

November 18, 2011

Mr. Doug Anderson  
ENERGY STAR Program Manager  
U.S. Environmental Protection Agency

**RE: Version 6.0 Product Specification Framework Document Feedback**

Mr. Anderson,

This letter is in response to ENERGY STAR's request for feedback on the Version 6.0 Product Specification Framework Document dated October 2011. ProVia appreciates the opportunity given by ENERGY STAR to provide industry feedback. Our responses to the applicable questions by section are below in a Q&A format.

Program Elements Considered for Adoption

Q: Is there compelling data demonstrating that any of these proposals should be reconsidered during this criteria revision?

A: ProVia agrees with ENERGY STAR's conclusions. Exceptions should not be granted for impact and high altitude products.

Q: Is there compelling data or research demonstrating that any of these proposals should not be considered (or, alternatively, should be given special attention) during the next criteria revision?

A: Structural requirements should not be considered during the next criteria revision. ENERGY STAR is a thermal performance program, not structural. The only structural performance criteria that impacts energy performance is air leakage which is already being considered.

New Additions to Program Requirements

Q: How many manufacturers are currently testing for air leakage? For those not already testing, what are the projected costs associated with adding air leakage testing? Do manufacturers anticipate a product price increase to the consumer? If so, how much?

A: ProVia currently tests for air leakage. However, we do not certify our results. ProVia's consumers would not incur a price increase if air leakage testing was required.

Q: Approximately what percent of your company's products already meet and are labeled according to the above-specified air leakage criteria? What percent of your products are tested, but not labeled? What is the cost associated with beginning to label these products?

A: 80% of ProVia's products have been tested and meet the proposed air leakage requirements. ProVia currently does not include air leakage on any of our product labels. There is a \$5,000 cost associated with beginning to include air leakage on product labels.

Q: Are there any concerns about the ability of windows, doors, or skylights to meet the above-specified air leakage criteria?

A: No.

Q: Should air leakage results be available to the public via the CPD (or the forth-coming CPD-based ENERGY STAR search feature)?

A: No, air leakage results should not be required to be available to the customer, whether through the CPD or product labels. Air leakage requirements should be a pass/fail criteria with no actual values published. Manufacturers play many games to improve air leakage numbers, a game that ProVia tries to avoid.

Q: What is a reasonable timeline for implementation of this requirement?

A: 12 months from date of announcement.

### Installation Instructions

Q: What basic elements would be most valuable in installation instructions (e.g. diagrams, flashing instructions, attributes of insulation or air sealing materials, etc.)? What are potential obstacles to requiring these items?

A: All elements are important for a quality installation. However, some manufacturers may not have installation instructions available. ProVia recommends ENERGY STAR work with industry organizations to develop a generic set of installation instruction to publish on ENERGY STAR's website.

Q: What is the best way that partners have found to share installation info with customers? Should EPA consider any alternative or supplementary methods for education consumers on proper installation of fenestration products?

A: The best way to provide installation information to the consumer is ship every product with a set of installation instructions. However, most fenestration products are installed by experienced professionals, not consumers. A good installer training program is the best method for educating installers.

### Proposed Revisions to Product Criteria – Windows

Q: What are the performance criteria for your company's most commonly sold ENERGY STAR qualified window?

A: U-factor=.30, SHGC=.29

Q: What are the potential cost impacts of the proposed criteria ranges to the consumer and to your company?

A: The proposed criteria will likely require triple glazing, a significant cost increase to the consumer.

Q: Are there specific criteria you find particularly concerning? If so, why? (Please provide data substantiating your particular concerns.)

A: No.

Q: Are there concerns about removing the Equivalent Energy Performance criteria in the Northern Zone? If so, what are they? (Please provide data substantiating your particular concerns.)

A: ProVia recommends removing the Equivalent Energy Performance criteria in the Northern Zone. These criteria typically are only beneficial on south facing walls with no shading.

Proposed Revisions to Product Criteria – Doors

Q: Do the proposed criteria levels present any challenges for sliding glass doors?

A: Potentially. U-factors in the .30 range are achievable with double glazed IGs. A .27 will likely require triple glazing.

Q: Does the proposed SHGC maximum raise any concerns?

A: No.

Q: Does the proposed SHGC maximum affect any doors disproportionately?

A: No.

Q: Given the relatively few data points in the CPD for opaque doors, does your company have additional information regarding opaque door performance that it would like to provide?

A: No, all of ProVia's data is in the CPD. The CPD includes the "base" opaque door for every swinging door glass option listed. If an opaque door is not in the CPD, the glazed version of that door is not either. The number of opaque versus glazed doors appears disproportional due to the many glazing options and glass sizes available for swinging doors.

Q: Would your company be willing to volunteer incremental cost data on its door products?

A: Yes, ProVia has provided data in the past and will continue to provide data as requested.

Additional Swinging Door Comments

Current NFRC procedures allow for a door matrix data label. The matrix label allows u-factor & SHGC data for multiple glazing options to be displayed on one label. To clarify the data applicable to a labeled door a prehanger highlights the representative data and checks the appropriate box on the ENERGY STAR label. This procedure is prone to error and misinterpretation by the consumer. ProVia recommends ENERGY STAR should only allow one set of NFRC values on the labeled ENERGY STAR door.

NFRC has created a benchmark swinging door calculation spreadsheet to determine whole product u-factors and SHGCs. ProVia recommends ENERGY STAR uses this spreadsheet's calculation method when completing its swinging door analysis.

Will ENERGY STAR require separate labeling of sidelites and transoms?

Thank you for taking time to consider ProVia's feedback. Please contact me if you have any questions or need more information.

Best Regards,



Chris Nolt  
Test & Certification Engineer  
ProVia