Less green. For less green.

University of Kansas Medical Center Health Education Building | Kansas City, Kansas | Shown: Solarban® 72 Starphire® glass

*Like Solarban® Starphire® glass, Solarban® Acuity™ glass delivers a distinctive, highly transparent low-iron aesthetic.
Find affordable clarity in the Solarban® Acuity™ low-e glass series.

The right glass can be the centerpiece of your design. Combining Vitro’s new Acuity™ low-iron glass—which is 60 percent less green than ordinary clear glass—with any Solarban® low-e coating, can provide the truly clear look you want with the outstanding energy and code performance you need.

An Engineered System

Leveraging 30 years of Starphire Ultra-Clear® glass manufacturing experience, Acuity™ low-iron glass is specifically engineered for vision glazings, both as a substrate for Solarban® coatings and for all lites in an insulating glass unit (IGU) or laminated configuration. This combination provides excellent transparency and clarity at an affordable upcharge from coated clear glass.

Where to Use Solarban® Acuity™ Glass

Solarban® Acuity™ glass is optimized for vision glazings or any exterior application where excellent clarity and low-e performance are needed (similar to Solarban® Starphire® glasses, shown on cover and below).

Consider Solarban® Acuity™ glass for the following applications:

- Office buildings and institutions
- Hotels
- Schools
- Luxury condos & mixed-use
- Entrances & retail storefronts

Solarban® Acuity™ glass also is ideal for distinctive exterior applications, such as atriums, skylights and spandrel glass.

Hoyt Street Yards No. 2 | Portland, Oregon - USA | Architect: Bora Vitro Certified™ Fabricator: Vitrum Industries Ltd.

California Academy of Sciences | San Francisco, California - USA
Architects: Renzo Piano Building Workshop and Stantec Architecture
Optimizing Cost, Clarity & Performance

Cost Considerations

Vitro market research indicates the installed cost of a standard glass and metal curtainwall averages $90 per square foot nationally. Upgrading a low-e coated clear IGU to a Solarban® Acuity™ glass unit typically will increase the total installed curtainwall cost by only $1 to $2 per square foot.

This optimization of cost, clarity and performance allows you to make Solarban® Acuity™ glass the centerpiece of your façade design.

Design Considerations

Acuity™ low-iron glass is 60 percent less green than standard “clear” glass. Solarban® Acuity™ glass achieves excellent clarity and 1 to 3 percent higher visible light transmittance (VLT) than coated clear glass.

For the ultimate in transparent low-iron glass, Starphire® glass is 87 percent less green and also can be coated with Solarban® low-e coatings.

Fabrication & Availability

Available in 6, 8 and 10 millimeter thicknesses, Solarban® Acuity™ glasses are stocked at all Vitro facilities for immediate shipment with the same lead time as all Solarban® glass products. Acuity™ glass also can be cut, drilled, heat-treated, laminated and bent, just like any low-iron glass or glass substrate.

All Solarban® solar control low-e glasses are available through the Vitro Certified™ Network.

For more information about Solarban® Acuity™ low-iron glass and other architectural glasses by Vitro Glass, visit vitroglazings.com/acuity, or call 1-855-VTRO-GLS (887-6457).
Supporting Sustainable Design

Vitro Architectural Glass provides abundant opportunities for architects and building owners to realize their sustainability objectives.

Energy Use & Operating Cost Reduction: High-performance glasses by Vitro are engineered to facilitate downsized mechanical equipment costs, leading to reduced long-term energy costs. For glass comparison and configuration tools, visit tools.vitroglazings.com.

Sustainability Documentation: Vitro Architectural Glass is the first U.S. float glass manufacturer to have its entire selection of products recognized by the Cradle to Cradle Certified™ program, and the first in North America to publish third-party verified EPDs for its Flat Glass and Processed Glass products.

For additional credit opportunities and supporting documentation, visit vitroglazings.com/LEED

<table>
<thead>
<tr>
<th>Possible Points</th>
<th>LEED Credit</th>
<th>Solarban® Acuity™ Feature</th>
<th>Path/Option Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Energy &amp; Atmosphere (EA) Optimizes Energy Performance</td>
<td>Excellent SHGC, U-value and Tvis performance</td>
<td>Whole Building Energy Simulation (Option 1) or Prescriptive Compliance: ASHRAE Advanced Energy Design Guide (Option 2)</td>
</tr>
<tr>
<td>5</td>
<td>Innovation (IN) Innovation in Design</td>
<td>Exceeds minimum performance mandated by local energy codes</td>
<td>Innovation (Option 1), Pilot (Option 2) and Exemplary Performance (Option 3)</td>
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<tr>
<td>3</td>
<td>Indoor Environmental Quality (EQ) Daylight</td>
<td>Exhibits high light transmission</td>
<td>Simulation: Spatial Daylight Autonomy and Annual Sunlight Exposure (Option 1), Simulation: Illuminance Calculations (Option 2) or Measurement (Option 3)</td>
</tr>
</tbody>
</table>

Performance Data for Solarban® Acuity™ Low-E Low-Iron Glass

<table>
<thead>
<tr>
<th>Glass Type</th>
<th>Visible Light Transmittance (VLT) %</th>
<th>Visible Light Reflectance</th>
<th>(Btu/hr•ft²•˚F)</th>
<th>NFRC U-Value</th>
<th>Solar Heat Gain Coefficient (SHGC)</th>
<th>Light to Solar Gain (LSG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor Lite: Coating if Any + Indoor Lite: Coating if Any (Surface) Glass</td>
<td>Exterior %</td>
<td>Interior %</td>
<td>Winter Nighttime</td>
<td>Winter Argon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOLARBAN® 60 Solar Control Low-E Glass</td>
<td>73%</td>
<td>11%</td>
<td>12%</td>
<td>0.29</td>
<td>0.24</td>
<td>0.41</td>
</tr>
<tr>
<td>SOLARBAN® 67 Solar Control Low-E Glass</td>
<td>56%</td>
<td>19%</td>
<td>16%</td>
<td>0.29</td>
<td>0.24</td>
<td>0.30</td>
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<tr>
<td>SOLARBAN® 72 Solar Control Low-E Glass</td>
<td>66%</td>
<td>13%</td>
<td>14%</td>
<td>0.28</td>
<td>0.24</td>
<td>0.28</td>
</tr>
<tr>
<td>SOLARBAN® 90 Solar Control Low-E Glass</td>
<td>53%</td>
<td>12%</td>
<td>19%</td>
<td>0.29</td>
<td>0.24</td>
<td>0.23</td>
</tr>
<tr>
<td>SOLARBAN® R100 Solar Control Low-E Glass</td>
<td>43%</td>
<td>33%</td>
<td>13%</td>
<td>0.29</td>
<td>0.25</td>
<td>0.23</td>
</tr>
</tbody>
</table>

All performance data calculated using LBNL Window 7.3 software and represents center of glass performance data. For detailed information on the methodologies used to calculate the aesthetic and performance values in this table, please visit vitroglazings.com or request our Architectural Glass Catalog.

Additional Resources

To obtain samples of any Vitro Glass product, call 1-855-VTRO-GLS (877-6457) or visit samples.vitroglazings.com. For videos, design insights and technical education, visit the Vitro Glass Education Center at glassed.vitroglazings.com. For glass comparison and configuration tools, visit tools.vitroglazings.com.