

Sungate® 100 Low-E Glass



*Washington Convention Center
MH Concepts
Location: Washington, D.C.
Product: Sungate® 100 Glass
Architect: TVS Architects
Devroux & Purnell, P.C.
Glazing Contractor: Advanced
Structures Incorporated
Glass Fabricator: Pdc Glass &
Metal Services*

Sungate® 100 Low-E Glass

With the emergence of sustainable building practices, the demand for energy-efficient architectural glass products has grown more acute. This has been accompanied by a corresponding rise in demand for expanded aesthetic options.

With **Sungate®** 100 Low-E Glass, architects and specifiers have a product that can satisfy both criteria. Introduced in 1983, as the world's first commercially available Low-E glass, **Sungate** 100 continues to be a popular choice for enhancing interior environments in commercial buildings.

Architects and specifiers value the versatility of **Sungate** 100 glass. When combined with clear glass in a one-inch insulating glass unit, **Sungate** 100 glass delivers a bright, virtually transparent aesthetic together with a Light to Solar Gain (LSG) ratio of 1.43, comfortably above the minimum 1.25 standard established by the U.S. Department of Energy for spectrally selective glass*.

Sungate 100 glass can also be combined with any one of the four **Oceans of Color®** spectrally selective tints offered by PPG. This produces LSG ratings of up to 1.72 in an exquisite array of ocean-inspired tints ranging from the glitter aqua-blue seascape of **Azuria™** glass to the tranquil light-green hues of **Solexia™** glass.

Sungate 100 glass provides a 31% U-Value improvement compared with a standard clear glass insulating unit, while transmitting 73% of the sun's visible light. This dramatically enhances energy efficiency while reducing reliance on artificial lighting systems. (See performance data on back for additional information.)



*Canada Trust Centre
Location: Kitchener, ON, Canada
Products: Azuria™ /Sungate® 100 Glass*

*The U.S. Department of Energy defines spectrally selective glass as any glass with a Light to Solar Gain (LSG) ratio of 1.25 or better. LSG is a derivative of Solar Heat Gain Coefficient (SHGC) and Visible Light Transmittance (VLT). All **Oceans of Color** glasses meet the new energy efficient guidelines set forth by the Federal Energy Management Program (FEMP) for spectrally selective glazing products.

Sungate® 100 Low-E Glass



Empire Fire & Marine Insurance
 Location: Omaha, NE
 Products: Sungate® 100/
 Atlantica™ Glass
 Architect: Gensler & Associates
 Glazing Contractor: Keystone Glass
 Company
 Glass Fabricator: Insulite Glass
 Company

Fabrication

Sungate 100 Low-E Glass provides maximum processing flexibility and can be heat-strengthened or tempered to satisfy glazing requirements. **Sungate** 100 glass is readily available through over 30 locations of the PPG Certified Fabricator Network. PPG Certified Fabricators can meet tight construction deadlines and can accelerate the delivery of replacement glass during and after construction.



Additional Resources

Sungate 100 Low-E Glass is just one of the *EcoLogical Building Solutions* from PPG. For more information, or to obtain samples of **Sungate** 100 glass, call 1-888-PPG-IDEA, or visit www.ppgglazing.com.



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

Sungate® 100 Glass Performance Comparison

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			
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												
SUNGATE® 100 Low-E Glass												
SUNGATE 100 (2) Clear	35	73	44	12	20	0.31	0.30	1.76	1.70	0.59	0.52	1.40
SUNGATE 100 (3) SOLEXIA	18	63	30	10	10	0.31	0.30	1.76	1.70	0.48	0.41	1.54
SUNGATE 100 (3) ATLANTICA	10	55	23	9	7	0.31	0.30	1.76	1.70	0.39	0.33	1.67
SUNGATE 100 (3) CARIBIA	14	56	23	9	7	0.31	0.30	1.76	1.70	0.38	0.33	1.70
SUNGATE 100 (3) AZURIA	24	56	23	9	7	0.31	0.30	1.76	1.70	0.38	0.33	1.70
SUNGATE 100 (3) Bronze	15	44	28	7	12	0.31	0.30	1.76	1.70	0.46	0.40	1.10
SUNGATE 100 (3) Gray	14	36	24	7	10	0.31	0.30	1.76	1.70	0.41	0.35	1.03
SUNGATE 100 (3) OPTIGRAY 23	5	19	11	5	6	0.31	0.30	1.76	1.70	0.25	0.21	0.90
SUNGATE 100 (3) GRAYLITE	4	11	12	5	8	0.31	0.30	1.76	1.70	0.27	0.23	0.48
SOLARCOOL® Glass (Reflective) with SUNGATE® 100 Low-E (3)												
SOLARCOOL (2) SOLEXIA + Low-E	5	25	13	24	14	0.31	0.30	1.76	1.70	0.26	0.23	1.09
SOLARCOOL (2) CARIBIA + Low-E	4	21	9	19	10	0.31	0.30	1.76	1.70	0.21	0.18	1.17
SOLARCOOL (2) AZURIA + Low-E	7	22	9	19	10	0.31	0.30	1.76	1.70	0.21	0.18	1.22
SOLARCOOL (2) Bronze + Low-E	4	17	13	14	15	0.31	0.30	1.76	1.70	0.28	0.24	0.71
SOLARCOOL (2) Gray + Low-E	4	14	11	11	12	0.31	0.30	1.76	1.70	0.25	0.22	0.64
SOLARCOOL (2) GRAYLITE + Low-E	1	4	7	5	8	0.31	0.30	1.76	1.70	0.20	0.17	0.24

Performance data simulated 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.

© 2005 PPG Industries, Inc. All rights reserved. *Atlantica, Azuria, Azurlite, Caribia, Graylite, Oceans of Color, Optigray, IdeaScapes, Solarban, Solarbronze, Solarcool, Solargray, Solargreen, Solex, Solexia, Sungate*, PPG and the PPG logo are trademarks and the PPG CFP logo and *EcoLogical Building Solutions* are service marks owned by PPG Industries, Inc.

Printed in U.S.A.
 7062 12/04 10M

