



Friday, November 18, 2011

To: windows@energystar.gov

Simonton Windows offers the following comments and recommendations regarding the (*ENERGY STAR*[®]) *Version 6.0 Product Specification Framework Document* as published by EPA in October 2011:

1. We agree with maintaining the current climate zones and corresponding map.
2. We believe that *ENERGY STAR* products should also be certified to the North American Fenestration Standard (NAFS); such certification would be beneficial to the consumer insofar as it provides additional reassurance of a quality unit, one whose performance in resisting wind-driven rain and structural loads imposed by wind has been verified by an independent third party. Note that NRC Canada feels that requiring physical performance testing is valuable, and include such testing in the Canadian *ENERGY STAR* criteria.
3. We are very concerned regarding the deployment of the new NFRC *Independent Verification Program* (IVP). It is understood that the IVP is being developed at NFRC in partnership with the EPA, but without input from major NFRC stakeholders. As a member of NFRC, we fully anticipated having the opportunity to participate in structuring this program, but have not been afforded that opportunity to-date. While the program has not been finalized, preliminary indications are that the program will include 'destructive' and 'performance' testing. The IVP should be an audit of the ratings process used to determine compliance with *ENERGY STAR* criteria—computer simulations using LBNL's *WINDOW* and *THERM*—and should never incorporate physical testing to confirm NFRC performance ratings. Such testing would add another layer of complexity to manage, both for NFRC for the manufacturers. Complexity translates into additional expense for consumers.

NFRC's certification program is well established, and has a 20-year track record of success. If the EPA has specific concerns with the program as it currently exists, we suggest communicating those concerns in an open forum of NFRC members and stakeholders, and working through the current process to revise those specific areas needing further strengthening. Use of physical testing to 'prove' accuracy of ratings directly *contradicts* one of the premises upon which NFRC was founded; computer simulations can be standardized and are repeatable, guaranteeing fair, accurate and credible ratings. Prior to the formation of NFRC, the use of values derived by physical 'hot box' testing resulted in widely varying ratings, and loss of confidence in those ratings by the consumers attempting to sort through competing claims when purchasing efficient windows.

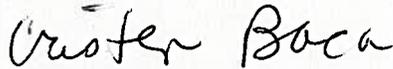
If the goal of the EPA is to ensure ratings that appear on the product's temporary label match those that appear in the NFRC *Certified Products Directory*, this goal can be realized in a much easier fashion than to implement a program incorporating physical testing and destructive testing. A simple audit of values on the NFRC temporary label and cross-check of the unit's ratings as published in the CPD would seem to accomplish the EPA's goal.

4. We agree that air infiltration plays a role in energy performance and customer satisfaction. To keep the program simple and effective, we propose placing air infiltration information on the *ENERGY STAR* label and keeping the NFRC temporary label in its current format. In addition, air infiltration should be treated as a pass-fail criterion; it is not necessary, and in fact, needlessly confusing, to include the measured air infiltration rate on *any* label. The addition of this criterion will require the NFRC CPD be modified to include a simple 'y' in a field indicating compliance with the air leakage requirement. If additional explanation regarding air infiltration is necessary, we recommend placing this explanation on the *ENERGY STAR* label and further reinforced on the *ENERGY STAR* website.
5. The new requirement regarding the inclusion of manufacturers' installation instructions is valid. That said, it is not clear what entity would be responsible for auditing these instructions, and what the criteria used to determine acceptability would include. Simonton suggests this responsibility fall on the manufacturer, and be included in the *ENERGY STAR* Agreement executed by the manufacturer.
6. One of the key methods used to determine initial set of parameters was based on parsing the NFRC Certified Products Directory (CPD) and performing 'feasibility analyses.' These analyses resulted in identifying a smaller subset of various product types that satisfy current proposed criteria. While it is understood that additional methods were used, including a review of the Ducker research information, it is not clear if the compliant subsets were further reviewed to determine the fraction that is *actually manufactured*, and if available, what the price premium related to such products and the impact on consumers would be. It is well known that a very significant percentage of products that are listed in the CPD are never manufactured.
7. Establishing a *minimum* SHGC in the Northern Zone should be required; it is well established that in this zone higher solar gain is desirable. By removing all Northern Zone SHGC criteria, a very low solar gain product (i.e., one more suited for the Southern Zone) would qualify in all other Zones. This misleads the consumer, who would be better served by allowing products to have an SHGC of *greater than* that required in the North-Central Zone (i.e., 0.40).
8. Regarding the U-factor criteria for windows in the Northern Zone; Simonton Windows has concern regarding the Northern zone's proposed U-factor range of 0.25-0.27. In order to achieve this level of performance, many units would require either the exotic dual-glazed units with 'surface 4' low emissivity coatings (this configuration is often accompanied by increased room side condensation), or triple glazing. While there are benefits associated with triple glazing, the high cost will be prohibitive to most consumers. Increased cost is of greatest concern in the new construction segment, where price points are generally lower than the repair/remodel segment. It is our

opinion that this aggressive target will result in an inflated price which will create longer payback periods and therefore lessen adoption of high-performance products. Simonton supports a more reasonable target of $U = 0.30$; such units exceed the IECC value, and would be more affordable and result in greater consumer acceptance.

9. Elimination of Northern Zone U-factor/SHGC 'pairs' does not serve the public interests; the additional complexity cited in the *Framework* would in fact be borne by the manufacturers, some of whom may be quite willing to deal with said complexity as other alternatives to supply *ENERGY STAR*-compliant products may not be available to that manufacturer.
10. Understanding EPA's goal to have the *ENERGY STAR* criteria meet or exceed code requirements cited in the 2012 IECC, we recommend the window SHGC requirement for the South-Central and Southern Zone be set at 0.25.
11. *Enforcement* of the current building energy codes and *education* relating to these codes has the potential to provide the country with significant energy savings; we urge the EPA to increase the focus in these areas.

Sincerely,



Cristen Baca

VP, New Product Development
Simonton Windows