

Aesthetic Description

The **Vistacool™** collection of architectural glasses by PPG offers lustrous color and subtle reflectivity unlike any other in the industry. Their distinguishing characteristic is a proprietary color-neutral, second-surface coating that enriches the color of the tinted glass substrate while still transmitting high levels of natural light. The result is a striking aesthetic that represents an entirely new category of products on the architectural glass spectrum.

That point is illustrated in the chart at right which plots the correlation of Visible Light Transmittance (VLT) and Visible Light Reflectance of **Vistacool** glasses in comparison to other competing reflective glasses. The chart shows that, while levels of outdoor reflectivity can vary significantly among reflective architectural glasses, no other glazing product offers the same high levels of visible light transmittance as the **Vistacool** glasses.

Vistacool glasses are available in three distinct aesthetics:

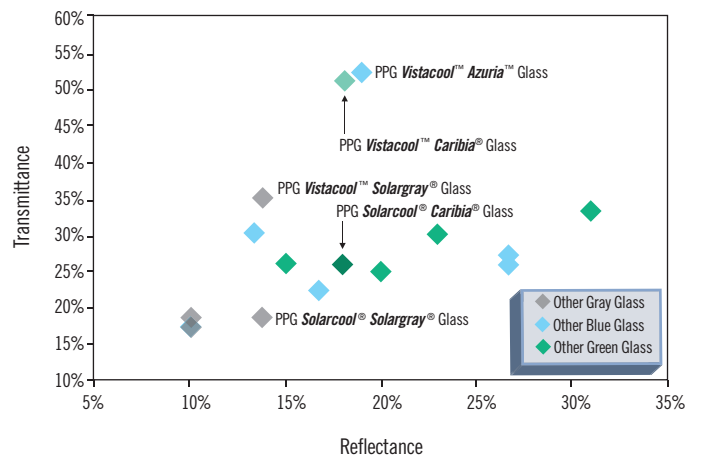
- **Vistacool Azuria™** offers an exceptionally rich and soothing aqua-blue appearance, together with a Solar Heat Gain Coefficient (SHGC) of 0.26 when teamed with **Solarban® 60** Solar Control Low-E Glass in a standard 1" insulating glass unit. Together with Visible Light Transmittance (VLT) of 42%, **Vistacool Azuria** produces a Light to Solar Gain (LSG) ratio of 1.62, which is much higher than other reflective glass products currently on the market.
- **Vistacool Caribia®** saturates the popular aqua-green tint of **Caribia** glass with an added dimension of warmth and luster. When combined with **Solarban 60** glass in a 1" insulating glass unit, **Vistacool Caribia** also offers a rare combination of visible light transmittance and solar control, which is reflected in its 1.66 LSG ratio.
- **Vistacool Solargray®** features an elegant light gray tint that delivers relatively high levels of interior brightness together with exceptional solar control characteristics. Combined with **Solarban 70XL** Solar Control Low-E glass in a standard 1" insulating glass unit, **Vistacool Solargray** provides visible light transmittance of 24% and a Solar Heat Gain Coefficient (SHGC) of 0.20, which yields an LSG ratio of 1.22.



Vistacool Azuria glass combines with Sungate 500 glass to create energy savings as well as a lustrous aqua-blue sheen for the Bolingbrook, IL based glazing contractor, Frontrunner Glass & Metals.

*Architect: Ekash Associates
Glass Fabricator: Oldcastle Glass*

Relationship of Transmittance and Reflectance Current Reflective (6mm) Tinted Glass Products



As this chart demonstrates, levels of outdoor reflectivity can vary significantly among reflective architectural glasses. However, only Vistacool glasses offer such high levels of visible light transmittance.



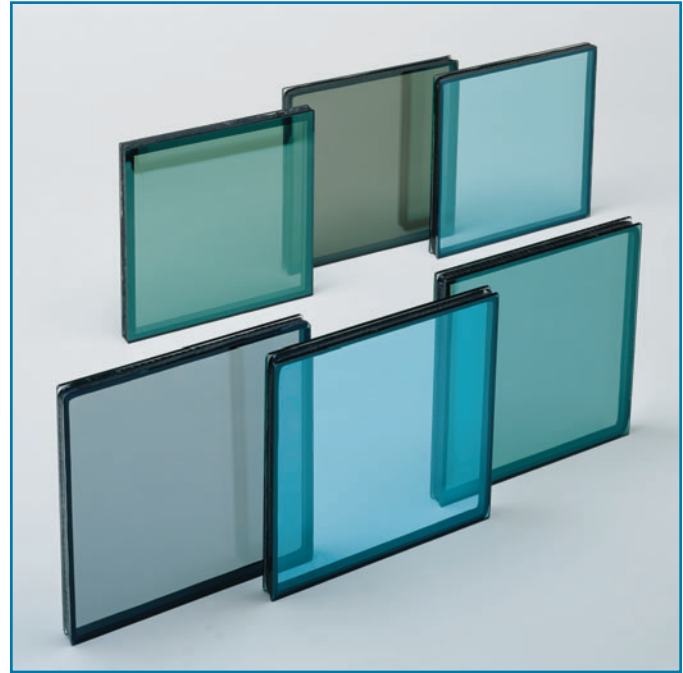
Subtly Reflective, Color-Enriched Glass

Fabrication

Vistacool Azuria, **Vistacool Caribia** and **Vistacool Solargray** provide maximum processing flexibility and can be easily laminated, tempered or heat-strengthened to satisfy increased strength or safety glazing requirements. With their pyrolytic or “hard coat” coatings, **Vistacool** glasses are durable and readily available for rapid job-site delivery from nearly 100 glass fabrication locations throughout the U.S. and Canada. They also are available through international representatives in 25 countries.

Additional Resources

Vistacool glasses represent just one of the many **EcoLogical Building Solutions™** from PPG. For more information or to obtain samples of any **Vistacool** glass, call 1-888-PPG-IDEA or visit www.ppgideasces.com.



Vistacool Solargray, Vistacool Azuria and Vistacool Caribia (L to R, front) feature subtle reflectivity as well as more enriched color than the traditional reflective glass pictured behind them, which are Solarcool® Caribia, Solarcool Solargray and Solarcool Azuria (L to R, back).

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

Vistacool™ Collection of Glass Performance — Commercial Insulating Glass Unit and Monolithic Comparisons

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				
Monolithic (6mm)											
VISTACOOl AZURIA	35	52	26	19	10	1.02	0.92	5.18	0.53	0.45	1.16
VISTACOOl CARIBIA	20	52	26	19	9	1.02	0.92	5.18	0.53	0.45	1.15
VISTACOOl SOLARGRAY	20	34	35	11	8	1.02	0.92	5.18	0.61	0.52	0.65
Insulating Vision Unit Performance 1-inch (25mm) units with 1/2-inch (13mm) airspace and two 1/4-inch lites; interior lite clear											
VISTACOOl AZURIA	29	47	22	21	11	0.47	0.50	2.66	0.39	0.34	1.39
VISTACOOl CARIBIA	39	47	22	21	10	0.47	0.50	2.66	0.39	0.34	1.38
VISTACOOl SOLARGRAY	17	31	28	12	9	0.47	0.50	2.66	0.47	0.40	0.77
SUNGATE® 500 Low-E Glass (3)											
VISTACOOl AZURIA + LOW-E	24	44	19	22	11	0.35	0.35	1.88	0.34	0.29	1.52
VISTACOOl CARIBIA + LOW-E	17	44	19	22	11	0.35	0.35	1.88	0.34	0.29	1.51
VISTACOOl SOLARGRAY + LOW-E	14	29	23	12	10	0.35	0.35	1.88	0.41	0.35	0.83
SOLARBAN® 60 Solar Control Low-E Glass (3)											
VISTACOOl AZURIA + LOW-E	11	42	16	20	11	0.29	0.27	1.49	0.30	0.26	1.62
VISTACOOl CARIBIA + LOW-E	7	42	15	20	11	0.29	0.27	1.49	0.29	0.25	1.66
VISTACOOl SOLARGRAY + LOW-E	7	27	14	11	15	0.29	0.27	1.49	0.28	0.24	1.13
SOLARBAN® 70XL Solar Control Low-E Glass (3)											
VISTACOOl AZURIA + LOW-E	3	38	13	21	11	0.29	0.27	1.44	0.27	0.24	1.58
VISTACOOl CARIBIA + LOW-E	2	38	13	20	11	0.28	0.26	1.44	0.27	0.23	1.65
VISTACOOl SOLARGRAY + LOW-E	2	23	10	11	17	0.28	0.26	1.44	0.23	0.20	1.15

Notes: All IG data for 1/2"-air space with air (not argon). **Vistacool** coated glass is recommended for use only on the 2nd, 3rd or 4th surface of standard architectural insulating glass applications. When used in architectural applications as a monolithic lite, the **Vistacool** coating is to be glazed to the interior of the structure, 2nd surface.

All performance data calculated using LBL Window 5.2 software as of June, 2006, 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.

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