Hi Doug,

My apologies as I am booked at that time on Thursday. My concerns for safety of these products remain as shown and cost control must not be the reason for lack of safety.

**Glass strength** - Contrary to the EPA response most if not all residential manufacturers use ASTM 1300 for glass strength. We do this for safety and calculate it for size and wind resistance strength. Please reconsider your decision based on this faulty assumption that 1300 is not widely used. Glazing thickness also effects energy performance. EPA must require its use.

**Glass tempering** - a simple checklist for consumers is not a safety protocol. The building codes are clear on the use of tempered glass and after market products must comply. EPA is endorsing these products and must require compliance.

**Drop testing** - This is a critical criteria that has been used in the industry for 40+ years. It is not safe, especially for children, to have unbalanced products endorsed by EPA that do not bear a third party drop test report. EPA must require this.
Thanks for your consideration

Ray G

For reference;

Safety / Structural

EPA received several comments regarding compliance with certain safety and structural standards for storm windows and has addressed these specific concerns below. ASTM E1300 Two commenters suggested that EPA require storm windows to comply with ASTM E1300 to ensure glass strength. One commenter also suggested that ENERGY STAR storm windows meet the glass tempering requirements in local building code. EPA Response: EPA thanks the commenters for their suggestions. EPA closely reviewed the need for ASTM E1300 certification in the proposed criteria. EPA found that E1300 is a commercial glazing strength standard and, therefore, is not widely used for residential fenestration applications. EPA is reluctant to assign product design requirements that are not widely used, do not directly affect the energy performance of the product, and may increase product costs. EPA is requiring manufacturers to provide a reference to safety requirements defined in local building codes in their installation instructions, and on the
ENERGY STAR Web site, they will encourage consumers to consider safety and local building codes when installing storm windows. 18 North American Fenestration Standard/Specification (NAFS) Two commenters suggested that EPA should require NAFS for air, water and structural certification as part of the ENERGY STAR specification for storm windows. One commenter stated that requiring NAFS was consistent with the ENERGY STAR guiding principle of maintaining or enhancing overall product performance. The commenter referenced a DOE Volume Purchase Program (VPP) for storm windows that required a minimum NAFS Performance Grade. Another commenter stated that hung storm windows could be a safety concern if they have not been tested per the safety drop testing protocol defined in NAFS. In contrast, one commenter suggested that the certification requirements be limited to energy performance, and that requiring compliance with NAFS would unnecessarily increase the cost of storm windows to homeowners without increasing the effectiveness of the program. EPA Response: EPA thanks the commenters for their suggestions and feedback. EPA closely reviewed the need for NAFS certification in the proposed criteria. The ENERGY STAR guiding principles state that energy efficiency improvements should maintain or enhance product performance; however, EPA is reluctant to assign product design requirements that are not widely used, do not directly affect the energy performance of the product, and may increase product costs. Although DOE’s VPP for storm
windows required a minimum performance grade, the program was designed for commercial applications. To date, EPA has not received evidence that full NAFS certification is necessary to maintain product performance for low emissivity storm windows. The feedback from another commenter cited above supports EPA’s conclusion that NAFS would unnecessarily increase the cost of storm windows to homeowners. **EPA acknowledges that elements of NAFS may be relevant to the energy performance of the product.** For example, in the CAR (p. 11), EPA indicated that it would accept NAFS certification (as well as other third-party certifications) for compliance with the air leakage requirement provided that such certification uses the AERC 1.2 test procedure. As with the ENERGY STAR program for windows, doors and skylights, manufacturers may choose to utilize NAFS certification to differentiate their products in the market and provide additional assurances to consumers.