



December 28, 2011

As a retailer and manufacturer of windows, doors and skylights, we place a high importance on the manufacture and sale of energy efficient products for the home envelope. Since we serve such an important and unique role, we offer the following comments to the proposed product specification.

Sincerely,

Michael Chenard  
Director Corporate Sustainability  
Lowe's Companies, Inc.

**Lowe's Comments on ENERGY STAR for Windows, Doors, and Skylights  
Proposed Version 6.0 Product Specification**

**General:**

**Section IV. New Additions to Program Requirements**

**a. Air Leakage**

We understand and agree that an effective air leakage requirement can help ensure the products' thermal performance. The challenge is balancing an effective requirement in a cost-effective manner.

Air leakage testing per ASTM E283 costs \$1,750 per configuration. The challenge comes when you consider the hundreds of configurations that are possible at a pre-hang shop that offers multiple options. Testing each possible configuration would be cost-prohibitive.

Lowe's proposes a components-based model to allow substitution of different components into a qualified door system. Testing and labeling would be the responsibility of each component manufacturer. This would result in increased effectiveness in both costs to the consumer and product efficacy.

Additionally, we don't believe changing the program requirements will get to the root cause of the concern. Air leakage is highly dependent on proper installation practices by trained installers. The best performing door will be ineffective in the hands of an unqualified installer.

On the question of whether air leakage results should be made available to the public via the Certified Products Directory (CPD), we strongly believe that any communication to the consumer has to be clearly understandable and not encumbered by jargon or difficult to understand concepts. Doing so would confuse the customer as they attempt to select the right product.



Finally, with the complexity involved in retooling a manufacturing and testing process, we believe a reasonable timeline should work backward from an effective criteria date of the middle of June, 2015. That would allow adequate time to prepare and test in advance of the criteria requirement date.

#### **b. Installation Instructions**

As stated in the October 2011 framework document, "Poor installation is the most common cause of poor product performance for windows, doors, and skylights." Properly squaring a door assembly is critical to ensuring effective thermal performance.

Lowe's believes that clearly understandable step-by-step visual instructions or installation videos are the most effective ways to deliver information to both consumers and professionals.

This information is important to include along with the product in written form and online through articles and videos.

### **Section V. Proposed Revisions to Product Criteria**

#### **b. Doors**

The proposed lower Solar Heat Gain Coefficient (SHGC) is concerning since it is difficult and expensive to achieve this tightened performance in decorative glass. Accommodating those changes could add \$15-40 per configuration without appreciably improving the performance of the product.

Lowe's proposes development of different criteria specifically for decorative glass that would provide the energy savings without unduly driving up the cost of the product.