

Dear Environmental Protection Agency,

This letter is a response to the call for comments regarding the recent Energy Star specification framework for storm windows. In particular, the letter addresses the discussion question raised in part (III. c. iv.),

“Should EPA align ENERGY STAR qualification criteria with identified example programs?”

Among the example programs is a series of specifications designed and set forth by the Regional Technical Forum (RTF) in 2015. However, there are two specifications from the RTF which have the potential to be problematic to the industry.

Historically, there has been an issue with storm windows (a.k.a. secondary glazing systems) being installed seasonally, which leads to the problem of unrealized energy savings when not installed. Because the installation and removal of storm windows for an entire home is labor intensive, many homeowners do not reinstall the windows and the savings potential is completely lost. As a result, the RTF attempts to address this problem by requiring storm windows to be installed permanently and also requiring the storm window to be of the same operation type (i.e. single hung, slider, etc.) as the primary window.

While it is important to maintain the installation of storm windows throughout the year, it is not realistic that this requirement can be enforced. There are no manufacturers, retailers, or utility representatives who can make periodic checks of homes to ensure that the windows are still installed. This requirement is tantamount to creating a program for energy efficient programmable thermostats and requiring the use of setback temperatures. It is only possible to create a “proper use guidelines” for the homeowner in order to achieve the desired results, but enforcement is not possible.

The requirement for having the storm window’s operation type match the primary window also eliminates one of the key features used by some interior storm panel manufacturers. Frames created from silicone and/or polyurethane foam (et al) are designed to fit into the window opening without the use of screws, nails, adhesives, etc. These panels can be installed and removed in seconds, thereby eliminating the labor intensity.

I believe this feature is important to the evolution of secondary glazing systems in that it overcomes two of the greatest market barriers to adoption. The first barrier is the need for storm windows to match the exact size of the window opening, which makes it difficult for retailers to stock common sizes, resulting in the need for special orders and therefore increased costs. I was told by a national storm window manufacturer that about half of their orders are special orders and that it increases the product cost from ~\$8/ft² to ~\$12/ft². The second barrier which is overcome by the flexible frame feature is the barrier resulting from the difficulty of installing secondary glazing systems in many window openings, particularly brick and sheet rock openings. It is my hope that secondary glazing systems will become a

viable option for the commercial sector in the future, and commercial buildings will be particularly vulnerable to this barrier.

It is therefore my recommendation that Energy Star avoid an attempt to require permanent installation of interior and exterior storm windows. I would also recommend that the requirement for identical operation types not be used for any interior panels which have flexible frames that do not use screws, nails, adhesives, etc.

Many thanks for the opportunity to comment on this framework and I welcome any questions you may have.

Sincerely,

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