

October 7, 2008

Richard Karney  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585

Mr. Karney,

ProVia Door thanks the Department of Energy for this opportunity to provide feedback concerning the proposed ENERGY STAR criteria. We want the ENERGY STAR program to be a success and believe government and industry cooperation is essential to achieve this goal. Please consider ProVia's feedback on the five areas addressed below regarding the proposed ENERGY STAR criteria:

1. ProVia strongly encourages the Department of Energy to extend the Phase 1 effective date to twelve months after the finalization of the criteria. Time is not only needed to make minor product improvements but also update marketing programs and literature.
2. We favor the simplification of climate zones for swinging entry doors. However, it is impractical to set a single SHGC requirement nationwide since a high SHGC is desirable in Northern climate regions and a low SHGC is desirable in Southern climate regions. We suggest eliminating SHGC requirements for entry doors. In addition, U-Factor requirements typically keep SHGC values in check since SHGC nearly always drops as U-Factor decreases.

If the DOE chooses to keep SHGC requirements as part of the ENERGY STAR criteria please consider a two-part phase-in for SHGC to coincide with the U-Factor phased approach being implemented in 2010 and 2013.

3. The  $\leq \frac{1}{2}$  lite criterion is more stringent than  $> \frac{1}{2}$  lite criterion for entry doors for Phase 1 & 2. The  $\leq \frac{1}{2}$  lite U-factor criterion must be raised to allow the two criteria to be equally stringent. A consumer will be able to purchase an ENERGY STAR qualified  $> \frac{1}{2}$  lite entry door that is less efficient than a **NON-ENERGY STAR** qualified  $\leq \frac{1}{2}$  lite when using the current proposed criteria. These criteria need corrected.

4. Air infiltration is a major source of energy loss but is not considered in the proposed ENERGY STAR criteria. The current criteria focus on insulation performance only and exclude air leakage. ProVia’s calculations determine air leakage at the maximum allowable rate per AAMA/WDMA/CSA 101/I.S.2/A440-05 near equally impacts heat transfer through an entry door compared to the proposed maximum allowable Phase 1 U-factor criteria. How can air leakage be ignored? ProVia Door encourages the DOE to make air infiltration a mandatory ENERGY STAR criterion.
5. Broad U-factor variances exist between entry doors of similar construction in the NFRC’s CPD. NFRC 100’s procedures for determining U-factors for entry doors are vague. The THERM and WINDOWS software is not optimized for entry doors, which leads to inconsistent simulations from test lab to test lab.

Figure 1 shows a comparison of fiberglass entry doors of similar construction, core fill and glass type from three entry door manufacturers listed in the NFRC CPD. U-factors range from 0.31 to 0.38 for double glazed clear full lites and from 0.12 to 0.16 for opaque doors. We believe these inconsistencies must be corrected or the Phase 1 criteria must be relaxed prior to implementing the proposed ENERGY STAR criteria.

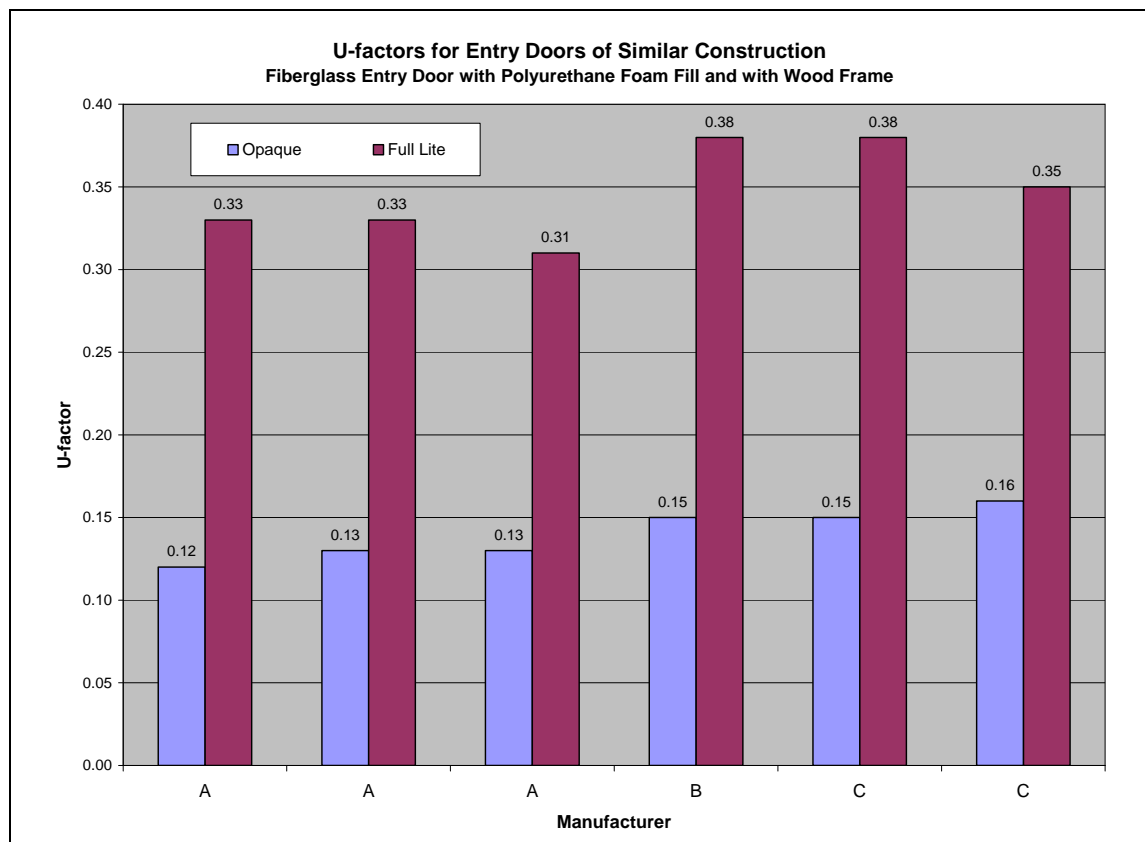


Figure 1: U-factor variance for entry doors of similar design and construction.

Thank you for allowing ProVia Door to provide feedback concerning the proposed ENERGY STAR criteria. We ask that you consider ProVia's recommendations to the proposed criteria and address the listed concerns. If you have questions or need additional information please contact me.

Sincerely,

Chris Nolt  
Test & Certification Engineer