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To: windows@energystar.gov
Subject: Comments on Storm Panel Framework Document

General comments:

1. EPA has proposed a program that has no backbone on energy rating procedures (earliest expected AERC ratings will be in 2017). Without ratings in place, how can the guiding principle of verified performance be met?
2. The program suggests the use of monolithic glass in the storm panel via the emittance requirements. Does this say that an effective IG storm panel can't qualify even though it would deliver similar insulating value without a low-E coating?
3. What baseline window performance is assumed to develop the "performance metrics"? If the homeowner's windows don't meet the baseline how do you communicate this, or will you push the emittance low enough to deliver "significant energy savings" over the worst case window?
4. Adding an Energy Star Storm Panel to an Energy Star Window has a small(er) impact. How is this limitation communicated?
5. There seems to be an assumed reduction in air leakage. Is it the same across all windows? Will the reduction in air leakage be "significant" for all mounting options?
6. The IGDB has fairly broad submittal tolerances, does not require re-certification or product validation from multiple production facilities. This lack of rigor seems to conflict with the effort in Energy Star Windows and the IVP.
7. Energy Star windows has a maximum SHGC in the North Central zone yet this proposal calls out a minimum transmission requirement. Where's the technical justification to overturn the current protocol?
8. If the program does set minimum solar heat gain would suggest that you strike any claims for cooling savings in the northern regions.
9. Shouldn't there be discussions on primary window condensation for interior storm products in cold climates?
10. Solar control retrofits already have a working program in NFRC – applied films. Suspect that the energy savings from films are comparable to storms. Why aren't these considered?
11. Solar control and interior storm panels seems like a poor application due to trapped heat. Shouldn't the program limit solar control storms to exterior panels only?
12. Cardinal produces a sputtered hard coat product that seemingly contradicts the low-E coating definitions on page 4 of the document. Not all sputtered coatings are "soft" nor do we know that all pyrolitic coatings are "hard". The program needs to call out a durability regimen to distinguish products acceptable for monolithic use. The same discussion applies to solar control products as well (including applied films, if added into program).

In all, it seems that there's little technical justification available until a rating and verification program is in operation. It would seem prudent to wait until the technical pieces are up in operation.

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