Thermal Simulation Report

Simulation Date: 02/20/2014
Client: Panda Windows and Doors
Contact: Alex Teran
Product Type: Sliding Glass Door
Model ID: TS 19 - Testing

The Following NFRC Procedures were Followed:

NFRC-100-2010
NFRC-200-2010
NFRC-300-2010
NFRC-500-2010

Simulated by:

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Note: This report is based on approved practices, methods and values which are established by National Fenestration Rating Council (NFRC). The results shown are for informational purposes only and not to be used for product certification or labeling. Actual product testing results may vary from the values shown in the simulation.
**Summary Report**

**Panda Windows and Doors**

**Simulator:** Stephen Aki  
**Date:** 2/20/2014  
**System:** Sliding Door Simulation 2 m x 2 m with PA Interlock

<table>
<thead>
<tr>
<th>IG #</th>
<th>Spacer Type</th>
<th>Spacer Size</th>
<th>Primary Seal</th>
<th>Secondary Seal</th>
<th>U-Factor</th>
<th>U-Factor</th>
<th>SHGC</th>
<th>CR Value</th>
<th>Sightline Temp.</th>
<th>Top of Spacer to Edge of Glass (inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IG-1</td>
<td>TGI Rigid 1/2&quot;</td>
<td>0.5000</td>
<td>PIB</td>
<td>Silicone</td>
<td>0.448</td>
<td>2.543</td>
<td>0.205</td>
<td>40</td>
<td>39.6</td>
<td>0.4252</td>
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<tr>
<td>IG-2</td>
<td>TGI Rigid 1/2&quot;</td>
<td>0.5000</td>
<td>PIB</td>
<td>Silicone</td>
<td>0.435</td>
<td>2.472</td>
<td>0.263</td>
<td>40.7</td>
<td>41.0</td>
<td>0.4252</td>
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<tr>
<td>IG-3</td>
<td>TGI Rigid 1/2&quot;</td>
<td>0.5000</td>
<td>PIB</td>
<td>Silicone</td>
<td>0.400</td>
<td>2.269</td>
<td>0.263</td>
<td>39.2</td>
<td>40.2</td>
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</tr>
<tr>
<td>IG-4</td>
<td>TGI Rigid 3/4&quot;</td>
<td>0.7500</td>
<td>PIB</td>
<td>Silicone</td>
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<td>0.256</td>
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<td>41.6</td>
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</tbody>
</table>

**Spacer Height**

<table>
<thead>
<tr>
<th>IG #</th>
<th>Spacer Type</th>
<th>Spacer Size</th>
<th>Primary Seal</th>
<th>Secondary Seal</th>
<th>U-Factor</th>
<th>U-Factor</th>
<th>SHGC</th>
<th>CR Value</th>
<th>Sightline Temp.</th>
<th>Top of Spacer to Edge of Glass (inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IG-1</td>
<td>TGI Rigid 1/2&quot;</td>
<td>0.5000</td>
<td>PIB</td>
<td>Silicone</td>
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<td>39.6</td>
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<td>IG-2</td>
<td>TGI Rigid 1/2&quot;</td>
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<td>PIB</td>
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<td>0.429</td>
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<td>0.263</td>
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<td>40.2</td>
<td>0.4252</td>
</tr>
<tr>
<td>IG-3</td>
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<td>PIB</td>
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<td>PIB</td>
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<td>0.260</td>
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</tr>
</tbody>
</table>

Notes:

- System performance with new glass type increased to a .327 u-value.
- System: 1
  Interior Sill 3082 / 1 / 5439 (With 100% Air)
- Interior Sill 6362 / 9 / 30030 / 9 / 5011
- Interior Sill 30820/ 6 / 5439 (With 95% Argon)
Meeting Rail 3082 / 1 / 5439 (With 100% Air)

Meeting Rail 3082 / 6 / 5439 (With 95% Argon)

Interior Sill 6362 / 9 / 30030 / 9 / 5011
System 2
Interior Sill with PA Interlock 3082/1/5439 (With 100% Air)
Interior Sill with PA Interlock 30820/6/5439 (With 95% Argon)
Meeting Rail with PA Interlock 3082/1/5439 (With 100% Air)
Meeting Rail with PA Interlock 30820/6/5439 (With 95% Argon)