above.

Sincerely,



Jeffrey T. Inks
Vice President, Advocacy