

# 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

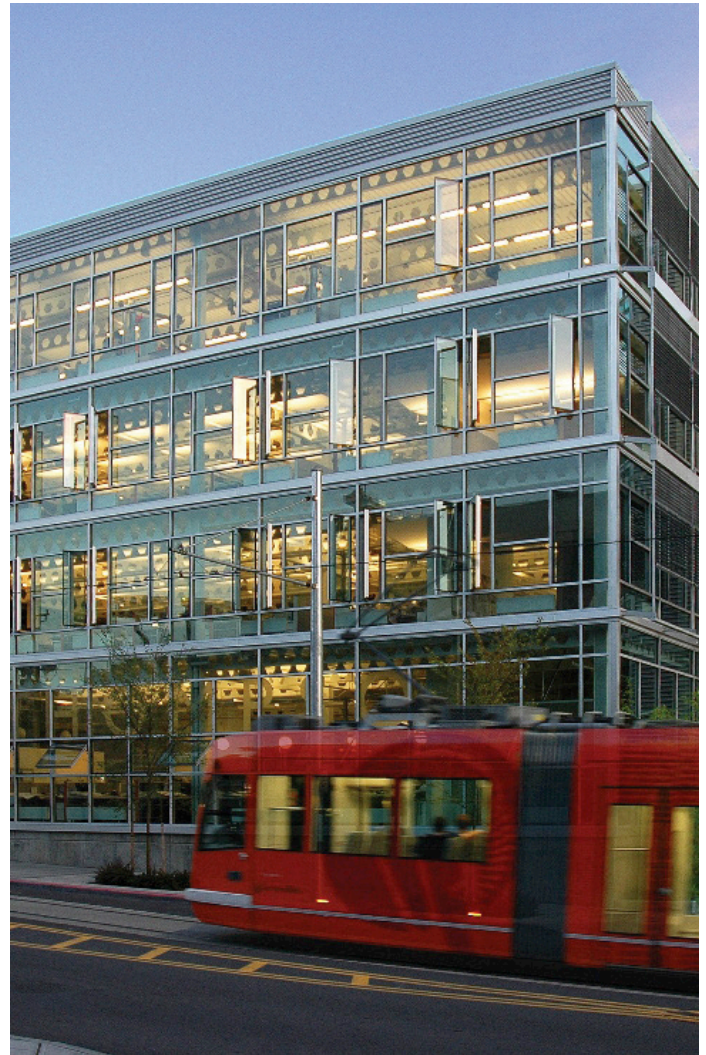
In a standard one-inch insulating glass unit, *Solarban*® 72 *Starphire*® glass boasts a Visible Light Transmittance (VLT) approximating that of *Solarban*® 60 on *Starphire*® glass, yet it offers 25 percent better solar control. *Solarban*® 72 *Starphire*® glass also has solar control characteristics that are similar to those of *Solarban*® 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*® 70XL glass, as well as a solar heat gain coefficient (SHGC) of 0.28, which is approximately equal to that of *Solarban*® 70XL glass.

| Glass   | VLT | SHGC | LSG Ratio |
|---|-----|------|-----------|
| Clear Glass / Clear                           | 79% | 0.70 | 1.13      |
| <i>Solarban</i> ® 70XL (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*® 70XL glass and conventional clear glass.



New *Solarban*® 72 glass is comparable to *Solarban*® 70XL 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](http://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 EPDs for its Flat Glass and Processed Glass products.

For additional credit opportunities and supporting documentation, visit [vitroglazings.com/LEED](http://vitroglazings.com/LEED)

| LEED Credit Opportunities |  |  |  |
|---------------------------|--|--|--|
| Possible Points           | LEED Credit  | Solarban® 72 Feature                                       | Path/Option Satisfied  |
| 18                        | <b>Energy &amp; Atmosphere (EA)</b><br>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><br>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><br>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                         | <b>Materials &amp; Resources (MR)</b><br>Building Product Disclosure & Optimization – Material Ingredients               | Cradle to Cradle Certified™                                | Material Ingredient Reporting (Option 1) or Product Manufacturer Supply Chain Optimization (Option 3)  |
| 2                         | <b>Materials &amp; Resources (MR)</b><br>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/hr <sup>2</sup> ft <sup>20</sup> F)<br>NFRC U-Value |              | Solar Heat Gain Coefficient (SHGC) | Light to Solar Gain (LSG) |
|  |                                   | Exterior %                | Interior % | Winter Nighttime   | Winter Argon |                                    |                           |
| <b>Solarban® 72 Solar Control Low-E Glass</b>  |                                   |                           |            |  |              |                                    |                           |
| 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](http://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](http://samples.vitroglazings.com). For videos, design insights and technical education, visit the Vitro Glass Education Center at [glossed.vitroglazings.com](http://glossed.vitroglazings.com). For glass comparison and configuration tools, visit [tools.vitroglazings.com](http://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](http://vitroglazings.com), or call **1-855-VTRO-GLS (887-6457)**.

