

Solarban® 60 Coating on Starphire® Ultra-Clear Glass



*Comcast Center, Philadelphia, Pa.
Architect: Robert Stern Architects LLP
Glass Fabricator: JE Berkowitz, LP
Glazing Contractor: Enclos*

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 Center in Philadelphia.

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 PPG 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 (0.40 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. PPG 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 Starphire glass can be laminated, tempered or heat strengthened and is readily available as a standard product. Like other high-performance PPG architectural glasses, **Solarban 60 Starphire** is available through more than 60 locations of the PPG Certified Fabricator Network. PPG Certified Fabricators can meet tight construction deadlines and accelerate the delivery of replacement glass before, during and after construction.

To locate a PPG Certified Fabricator in your area, visit www.ppgcfp.com or call 1-888-PPG-IDEA (774-4332).

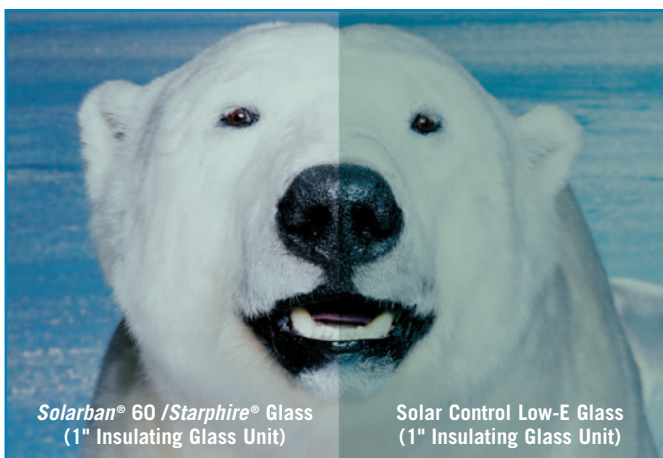


Solarban® 60 Starphire® Ultra-Clear Glass

Additional Resources

Solarban 60 Starphire glass is part of the **ecological Building Solutions™** from PPG. For more information, or to obtain samples of this product, call 1-888-PPG-IDEA, or visit www.ppgideasces.com. All PPG architectural glass is Cradle to Cradle Certified.™

PPG *IdeaScapes™* Surface solutions to inspire your sustainable design and color vision.



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

Insulating Vision Unit Performance Comparisons 1-inch (25mm) units with 1/2-inch (13mm) airspace and two 1/4-inch (6mm) lites; as shown below											
Glass Type	Transmittance			Reflectance		U-Value (Imperial)		European U-Value	Shading Coefficient	Solar Heat Gain Coefficient	Light to Solar Gain (LSG)
	Ultra-violet %	Visible %	Total Solar Energy %	Visible Light %	Total Solar Energy %	Winter Night-time	Summer Day-time				
SOLARBAN® 60 Solar Control Low-E Coating											
SOLARBAN 60 (2) STARPHIRE/STARPHIRE	25	74	38	11	42	0.29	0.27	1.55	0.46	0.40	1.85
SOLARBAN 60 (2) Clear/Clear	19	70	33	11	29	0.29	0.27	1.55	0.44	0.38	1.85

All performance data calculated using LBNL Window 5.2 software, except European U-Value, which is calculated using WinDat version 3.0.1 software. For detailed information on the methodologies used to calculate the aesthetic and performance values in this table, please visit www.ppgideasces.com or request our Architectural Glass Catalog.

Solarban® 60 Starphire® Laminated Glass Performance

SOLARBAN® 60 (2) STARPHIRE® + interlayer + STARPHIRE® – thicknesses as shown below												
Configuration		Transmittance			Reflectance		U-Value (Imperial)		European U-Value	Shading Coefficient	Solar Heat Gain Coefficient	Light to Solar Gain (LSG)
Inches	mm	Ultra-violet %	Visible %	Total Solar Energy %	Visible Light %	Total Solar Energy %	Winter Night-time	Summer Day-time				
0.030" Lamination between 2-lites												
SOLARBAN® 60 (2) STARPHIRE®												
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												
SOLARBAN® 60 (2) STARPHIRE®												
1/8	3	0	76	39	9	42	0.98	0.89	5.50	0.51	0.44	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												
SOLARBAN® 60 (2) STARPHIRE®												
1/4	6	0	76	38	9	40	0.93	0.85	5.25	0.51	0.44	1.72

All performance data calculated using LBNL Window 5.2 and Optics 5.1 software, except European U-Value, which is calculated using WinDat version 3.0.1 software. For detailed information on the methodologies used to calculate the aesthetic and performance values in this table, please visit www.ppgideasces.com or request our Architectural Glass Catalog.

© 2009 PPG Industries, Inc. All rights reserved. *IdeaScapes*, *Solarban*, *Starphire*, PPG and the PPG logo are trademarks and PPG Certified Fabricator Program and EcoLogical Building Solutions are service marks owned by PPG Industries, Inc. Cradle to Cradle is a certification mark for MBDC.



Printed in U.S.A.
7060 2/09 10M