



March 27, 2022

Mr. Doug Anderson
Program Manager, ENERGY STAR® for Windows, Doors, and Skylights
U.S. Environmental Protection Agency (EPA)

Re: ENERGY STAR Residential Windows, Doors and Skylights Version 7.0 Draft 2
Specification

Dear Mr. Anderson,

Thank you for the opportunity to provide this response to the proposed changes for Energy Star for Windows, Doors, and Skylights Version 7.0. I am writing on behalf of AeroShield Materials, a startup developing super-insulating materials to improve the thermal performance of windows and doors. We are fully supportive of the proposed revisions to Energy Star 7.0, not only because of the energy- and climate-related benefits to homeowners and the country, but also because of Energy Star's ability to drive innovation in US window and materials manufacturing.

Since the start of my research into transparent silica aerogels for energy-efficient windows in 2017 at MIT's Device Research Laboratory, I cannot understate how much of an impact the announcement of Energy Star 7.0 has had on industry and investor interest in our material. Prior to the release of Draft 1, there was limited industry interest in our material enabling center-of-glass U-Values of 0.13-0.18 in an argon-filled double pane, due to concerns about market demand. Since the release of Energy Star 7.0, AeroShield has been invited to present at the NFRC Emerging Trends Webinar, has received investment from the Massachusetts Clean Energy Center, and has begun performance and durability testing on 14" x 20" prototypes with various industry participants.

Adopting the proposed eligibility requirements – in particular a U-Value requirement of ≤ 0.22 or lower for the Northern Region – will accelerate US R&D towards high-performance products. Furthermore, ensuring that version 7.0 is implemented in 2023 and providing timelines for future revisions will support long-term technology development and create the certainty that fosters industry-startup collaborations. AeroShield is one of many technology pathways available to industry to meet version 7.0 and beyond. Through the proposed changes, Energy Star can catalyze the interest, investment, development, and adoption of the next generation of US window technologies.

Sincerely,

A handwritten signature in black ink that reads "Elise Strobach".

Elise Strobach
Ph.D., Massachusetts Institute of Technology
CEO & Co-founder, AeroShield Materials, Inc.
strobach@aeroshield.tech