

RE: ES V7 Draft #1 Response from Thermo-Tech Windows

Thank you for the opportunity to comment on the proposed changes for ES V7. A lot of benefit to the fenestration industry and the consumer have come from the implementation of ES V6. As both an insulating glass (IG) certified manufacturer as well as a window and door manufacturer in the upper Midwest, we have the following comments to the proposed changes.

- 1. Large Change in the Northern Zone:** The proposed change in the Northern Zone to U-.22 is too large of a change from the current U-.27 and will require manufacturers to adopt costly product changes which are not seen as desirable and will require significant cost increases that will have to be passed on to consumers. Furthermore, those cost increase and associated lengthy payback periods are not a good value proposition and may even limit the use of ENERGY STAR rated products. Finally, most of the burden for change falls on the Northern zone and this is an unfair burden on suppliers who provide products in those areas.
- 2. Methods to achieve the proposed ratings:** Additionally, there will be challenges for manufacturers that are difficult to overcome in terms of capital investments that will be needed particularly if Triple Pane glass becomes the new standard. Lead-times for new capital are very long these days and typically in the 12-18 month range. An implementation with less than 24 months for the industry to prepare would over burden the already challenged equipment manufacturers.
- 3. Supply Chain Constraints:** We feel the proposed ES V7 changes will place difficult challenges on the supply chain that have not been fairly accounted for. If we are forced into triple pane glass, there will be an increase in demand for flat glass in general and this is in an already volume and logistically challenged industry. Recently commonly used components have seen significant cost increases over the past 8-12 months due to supply chain constraints. The cost this calendar year was not captured as part of the overall cost analysis for ES V7. For example, Krypton has seen an over 400% cost price.
- 4. Use of CPD to determine market availability:** Based on the comments during the information session, there is concern that the EPA used the NFRC Certified Product Directory (CPD) as the resource for manufacturer capabilities and for what was being produced in the market. This assumption should be taken very carefully. The number of products posted in the NFRC CPD does not necessarily correspond to the number of available products in production. Using that data makes the pool seem much larger than it really is.
- 5. Separate qualification criteria for windows and doors:** We feel that the proposal to combine window and door qualification criteria for ES V7 is not a desirable change and will force many manufactures to use additional costly changes to their door offerings. Furthermore, doors require more change than windows to achieve the same ratings and we are concerned that that will require changes that result in glass types that do not match well between windows and doors. The current method of separate criteria for windows and doors is more realistic, provides excellent energy savings and allows a homeowner to specify windows and doors to utilize glass options that provide a common aesthetic.

As a result of the proposed changes to ES V7, the increased cost to consumer and to manufacturers would result in a high drop-off in unit market share that are E-Star qualified. The costs would be too high to meet the qualifications necessary.

In closing and in response to the Proposed ES V7 Draft #1 proposal, we offer the following comments and recommendations:

1. Scale back the proposed Northern Zone qualification criteria to be no less than a U-Factor of U=0.26.
2. Provide a longer adoption timetable so that manufacturers and suppliers can make the appropriate design changes and capital investments that will still be required to achieve U=0.26.
3. Limit criteria changes to allow the use of technologies that can be adopted at a reasonable cost increase that will encourage the use of ENERGY STAR rated windows and doors.

Thank you for the opportunity to present our thoughts and comments of the proposed ES V7 Draft #1 changes. We look forward to working with you to revise and improve the qualification criteria we all use. Our hopes are that these comments, which we feel will be supported by most other NFRC members and affiliates, will be carefully reviewed, and factored into the next round of proposed change. Our objective is to encourage and promote the use of ENERGY STAR qualified windows and doors and feel like our recommendations do in fact provide that.

Regards – Todd

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