SOLARBAN® SOLAR CONTROL LOW-E GLASS 70XL

SOLARBAN®60 SOLAR CONTROL LOW-E GLASS

PPG IdeaScapes™ Glass • Coatings • Paint

Solexia® glass features a light-green tint that can now be coated on the second surface with Solarban® 70XL or Solarban® 60 solar control, low-e coatings. The marriage of Solarban 60 glass and Solexia glass produces a Light to Solar Gain (LSG) ratio of 1.92.

Solar Control Low-E Glass on Tinted Substrates

Architects seeking heightened levels of solar control can specify ***Solarban***® 70XL and ***Solarban***® 60 solar control, low-e coatings as second-surface coatings for glasses from the ***Oceans of Color***® collection of ocean-inspired tints and Earth-Toned performance tints from PPG.

When ***Solarban*** 70XL glass is used as a second-surface coating in a standard one-inch insulating glass unit, glasses from the ***Oceans of Color***® collection – which encompasses ***Azuria***™, ***Atlantica***™, ***Pacifica***™, ***Caribia***® and ***Solexia***™ glasses – produce excellent Solar Heat Gain Coefficients (SHGC) ranging from 0.18 to 0.25. With ***Solarban*** 60 glass as the second-surface coating, Solar Heat Gain Coefficients are between 0.22 and 0.32.

While ***Oceans of Color*** glasses are popular for their attractive colors, they also deliver excellent Visible Light Transmittance (VLT). With ***Solarban*** 70XL glass as the second-surface coating, Visible Light Transmittance is from 34% to 54%. With ***Solarban*** 60 glass, it is slightly higher, from 54% with ***Azuria***, ***Atlantica***, ***Pacifica*** and ***Caribia*** glasses, to 61% with ***Solexia*** glass.

The resulting Light to Solar Gain (LSG) ratios of 1.92 to 2.18 are among the highest in the industry, and well beyond the minimum 1.25 LSG standard for spectrally selective glass established by the U.S. Department of Energy. These LSG ratios make each of these glasses ideal for achieving an optimal balance of aesthetics, sunlight transmission and solar heat control.

Earth & Sky Tints

Architects who want a classic blue, bronze or gray aesthetic, as well as improved solar control performance, can specify ***Solarban*** 70XL and ***Solarban*** 60 as second-surface coatings for ***Solarblue***™, ***Solargray***® and ***Solarbronze***® glasses. In a one-inch insulating glass unit, ***Solarban*** 70XL glass generates solar heat gain coefficients of 0.21, 0.19 and 0.20 with ***Solarblue***, ***Solargray*** and ***Solarbronze***, respectively.

Visible Light Transmittance (VLT) is 40% with ***Solarban*** 70XL ***Solarblue***, 31% with ***Solarban*** 70XL ***Solargray*** and 37% with ***Solarban*** 70XL ***Solarbronze***. The corresponding LSG ratios of 1.84, 1.65 and 1.87 are also spectrally selective according to the U.S. Department of Energy standard.

With ***Solarban*** 60 glass as a second-surface coating, the SHGC is 0.28, 0.24 and 0.27, VLT is 45%, 35% and 42%, and the LSG ratios are 1.60, 1.47 and 1.56 for ***Solarblue***, ***Solargray*** and ***Solarbronze*** glasses.

Sustainable Design and Architectural Glass

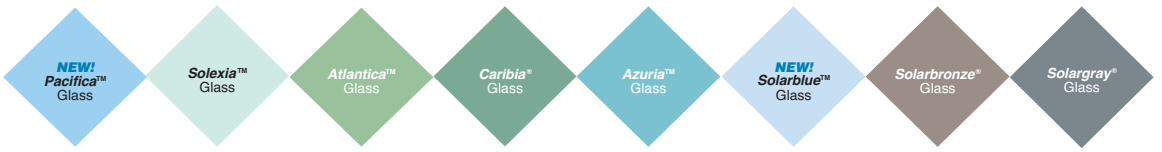
Sustainable design, green building, safeguarding the environment and the long-term management of energy costs are vital considerations for contemporary building designers. High-performance architectural glasses from PPG, such as ***Solarban*** 70XL glass and ***Solarban*** 60 glass, give architects and building owners a tool to reach their design objectives.

In addition to making products that support sustainable design, PPG is also a pioneer in developing innovative technologies that reduce energy consumption during the glass-making process. PPG promotes environmentally responsible manufacturing by recovering and reusing virtually all of our glass manufacturing byproducts and by shipping its materials on reusable steel racks.

PPG also promotes regional sourcing through its nationwide network of certified glass fabricators and laminators.

With ***Solarban*** 70XL and ***Solarban*** 60 coatings and the tinted substrates specified above, 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	Tvis comments	Connectivity to natural lighting and the outdoors
Innovation in Design	MBDC Cradle-to-Cradle Certification	Selection of environmentally-focused product evaluation



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SOLARBAN®60 SOLAR CONTROL LOW-E GLASS

Fabrication and Availability

PPG Certified Fabricator® Network

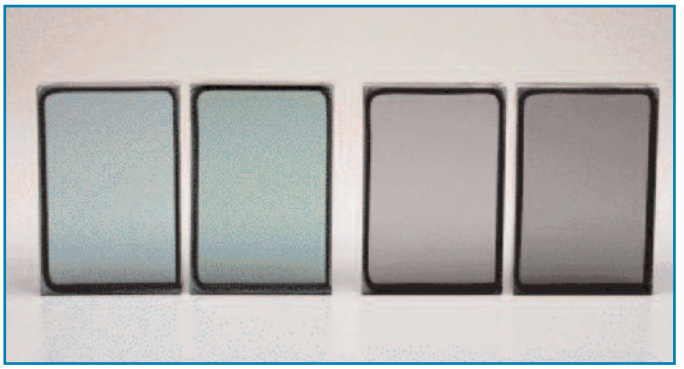
Using ***Solarban*** 70XL or ***Solarban*** 60 glass as second-surface coatings on a tinted substrate requires that the glass be heat-treated. These products, which are made to order, are sold exclusively through more than 60 locations of the PPG Certified Fabricator Network. PPG Certified Fabricators can meet tight construction deadlines and accelerate the delivery of replacement glass before, during and after construction.

Additional Resources

ecological Building Solutions℠

Solarban 70XL glass and ***Solarban*** 60 glass are part of the ***EcoLogical Building Solutions*** from PPG. For more information, or to obtain samples of ***Solarban*** 70XL or ***Solarban*** 60 glasses as second-surface coatings on tinted substrates, call 1-888-PPG-IDEA (774-4332), or visit www.ppgideascapes.com. All PPG architectural glass is Cradle to Cradle Certified℠.

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



*Pictured here from left to right are **Solarban** 60 and **Solarban** 70XL glasses on **Atlantica** glass, and **Solarban** 60 and **Solarban** 70XL glasses on **Solargray** glass.*

Solarban® 70XL & *Solarban*® 60 Glass Performance — Commercial Insulating Glass Unit

Insulating Vision Unit Performance Comparisons 1-inch (25mm) units with 1/2-inch (13mm) airspace and two 1/4-inch (6mm) lites; interior lite clear unless otherwise noted												
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				
Coated											
***SOLARBAN*® 70XL Solar Control Low-E Glass**											
SOLARBAN 70XL (2)* + Clear	6	64	25	12	52	0.28	0.26	1.50	0.32	0.27	2.37
SOLARBAN 70XL (2) *SOLEXIA* + Clear	3	54	19	10	12	0.28	0.26	1.50	0.29	0.25	2.18
SOLARBAN 70XL (2) *ATLANTICA* + Clear	2	48	16	9	8	0.28	0.26	1.50	0.26	0.23	2.07
SOLARBAN 70XL (2) *CARIBIA* + Clear	2	48	16	9	7	0.28	0.26	1.50	0.27	0.23	2.07
SOLARBAN 70XL (2) *AZURIA* + Clear	4	48	17	9	7	0.28	0.26	1.50	0.27	0.23	2.09
SOLARBAN 70XL (2) *PACIFICA* + Clear	1	30	11	6	7	0.28	0.26	1.50	0.21	0.18	1.63
SOLARBAN 70XL (2) *SOLARBLUE* + Clear	3	40	15	7	15	0.28	0.26	1.50	0.25	0.21	1.84
SOLARBAN 70XL (2) *SOLARBRONZE* + Clear	2	37	14	7	19	0.28	0.26	1.50	0.23	0.20	1.87
SOLARBAN 70XL (2) *SOLARGRAY* + Clear	2	31	12	7	15	0.28	0.26	1.50	0.22	0.19	1.65
***SOLARBAN*® 60 Solar Control Low-E Glass**											
SOLARBAN 60 (2) *SOLEXIA* + Clear	10	61	25	10	11	0.29	0.27	1.55	0.36	0.32	1.92
SOLARBAN 60 (2) *ATLANTICA* + Clear	5	54	20	8	7	0.29	0.27	1.55	0.31	0.27	1.98
SOLARBAN 60 (2) *AZURIA* + Clear	13	54	21	8	7	0.29	0.27	1.55	0.32	0.28	1.93
SOLARBAN 60 (2) *CARIBIA* + Clear	8	54	20	8	7	0.29	0.27	1.55	0.31	0.27	1.99
SOLARBAN 60 (2) *PACIFICA* + Clear	5	34	15	6	7	0.29	0.27	1.55	0.26	0.22	1.52
SOLARBAN 60 (2) *SOLARBLUE* + Clear	10	45	21	7	13	0.29	0.27	1.55	0.32	0.28	1.60
SOLARBAN 60 (2) *SOLARBRONZE* + Clear	8	42	20	7	16	0.29	0.27	1.55	0.31	0.27	1.56
SOLARBAN 60 (2) *SOLARGRAY* + Clear	8	35	17	6	12	0.29	0.27	1.55	0.28	0.24	1.47

**Solarban* 70XL for annealed applications is applied to *Starphire* glass; heat treated applications will require either clear or *Starphire* glass depending on manufacturing process.

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.ppgideascapes.com or request our Architectural Glass Catalog.

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