

Product Data Sheet



True Color Clarity and Solar Control in One Brilliant, Affordable Package

What happens when you combine two of the most popular architectural glass products? The answer is *Solarban® 60 Starphire®*, a new standard product from Vitro Architectural Glass (formerly PPG Glass) that offers the unequalled transparency of *Starphire®* glass together with the proven solar control of the *Solarban® 60* solar control low-e coating in one competitively priced package.

Superior Energy Performance

Solarban® 60 Starphire® glass allows ultra-clear glass to be used for vision glass, skylights, atriums, storefronts and entryways without sacrificing energy performance. This new product, used in an insulating glass unit, provides high visible light transmittance (74%) while offering superior solar control (0.41 SHGC).

Clearer than Clear

Used in a one-inch insulating glass unit with a *Starphire®* glass inboard lite *Solarban® 60 Starphire®* glass is visibly clearer and has a higher light transmittance than a conventional clear/clear low-e coated insulating unit. *Solarban® 60 Starphire®* glass can also be used in laminated glass applications and is ideal for safety, security and noise-reducing glazings. The unique clarity of *Solarban® 60 Starphire®* glass, when laminated with multiple layers of *Starphire® Ultra-Clear* glass, can dramatically reduce the greenish visual effect common with laminated clear glass.

Competitive Pricing

Thanks to recent manufacturing advances, *Solarban® 60 Starphire®* is affordable, too. Vitro manufacturing cost advances have moved *Starphire®* out of its niche as a premium-priced specialty product and made it price-competitive with other frequently specified architectural glasses. With its energy-saving characteristics and competitive pricing, *Solarban® 60 Starphire®* glass has become an affordable and practical choice for virtually any standard architectural glass application, from street-level storefronts to soaring office building facades.

Fabrication and Availability

Solarban® 60 glass is available exclusively 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® 60* glass is manufactured using the sputter-coating process and is available for annealed, heat-strengthened and tempered applications.



Comcast Center

Location: Philadelphia, PA | Product: *Solarban® 60* Glass | Architect: Robert Stern Architects LLP | Glass Contractor: Enclos | Glass Fabricator: JE Berkowitz, LP

The clarity and environmental performance of *Solarban® 60 Starphire®* glass, fabricated by J.E. Berkowitz, LP, for glazing contractor, Enclos, and Robert Stern Architects LLP, are highlighted in the atrium, entryways, inset walls and crown of the soaring 62-story Comcast Tower in Philadelphia.



Solarban® 60 Starphire® Ultra-Clear Glass

Additional Resources

Solarban® 60 glass is *Cradle to Cradle Certified™*. For more information or to obtain samples of any Vitro Glass product, call 1-855-VTRO-GLS (887-6457) or visit vitroglazings.com.

Vitro Architectural Glass is the first U.S. float glass manufacturer to have its products recognized by the *Cradle to Cradle Certified™* program, and offers more C2C-certified architectural glasses than any other float glass manufacturer.



Solarban® 60 Starphire® Glass Performance Comparison with Solarban® 60 on Clear Glass

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 ² ft ² °F) NFRC U-Value		Solar Heat Gain Coefficient (SHGC)	Light to Solar Gain (LSG)	
Outdoor Lite: Coating if Any (Surface) Glass	Indoor Lite: Coating if Any (Surface) Glass		Exterior %	Interior %	Winter Nighttime	Winter Argon			
Solarban® 60 Solar Control Low-E Glass									
Solarban® 60 (2) Clear + Clear		70	11	12	0.29	0.24	0.39	1.79	
Solarban® 60 (2) Starphire® + Starphire®		74	11	12	0.29	0.24	0.41	1.80	

Solarban® 60 Starphire® Laminated Glass Performance

Solarban® 60 (2) Starphire® + interlayer + Starphire® – thicknesses as shown below												
Glass Thickness		Transmittance			Reflectance		U-Value (Imperial)		European U-Value	Shading Coefficient	Solar Heat Gain Coefficient (SHGC)	Light to Solar Gain (LSG)
inches	mm	Ultraviolet %	Visible %	Total Solar Energy %	Visible Light %	Total Solar Energy %	Winter Nighttime	Summer Daytime				
Solarban® 60 (2) Starphire®												
0.030" Lamination between 2-lites												
1/8	3	0	76	39	9	42	1.00	0.90	5.61	0.51	0.44	1.73
0.060" Lamination between 2-lites												
1/8	3	0	76	39	9	42	0.98	0.89	5.50	0.51	.44	1.73
1/4	6	0	76	38	9	40	0.96	0.87	5.36	0.51	0.44	1.73
0.090" Lamination between 2-lites												
1/4	6	0	76	38	9	40	0.93	0.85	5.25	0.51	0.44	1.72

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

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.

For more information about Solarban® 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).

