

Product Data Sheet



Aesthetic Description

Solarban[®] 72 glass is a triple-silver-coated solar control low-e glass designed specifically for Vitro low-iron glass substrates, *Starphire Ultra-Clear*[®] glass and *Acuity*[™] low-iron glass.

Solarban[®] 72 glass provides high visible light transmittance (VLT), exceptional clarity and superior solar control performance. The exceptionally clear aesthetic makes it the ideal choice for both interior and exterior applications, such as vision and spandrel glass.

Expanding the Range of Performance Options

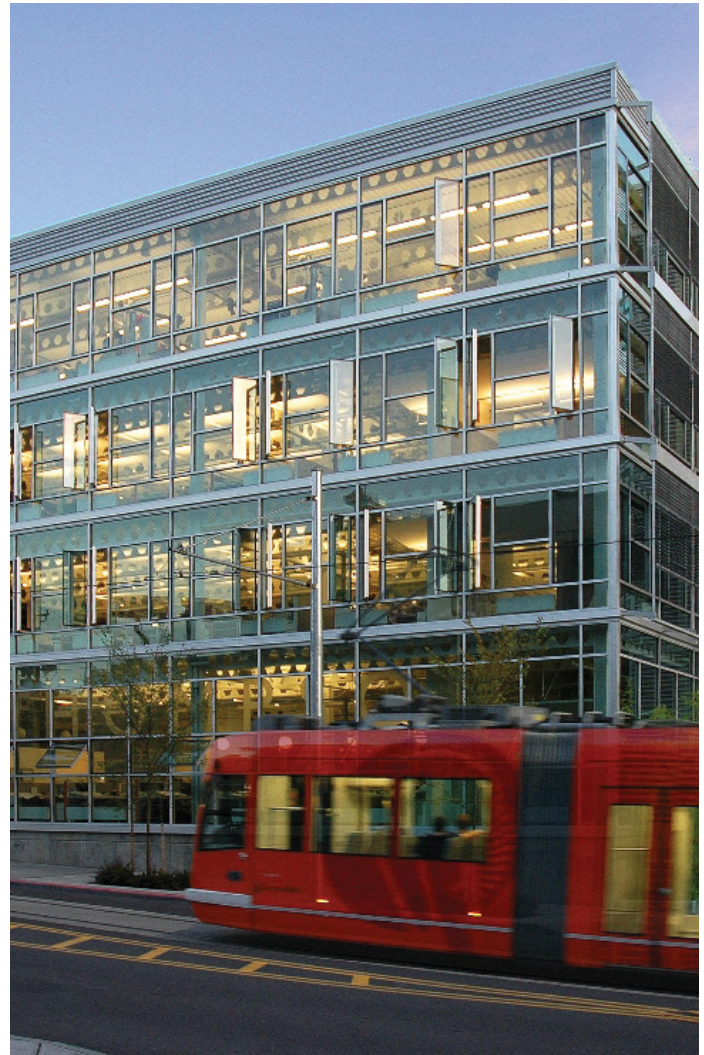
In a standard one-inch insulating glass unit, *Solarban*[®] 72 *Starphire*[®] glass boasts a Visible Light Transmittance (VLT) approximating that of *Solarban*[®] 60 on *Starphire*[®] glass, yet it offers 25 percent better solar control. *Solarban*[®] 72 *Starphire*[®] glass also has solar control characteristics that are similar to those of *Solarban*[®] 70 glass (formerly *Solarban*[®] 70XL glass), the industry's first triple-silver-coated, solar control, low-e glass, but it transmits 4 percent more visible light.

The color-neutral aesthetic of the *Solarban*[®] 72 coating on *Acuity*[™] low-iron glass delivers excellent solar control and light transmittance to help strike the right balance between form and function. For low-e applications where conventional clear glass might typically be considered, *Solarban*[®] 72 *Acuity*[™] glass provides superior clarity for a modest cost increase.

In a standard 1-inch IGU, *Solarban*[®] 72 *Acuity*[™] glass delivers a VLT of 67 percent, which surpasses that of *Solarban*[®] 70 glass, as well as a solar heat gain coefficient (SHGC) of 0.28, which is approximately equal to that of *Solarban*[®] 70 glass.

Glass	VLT %	SHGC	LSG Ratio
Clear Glass / Clear	79%	0.70	1.13
<i>Solarban</i> [®] 70 (2) / Clear	64%	0.27	2.37
<i>Solarban</i> [®] 72 (2) / <i>Starphire</i> [®]	68%	0.28	2.43
<i>Solarban</i> [®] 72 (2) + <i>Acuity</i> [™]	67%	0.28	2.39

The table above shows the VLT and Solar Heat Gain Coefficient (SHGC) for *Solarban*[®] 72 glass on *Starphire*[®] glass and on *Acuity*[™] glass, as well as that of *Solarban*[®] 70 glass and conventional clear glass.



New *Solarban*[®] 72 glass is comparable to *Solarban*[®] 70 glass, pictured here on AIA COTE award winner, The Terry Thomas in Seattle, with significantly better visible light transmittance and similar solar control.

Engineered for Low-Iron Glass

To maximize clarity and visible light transmittance, *Solarban*[®] 72 glass insulating glass units feature one lite with an advanced triple-silver coating engineered for use on a *Starphire*[®] or *Acuity*[™] glass substrate and one lite of uncoated *Starphire*[®] or *Acuity*[™] glass.

Thanks to a proprietary low-iron formulation developed by Vitro Architectural Glass (formerly PPG glass), *Starphire*[®] glass has been the most transparent architectural glass in the industry since it was introduced more than 20 years ago. Introduced in 2018, *Acuity*[™] low-iron glass is an affordable low-iron solution offering vivid views with no green cast for applications where conventional clear glass might typically be considered as a glass substrate.

Solarban® 72 Glass

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. Visit tools.vitroglazings.com for glass comparison and configuration tools for analyzing glass products.

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 Environmental Product Declarations (EPDs) for its Flat Glass and Processed Glass products.

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

LEED® Credit Opportunities			
Possible Points	LEED Credit	Solarban® 72 Feature	Path/Option Satisfied
18	Energy & Atmosphere (EA) 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	Innovation (IN) Innovation in Design	Exceeds minimum performance mandated by local energy codes	Innovation (Option 1), Pilot (Option 2) and Exemplary Performance (Option 3)
3	Indoor Environmental Quality (EQ) Daylight	Exhibits high light transmission	Simulation: Spatial Daylight Autonomy and Annual Sunlight Exposure (Option 1), Simulation: Illuminance Calculations (Option 2) or Measurement (Option 3)
2	Materials & Resources (MR) Building Product Disclosure & Optimization – Material Ingredients	Cradle to Cradle Certified™	Material Ingredient Reporting (Option 1) or Product Manufacturer Supply Chain Optimization (Option 3)
2	Materials & Resources (MR) Building Product Disclosure & Optimization – Environmental Product Declarations	Environmental Product Declaration (EPD)	Environmental Product Declarations (EPD) (Option 1)

Insulating Glass Unit Performance Comparisons 1-inch (25mm) units with 1/2-inch (13mm) airspace and two 1/4-inch (6mm) lites							
Glass Type	Visible Light Transmittance (VLT) %	Visible Light Reflectance		(BTU/hr²ft²°F) NFRC U-Value		Solar Heat Gain Coefficient (SHGC)	Light to Solar Gain (LSG)
		Exterior %	Interior %	Winter Nighttime	Winter Argon		
Solarban® 72 Solar Control Low-E Glass							
Solarban® 72 (2) Starphire® + Starphire®*	68	13	14	0.28	0.24	0.28	2.43
Solarban® 72 (2) Acuity™ + Acuity™	67	13	14	0.29	0.24	0.28	2.39

*Data based on using Starphire® glass for both interior and exterior lites.

Simulations were ran using LBNL Window 6.3 software with version 61.0 of the International Glazing Database 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.

Simulation provided is not NHRC approved.

Fabrication and Availability

Solarban® 72 glass is available through the *Vitro Certified™* Network. *Vitro Certified™* Fabricators can meet tight construction deadlines and accelerate the delivery of replacement glass before, during and after construction. Solarban® 72 glass must be heat-treated and is available for laminated, heat strengthened and tempered applications.

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 glossed.vitroglazings.com. For glass comparison and configuration tools, visit tools.vitroglazings.com.

For more information about Solarban® 72 low-e-glass and other *Cradle to Cradle Certified™* architectural glasses by Vitro Glass, visit vitroglazings.com, or call **1-855-VTRO-GLS (887-6457)**.

