

# Performance Tinted Glasses



## *Victory Building*

*Location: Little Rock, AR*

*Products: Solarban® 60/Clear and Solarban® 60/Solargray® Glass*

*Architect: Cromwell Architects Engineers*

*Glazing Contractor: Ace Glass*

*Glass Fabricator: Arch Aluminum and Glass Co., Inc.*

A staple in PPG's architectural glass offering since the 1960s, Performance Tinted **Solargray®** and **Solarbronze®** glasses allow architects to make a bold visual statement while maintaining energy efficiency and occupant comfort. These heat-absorbing, glare-reducing tinted glasses are engineered to showcase their individual color and performance characteristics. Architects also can apply one of PPG's reflective or low-emissivity coatings for additional aesthetic and performance solutions.

## **Solargray® Glass**

A cool light-gray color that enhances almost any building facade and the ability to control solar heat gain and glare have made **Solargray** glass a top choice for commercial structures. With a visible light transmittance of 40% for a 1" insulating glass unit with clear interior light, **Solargray** manages energy use with a Solar Heat Gain Coefficient (SHGC) of 0.45.

**Solargray** glass also reduces ultraviolet energy transmittance, allowing only 20% of the UV energy to pass through the glass. Ultraviolet energy has long been associated with the accelerated fading of fabrics and other interior materials.

For even more performance from **Solargray**, combine with **Sungate® 500** glass in a 1" insulating unit for improved solar heat gain performance and lower U-values.



## *Horizons II*

*Location: Austin, TX*

*Products: Solargray®/Solarban® 60 Glass*

*Architect: Sixth River Architects*

*Glass Fabricator: Craftsman Fabricated Glass*

\* The U.S. Department of Energy defines spectrally selective as glass with a Light to Solar Gain (LSG) ratio of 1.25 or higher.

# Performance Tinted Glasses

## Solarbronze® Glass

A popular choice for both commercial buildings and homes, **Solarbronze** glass has a warm bronze tint that adds a subtle richness to the exterior and a warm glow to interior décor. The bronze color especially complements brick and stone facades.

Like its counterpart, **Solarbronze** also reduces solar heat gain and glare, transmitting only 47% of visible light and just 21% of ultraviolet light with a SHGC of 0.51 in the 1" insulating glass unit with clear interior light.

## Superior Energy-Saving Performance

For even greater solar control, enhance **Solarbronze** and **Solargray** by combining it in a 1" insulating glass unit with **Sungate** 500 Low-E Glass. To achieve spectrally selective glass\*, as recommended by the U.S. Department of Energy, **Solargray** and **Solarbronze** can be teamed with **Solarban** 60 Solar Control Low-E Glass to earn LSG ratings of 1.25 or more\*.

## Solarbronze® and Sungate® 500 Low-E Glass (1" I.G. Unit, 6mm)

High Visible Light Transmittance: 44%  
Outstanding Solar Heat Gain Coefficient: 0.46  
Good Light to Solar Gain ratio: 0.96  
Summer Daytime U-value: 0.35

## Solarbronze® and Solarban® 60 Solar Control Low-E Glass (1" I.G. Unit, 6mm)

High Visible Light Transmittance: 41%  
Excellent Solar Heat Gain Coefficient: 0.32  
Excellent Light to Solar Gain ratio: 1.35\*  
Summer Daytime U-value: 0.28

## Solargray® and Sungate® 500 Low-E Glass (1" I.G. Unit, 6mm)

High Visible Light Transmittance: 37%  
Outstanding Solar Heat Gain Coefficient: 0.40  
Good Light to Solar Gain ratio: 0.93  
Summer Daytime U-value: 0.35

## Solargray® and Solarban® 60 Solar Control Low-E Glass (1" I.G. Unit, 6mm)

High Visible Light Transmittance: 35%  
Excellent Solar Heat Gain Coefficient: 0.29  
Excellent Light to Solar Gain ratio: 1.25\*  
Summer Daytime U-value: 0.28

## Fabrication and Availability

**Solargray**® and **Solarbronze**® glasses provides maximum processing flexibility and can easily be heat-strengthened, tempered, or laminated to satisfy increased strength or safety glazing requirements. **Solargray**® and **Solarbronze**® glasses are readily available from nearly 100 glass fabrication locations throughout the U.S. and Canada.

## Additional Resources

For more information, or to obtain samples of **Solargray**® and **Solarbronze**® glasses, call 1-888-PPG-IDEA, or visit [www.ppgglazing.com](http://www.ppgglazing.com).

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

## Solargray® and Solarbronze® Performance — Commercial Insulating Glass Unit Comparisons Using 1/4" (6mm) Glass

Glass Type	Transmittance			Reflectance		U-Value (Imperial)		K-Value (Metric)		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	Winter Night-time	Summer Day-time			
<b>Monolithic (6mm)</b>												
SOLARGRAY	24	44	42	6	5	1.02	0.93	5.79	5.28	0.67	0.58	0.76
SOLARBRONZE	26	53	50	6	6	1.02	0.93	5.79	5.28	0.73	0.63	0.84
<b>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</b>												
SOLARGRAY Tinted Glass	20	40	33	7	7	0.47	0.50	2.67	2.84	0.52	0.45	0.89
SOLARBRONZE Tinted Glass	21	47	39	9	7	0.47	0.50	2.67	2.84	0.59	0.51	0.92
<b>SUNGATE® Low-E Glasses</b>												
SUNGATE 100 (3) SOLARGRAY	14	36	24	7	10	0.31	0.30	1.76	1.70	0.41	0.35	1.03
SUNGATE 100 (3) SOLARBRONZE	15	44	28	7	12	0.31	0.30	1.76	1.70	0.46	0.40	1.10
SUNGATE 500 (3) SOLARGRAY	17	37	28	8	8	0.35	0.35	1.99	1.99	0.47	0.40	0.93
SUNGATE 500 (3) SOLARBRONZE	18	44	33	9	9	0.35	0.35	1.99	1.99	0.53	0.46	0.96
<b>SOLARBAN® 60 Solar Control Low-E Glass</b>												
SOLARBAN 60 (3) SOLARGRAY	8	35	18	7	13	0.29	0.28	1.65	1.55	0.33	0.29	1.25
SOLARBAN 60 (3) SOLARBRONZE	8	41	20	8	17	0.29	0.28	1.65	1.55	0.37	0.32	1.35

Performance data calculated using LBL Window 5.2. For detailed information on the methodologies used to calculate the aesthetic and performance values in this table, please visit [www.ppgglazing.com](http://www.ppgglazing.com) or request our Architectural Glass Catalog.

© 2004 PPG Industries, Inc. All rights reserved. *Atlantica, Azuria, Azurlite, Caribia, Graylite, Oceans of Color, Optigray, IdeaScapes, Solarban, Solarbronze, Solarcool, Solargray, Solargreen, Solex, Solexia, Starphire, Sungate*, PPG and the PPG logo are trademarks and ecological buildings solutions is a service mark owned by PPG Industries, Inc.

Printed in U.S.A.  
7082 1/05 10M

