

Less green. For less green.



20 MASS Ave. | Washington, D.C. | Solarban® 72 Acuity® Glass | Architect: Leo A. Daly | Vitro Certified® Fabricator: Press Glass  
Glazing Contractor: Pioneer Cladding & Glazing Systems | General Contractor: DPR Construction | Photographer: Jim Cunningham



# Low-E. Low Iron. High Clarity. At an Affordable Cost.

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The right glass can be the focal point of your design. Combining the superior color accuracy of *Acuity*<sup>®</sup> low-iron glass with the peak energy performance of Vitro's *Solarban*<sup>®</sup> family of glass products creates a visually striking and high performing façade. *Acuity*<sup>®</sup> glass is available with the full spectrum of *Solarban*<sup>®</sup> solar control, low-e coatings.

## Your Design's Focal Point

Developed based on 30 years of experience manufacturing *Starphire Ultra-Clear*<sup>®</sup> glass, *Acuity*<sup>®</sup> glass is produced utilizing proprietary low-iron materials and processes, specifically designed for exterior vision glazing applications. *Acuity*<sup>®</sup> low-iron glass serves as a substrate for *Solarban*<sup>®</sup> low-e coatings and is **60% less green** than standard "clear" glass. It is suitable for all lites in an insulating glass unit (IGU) or laminated configurations.

## Where to Use *Solarban*<sup>®</sup> *Acuity*<sup>®</sup> Glass

The award-winning *Solarban*<sup>®</sup> *Acuity*<sup>®</sup> glass is optimized for vision glazings or any exterior application where excellent clarity and low-e performance are needed.

Consider *Solarban*<sup>®</sup> *Acuity*<sup>®</sup> glass for the following applications:

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

*Solarban*<sup>®</sup> *Acuity*<sup>®</sup> glass also is ideal for distinctive exterior applications, such as atriums, skylights and spandrel glass. For configurations that require exposed edges, such as interior applications, Vitro recommends *Starphire Ultra-Clear*<sup>®</sup> low-iron glass, known for its distinctive azure blue edge and exceptional clarity. *Starphire*<sup>®</sup> glass is **87% less green** than standard "clear" glass and can also be paired with *Solarban*<sup>®</sup> low-e coatings.



Parkland Health and Hospital System Moody Outpatient Center | Dallas, Texas | *Solarban*<sup>®</sup> 90 *Acuity*<sup>®</sup> Glass  
Architect: HKS | Vitro Certified<sup>®</sup> Fabricator: Hartung Glass Industries (formerly NWI) | Glazing Contractor: IWR North America  
Photographer: Tom Harris Architectural Photography

# Optimizing Cost, Clarity & Performance

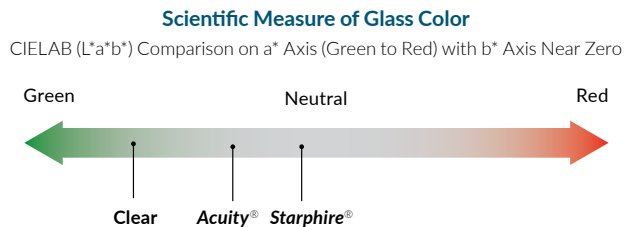
## Cost Considerations

*Solarban® Acuity®* glass provides exceptional performance and optimal aesthetics at a fraction of the total installed façade cost, allowing you to meet your project's needs while adhering to budgetary constraints.

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% less green than standard "clear" glass. *Solarban® Acuity®* glass achieves excellent clarity and 1% to 3% higher visible light transmittance (VLT) than coated clear glass.



## Fabrication & Availability

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

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

APPEARANCE

**60%**  
Less Green  
than Clear Glass\*

\*Comparison of uncoated substrates

VLT

**43-73%**  
High VLT enables  
daylighting  
and views



SAFE Credit Union Performing Arts Center | Sacramento, California | *Solarban® 90 Acuity®* Glass  
Architect: DLR Group | *Vitro Certified®* Fabricator: Glassfab Tempering Services | Glazing Contractor: Bagatelos  
Photographer: Tom Kessler

## 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](https://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*<sup>®</sup> 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](https://vitroglazings.com/LEED)

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

## Performance Data for Solarban<sup>®</sup> Acuity<sup>®</sup> Low-E Low-Iron Glass

Insulating Glass Unit (IGU) Performance Comparisons   1-inch (25 mm) units with 1/2-inch (13 mm) airspace and two 1/4-inch (6 mm) lites								
Glass Type		Visible Light Transmittance (VLT) %	Visible Light Reflectance		(Btu/hr•ft <sup>2</sup> •°F) NFRC U-Value		Solar Heat Gain Coefficient (SHGC)	Color Rendering Index (CRI)
Outdoor Lite: Coating if Any (Surface) Glass	Indoor Lite: Coating if Any (Surface) Glass		Exterior %	Interior %	Winter Nighttime	Winter Argon		
Coated								
<b>SOLARBAN<sup>®</sup> 60 Solar Control Low-e Glass</b>								
SOLARBAN 60 (2) ACUITY + ACUITY		73%	11%	12%	0.29	0.24	0.41	97
<b>SOLARBAN<sup>®</sup> 65 Solar Control Low-e Glass</b>								
SOLARBAN 65 (2) ACUITY + ACUITY		72%	15%	15%	0.29	0.24	0.36	98
<b>SOLARBAN<sup>®</sup> R67 Solar Control Low-e Glass</b>								
SOLARBAN R67 (2) ACUITY + ACUITY		56%	19%	16%	0.29	0.24	0.30	94
<b>SOLARBAN<sup>®</sup> 72 Solar Control Low-e Glass</b>								
SOLARBAN 72 (2) ACUITY + ACUITY		67%	13%	14%	0.28	0.24	0.28	94
<b>SOLARBAN<sup>®</sup> 90 Solar Control Low-e Glass</b>								
SOLARBAN 90 (2) ACUITY + ACUITY		53%	12%	19%	0.29	0.24	0.23	94
<b>SOLARBAN<sup>®</sup> R77 Neutral-Reflective Low-e Glass</b>								
SOLARBAN R77 (2) ACUITY + ACUITY		49%	26%	16%	0.29	0.24	0.25	95
<b>SOLARBAN<sup>®</sup> R100 Neutral-Reflective Low-e Glass</b>								
SOLARBAN R100 (2) ACUITY + ACUITY		43%	33%	13%	0.29	0.25	0.23	92

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](https://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](https://samples.vitroglazings.com). For videos, design insights and technical education, visit the Vitro Glass Education Center at [glossed.vitroglazings.com](https://glossed.vitroglazings.com). For glass comparison and configuration tools, visit [tools.vitroglazings.com](https://tools.vitroglazings.com).

