

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.

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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.

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			
Monolithic (6mm)												
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
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												
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
SUNGATE® Low-E Glasses												
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
SOLARBAN® 60 Solar Control Low-E Glass												
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 or request our Architectural Glass Catalog.

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