March 26, 2003

Richard H. Karney, P.E., Acting Manager
Energy Star Program
Office of Building Technology Assistance
Building Technology, State and Community Programs
1000 Independence Avenue; SW
Washington, DC  20585

Dear Mr. Karney;

This is in response to the DOE proposal “An evaluation of Alternative Qualifying Criteria for Energy Star Windows: February, 2003”

The key issue appears to us is to be the lack of uniformity between different agencies concerning the different zones on all the alternative maps proposed.

Regardless of the depicted zones on any of the maps, it appears that the only decisive factor used was thermal requirements. It is our position to support our customers including owner, dealer, contractor, architect and builder that thermal requirements alone, whether they are U-factor or SHGC are NOT a complete indication of the overall performance and safety to be able to select a window product.

We have attached a map for your review, which shows the relationship between the latest IECC2000 9 zone (7 zones for the continuous 48 states) and the ASCE 7-98 wind load map.

Our challenge to the DOE is what type of window material would be required to satisfy the minimum 100 MPH wind load requirements from Texas to Maine around coastal areas (See attached map)? A product that can meet the thermal requirements may not be able to meet the wind load, structural, coastal impact, 9000 cycle test and deflection under load to a maximum of L/175 of the span requirements. These issues and others will need to be addressed.

Refer to table 3 of page 9 of “An evaluation of alternative qualifying criteria for comparison of Three-Zone and Four Zone Alternatives for Annual Peak Reduction, which indicates that the Typical Lifetime of Windows = 40 years. Our question here is what are the life cycle testing requirements for framing materials of windows? True testing is required to identify the durability of each type of material during the “life” cycle. This is required to identify a clear direction to select the right products for the right application.
The June 21 letter also explains that we are totally committed to design and manufacture products that are energy efficient, but also are superior in long-term resistance to air and water infiltration, and structural provisions. It is very important that while addressing one issue we do not create several new issues. The consumer is entitled to expect a window that performs properly in all respects.

Impact on U.S. Economy and Aluminum Window Industry

By my count, adopting the Energy Star 2003 proposal eliminates over 1,600 aluminum window products from the NFRC Directory and eliminates over 50 aluminum window manufacturers. The Energy Star 2003 proposal will eliminate thousands of jobs. This will have a very significant and negative impact on the economy in states where aluminum manufacturers and their suppliers have been in business for decades. In my opinion, this is restraining trade and forcing fewer choices on consumers who also must then endure life safety, environmental and long-term durability concerns that are inherent with vinyl windows.

TRACO’s recommendation is to use The March 2002 DOE scheme (3 climate zones) with suggested modification that the AEC has proposed,

<table>
<thead>
<tr>
<th>Climate Zone</th>
<th>Current Energy Star</th>
<th>Proposed Energy Star</th>
<th>AEC/TRACO Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>0.75/0.40</td>
<td>0.65/0.40</td>
<td>0.65/0.35</td>
</tr>
<tr>
<td>Central</td>
<td>0.40/0.35</td>
<td>0.40/0.40</td>
<td>0.45/0.35</td>
</tr>
<tr>
<td>North</td>
<td>0.35/any</td>
<td>0.35/any</td>
<td>0.42/0.50</td>
</tr>
</tbody>
</table>

Very truly yours,

Robert P. Randall
President and CEO

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