

August 9, 2022

Douglas W. Anderson  
ENERGY STAR Product Manager for Windows, Doors, and Skylights  
US Environmental Protection Agency  
1200 Pennsylvania Ave NY  
Washington, D.C., 20460

Dear Mr. Anderson,

Corning Incorporated supports Draft 3 of the ENERGY STAR® v7.0 Product Specification for Residential Windows, Doors, and Skylights and has an available solution that can help enable the next generation of window thermal performance.

Leveraging our over 30 years of experience in manufacturing and processing thin glass, Corning is prepared to supply ultra-thin glass (< 1 mm thick) in large sizes and volumes, as well as processing know-how on incorporating thin glass into an IG. The concept of a thin triple pane is well-known by the industry and Corning's glass can now enable a thin triple pane drop-in solution for an ENERGY STAR v7.0 compliant window within the footprint of a standard double pane window and is working to partner with IG manufacturers to bring this solution to market.

A thin triple IG that uses Corning glass can provide the following benefits:

- ENERGY STAR v7.0 rating for all zones
- Width & Weight:
  - Total IG width/footprint comparable to a standard double pane IG
  - No need for retooling or redesigning of sash/frame or wider lumber studs for new homes which are required by a conventional thick triple IG
  - Up to 27% of weight reduction compared to a traditional triple pane IG resulting in savings in hardware, transportation and installation labor
- Reliability:
  - Corning glass has 3x lower thermal expansion compared to soda-lime glass, making it resistant to thermal stress breakage without heat strengthening
- Optics and performance:
  - Better optical quality compared to thin heat-strengthened SLG, which can have roller wave patterns and bi-refringence issues

- Eliminates the need for room-side coating, which has concerns over condensation, scratches, and dust collection

For the above reasons, Corning strongly supports Draft 3 of the ENERGY STAR v7.0 and would also support more stringent requirements such as those from Drafts 1 and 2.

Corning Incorporated is one of the world's leading innovators in materials science. For more than 171 years, Corning has combined its unparalleled expertise in glass science, ceramic science, and optical physics with deep manufacturing and engineering capabilities to develop life-changing innovations and products. Corning has been an ENERGY STAR Partner of the Year for 9 consecutive years and has received the 'Sustained Excellence' designation for 7 consecutive years.

Sincerely,

Anis Fadul  
Director, Exploratory Markets and Technologies  
Corning Incorporated