

**To:** Richard Karney **Date:** September 11, 2008

U.S. Department of Energy 1000 Independence Avenue Washington, DC 20910

From: Eldred "Tank" Reid cc: Emily Zachery

Codes & Certifications

Steve Hopwood

treid@masonite.com

Steve Schreiber

PH: (615) 441-4240

## **Subject: ENERGY STAR® criteria revisions**

Thank you for allowing Masonite the opportunity to provide additional input regarding the upcoming ENERGY STAR revisions. As a leader in the side-hinged door industry and an ENERGY STAR Partner, we would like to submit the following comments for your consideration concerning the proposed draft side-hinged door criteria and analysis published on August 6, 2008:

- Consistent with our February comments, we support separate criteria for glazed and opaque doors. However, we believe that any differentiation based on the quantity of glazing is not in the best interest of the homeowner. These values could persuade a consumer to purchase a lesser performing product (3/4-lite) over a higher performing product (1/2-lite) simply because it is ENERGY STAR qualified. This would result is less energy savings, not more.
- If criteria is variable by percent of glazing, we request the ½-lite values be adjusted to reflect the same glazing required by the full lite values (see Table 1). Simulations have demonstrated that the glazing required to attain a 0.32 U-factor in a full lite door will result in a 0.27 U-factor in a ½-lite door of identical construction and glazing.

|                 | Phase 1  | Phase 2  |
|-----------------|----------|----------|
| Opaque          | U = 0.18 | U = 0.16 |
| 1/4 & 1/2 Lite  | U = 0.27 | U = 0.23 |
| 3/4 & Full Lite | U = 0.32 | U = 0.28 |

Table 1

• We acknowledge that there is great opportunity for improvements in efficiencies with opaque door units. Opaque entry doors constitute a large percentage of the market. Therefore, we believe a more aggressive value for Phase 1 would better differentiate energy efficient products. Of the 463 opaque door records (VT ≤ 0.00001) in the NFRC database, 237 of them already perform at 0.18 or better (Fig 1 and Fig 2). We believe this would be an appropriate value that is achievable with current technologies.

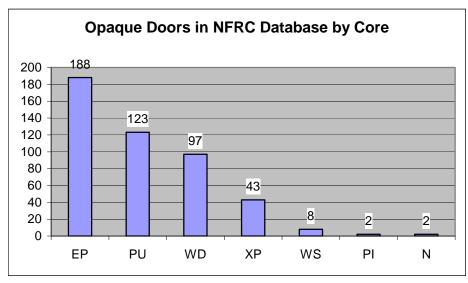


Figure 1

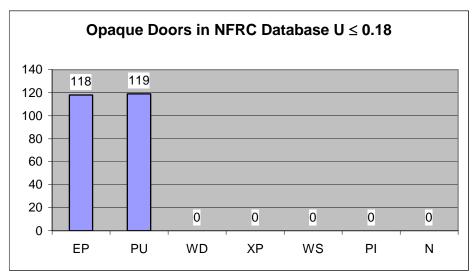


Figure 2

- We discourage the implementation of maximum SHGC. Lower U-factor requirements and the elimination of climate zones greatly reduces the importance of SHGC limitations. By their nature, products with low U-factors will also have low SHGC. The attempted "balance" is unnecessary.
- We continue to request that the interval between program criteria changes be at least four (4) years and would support a Phase 2 effective date 4 years after the Phase 1 effective date.

Please let me know if you need additional information. Thank you for your consideration.

Eldred Reid