SOLARBAN®60
Solar Control Low-E Glass

PPG IdeaScapes®
Glass • Coatings • Paint

Solarban® 60 solar control, low-e glass by PPG was engineered to control solar heat gain, which is essential to minimizing cooling costs. In a standard one-inch insulating glass unit (IGU), ***Solarban***® 60 glass offers an exterior appearance similar to clear, uncoated glass.

With a very good Solar Heat Gain Coefficient (SHGC) of 0.39, ***Solarban***® 60 glass blocks 66 percent of the total solar energy while allowing 70 percent of the visible light to pass through. This combination produces an excellent Light to Solar Gain (LSG) ratio of 1.79, along with exceptional insulating performance, as evidenced by its 0.29 winter nighttime U-value.

Aesthetic Options

Solarban® 60 glass can be coated on ***Starphire***® glass and paired with ***Starphire***® glass to produce an IGU with exceptional clarity and solar control characteristics. For even more color and performance options, it can be coated on the second (#2) surface of nearly all PPG's wide range of tinted glasses, or combined in an IGU with any PPG tinted glass, ***Solarcool***® reflective glass or ***Vistacool***® subtly reflective, color-enhanced glass (see performance data on back page).

Solarban® 60 Glass and Sustainable Design

An energy modeling study conducted by an independent energy design and consulting firm showed that architects and building owners can potentially save millions of dollars during a building's lifetime by specifying ***Solarban***® 60 glass instead of less advanced architectural glazings.

For instance, the study showed that, by substituting ***Solarban***® 60 glass in place of dual-pane tinted glass, the owners of a typical glass-walled, eight-story office building in Boston could lower their initial HVAC equipment costs by nearly $350,000 while realizing annual energy savings of more than $80,000. Corresponding carbon emissions from the same building were also reduced by more than 300 tons per year, which eclipses the total carbon emissions generated by 31,000 gallons of gasoline.

In addition to making products that support sustainable design, PPG has pioneered innovative technologies that reduce energy consumption during the glass-making process. PPG promotes environmentally responsible manufacturing by recovering and reusing virtually all of its glass manufacturing by-products and by shipping its materials on reusable steel racks. PPG also facilitates regional sourcing through its nationwide network of certified glass fabricators and laminators.

Prudential Center
Location: *Newark, NJ*
Product: ***Solarban*** *60 Glass*
Architect: *Morris Adjmi Architects*
Glass Contractor: *Josloff Glass*
Glass Fabricator: *J.E. Berkowitz, LP*

Streeter Place
Location: *Chicago, IL*
Product: ***Solarban*** *60 Glass*
Architect: *Solomon Cordwell Buenz and Associates*
Owner/Developer: *Golub and Company*
Glass Fabricator: *Northwestern Industries, Inc.*
Glazing Contractor: *Custom Windows and J&D Erectors*

With ***Solarban***® 60 glass, sustainable design and LEED® credit opportunities are provided according to the following criteria:

LEED / Green Design Category	Feature	Benefit
Optimizing Energy Performance	Excellent SHGC, U-value, and Tvis performance	Enhance energy performance of building design
Daylight & Views	High VLT	Connectivity to natural lighting and the outdoors
Innovation in Design	Cradle to Cradle Certification℠	Selection of environmentally-focused product evaluation

SOLARBAN®60
Solar Control Low-E Glass

Fabrication and Availability

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

Solarban® 60 glass is just one of many ***Ecological Solutions from PPG™***. For more information, or to obtain samples of this product, call 888-PPG-IDEA (774-4332), or visit www.ppgideascapes.com.

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

PPG *IdeaScapes.*® Integrated products, people and services to inspire your design and color vision.

Additional Resources

Solarban® 60 Glass Performance — Commercial Insulating Glass Unit Comparisons Using 1/4" (6mm) 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 Glass**											
SOLARBAN 60 (2) Clear + Clear	18	70	34	11	28	0.29	0.27	1.6	0.45	0.39	1.79
ATLANTICA® + *SOLARBAN* 60 (3) Clear	5	53	20	9	7	0.29	0.27	1.6	0.36	0.31	1.71
AZURIA® + *SOLARBAN* 60 (3) Clear	13	54	21	9	7	0.29	0.27	1.6	0.36	0.31	1.74
GRAYLITE® II + *SOLARBAN* 60 (3) Clear	1	7	4	4	5	0.29	0.27	1.6	0.14	0.13	0.54
OPTIGRAY® + *SOLARBAN* 60 (3) Clear	10	50	23	8	15	0.29	0.27	1.5	0.40	0.35	1.43
PACIFICA® + *SOLARBAN* 60 (3) Clear	5	34	15	6	7	0.29	0.27	1.6	0.29	0.25	1.36
SOLARBLUE® + *SOLARBAN* 60 (3) Clear	10	45	21	7	13	0.29	0.27	1.6	0.38	0.33	1.36
SOLARBRONZE® + *SOLARBAN* 60 (3) Clear	8	42	21	7	16	0.29	0.27	1.6	0.37	0.32	1.31
SOLARGRAY® + *SOLARBAN* 60 (3) Clear	8	35	18	7	13	0.29	0.27	1.6	0.33	0.29	1.21
SOLEXIA® + *SOLARBAN* 60 (3) Clear	10	61	25	10	10	0.29	0.27	1.6	0.42	0.37	1.65
***VISTACOOL*® Glass with *SOLARBAN*® 60 Solar Control Low-E (3)**											
VISTACOOL (2) *AZURIA* + Low-E	11	42	16	20	11	0.29	0.27	1.6	0.30	0.26	1.62
VISTACOOL (2) *PACIFICA* + Low-E	4	26	12	11	9	0.29	0.27	1.6	0.25	0.21	1.24
***SOLARCOOL*® Glass (Reflective) with *SOLARBAN*® 60 Solar Control Low-E (3)**											
SOLARCOOL (2) *AZURIA* + Low-E	4	21	8	19	10	0.29	0.27	1.6	0.19	0.17	1.24
SOLARCOOL (2) *PACIFICA* + Low-E	2	13	6	10	8	0.29	0.27	1.6	0.17	0.15	0.87
SOLARCOOL (2) *SOLARBLUE* + Low-E	3	17	9	14	15	0.29	0.27	1.6	0.21	0.18	0.94
SOLARCOOL (2) *SOLARBRONZE* + Low-E	2	17	9	14	18	0.29	0.27	1.6	0.21	0.18	0.94
SOLARCOOL (2) *SOLARGRAY* + Low-E	2	14	8	11	14	0.29	0.27	1.6	0.20	0.17	0.82
SOLARCOOL (2) *SOLEXIA* + Low-E	3	24	10	24	15	0.29	0.27	1.6	0.22	0.19	1.26

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

All performance data calculated using LBNL Window 6.3 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.ppgideascapes.com or request our Architectural Glass Catalog.

Printed in U.S.A.
7071 09/14 10M

PPG IdeaScapes® Glass • Coatings • Paint

PPG Industries, Inc. Glass Business & Discovery Center 400 Guys Run Road Cheswick, PA 15024 1-888-PPG-IDEA www.ppgideascapes.com