

China

Solarban® Solar Control Low-E Glasses

In 1964, PPG Industries launched the *Solarban* glass family of high-performance reflective coated glasses. Today, PPG continues the *Solarban* glass family of high-performance coatings with low-reflectance, versatile double-silver low-e coatings.

Solarban® 60 Solar Control Low-E Glass

A clear, neutral aesthetic, *Solarban* 60 low-e glass offers designers high visible light transmittance and outstanding thermal performance. These characteristics make *Solarban* 60 glass, which now covers more than 10 million square meters of glazing globally, an ideal choice for commercial buildings. *Solarban* 60 glass also meets Climate Code Compliance for all five climate zones in China (see chart below for details).



Climate Code Compliance Chart	Zone A Harbin	Zone B Changchun	Zone C Beijing	Zone D Shanghai	Zone E Guangzhou
Clear + Clear glass					
<i>Solarban</i> ® 60 (2) clear glass	✓	✓	✓	✓	
<i>Solarban</i> 60 (2) <i>Starphire</i> ® glass	✓	✓	✓	✓	
<i>Solexia</i> ™ + <i>Solarban</i> 60 (3) glass	✓	✓	✓	✓	
<i>Atlantica</i> ™+ <i>Solarban</i> 60 (3) glass	✓	✓	✓	✓	✓
<i>Caribia</i> ® + <i>Solarban</i> 60 (3) glass	✓	✓	✓	✓	✓
<i>Azuria</i> ™ + <i>Solarban</i> 60 (3) glass	✓	✓	✓	✓	✓
<i>Solargray</i> ® + <i>Solarban</i> 60 (3) glass	✓	✓	✓	✓	✓

Climate Code Compliance based on Chinese Design Standard for Energy Efficiency of Public Buildings $0.5 < \text{Window to Wall ratio} < 0.7$. Glass make-up assumes 6mm exterior lite + 12mm gap + 6mm interior lite. Glass performance calculated using NFRC methodology using LBL Window 5.2 software. Glass meets Zone A and Zone B requirements when unit is argon filled. All other zones are met with either air or argon filled spaces. See reverse for actual performance values.



Aesthetic Options

Expanded aesthetic and thermal performance options can be achieved by combining *Solarban* 60 glass with clear glass or any one of PPG's four *Oceans of Color*® tinted glasses, from the aqua-blue *Azuria*™ glass to the emerald-green *Atlantica*™ glass.

Solarban 60 glass is just one low-e glass choice from PPG Industries. For more information, visit www.ppgglass.cn.

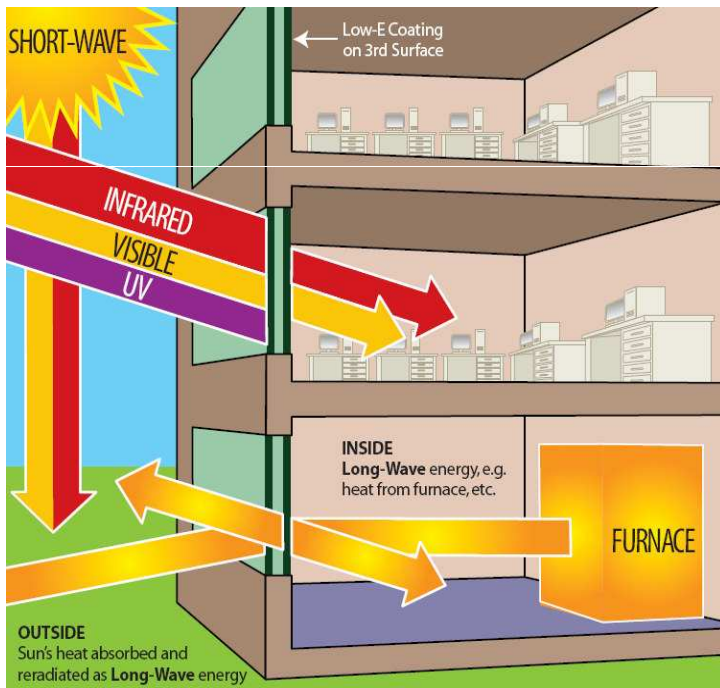
▶ **Greater Tacoma Convention and Trade Center**
Architect: MulvannyG2 Architecture
Solarban 60 glass + clear glass

Solarban® 60 Solar Control Low-E Glass

Insulating Vision Unit Performance – 24mm units with 12mm gap and two 6mm lites

Outdoor Lite + Indoor Lite Coating, if any (surface) glass type + Coating, if any (surface) glass type	%T	%R	K-value Winter W/m ² ·°K Air/Argon	Shading Coeff (SC)	Solar Heat Gain Coeff (SHGC)	Light to Solar Gain (LSG)	U-value EN 673 W/m ² ·°K Air/Argon	Solar Factor (g) EN 410
Clear Glass + Clear Glass	79	15	2.70/2.55	0.81	0.70	1.13	2.8/2.7	0.71
Solarban® 60 (2) Starphire® + Starphire	74	11	1.66/1.38	0.46	0.40	1.85	1.6/1.3	0.42
Solarban 60 (2) Clear + Clear	70	11	1.66/1.38	0.44	0.38	1.85	1.6/1.3	0.42
Solexia™ + Solarban 60 (3) Clear	61	11	1.66/1.38	0.42	0.36	1.69	1.6/1.3	0.39
Atlantica™ + Solarban 60 (3) Clear	53	9	1.66/1.38	0.35	0.31	1.71	1.6/1.3	0.32
Caribia® + Solarban 60 (3) Clear	54	9	1.66/1.38	0.35	0.31	1.74	1.6/1.3	0.33
Azuria™ + Solarban 60 (3) Clear	54	9	1.66/1.38	0.36	0.31	1.74	1.6/1.3	0.34
Solargray® + Solarban 60 (3) Clear	35	7	1.66/1.38	0.33	0.28	1.25	1.6/1.3	0.29

Performance data generated on representative samples of factory production. Actual values may vary slightly due to variations in the product process. Glass performance calculated using NFRC methodology using LBL Window 5.2 software, except CEN U-Value and Solar Factor, which were calculated using CEN methodology using WIS 3.01 software. Variations from previously published data are due to minor changes in the software.



The image illustrates how *Solarban 60* low-e glass works in an insulating glass unit to deliver high visible light transmittance, and reduced energy costs.

Solarban 60 glass transmits 70 percent of the available visible light while allowing only 38 percent of the sun's solar (heat) energy to pass through. The result is an exceptional Light to Solar Gain (LSG) ratio of 1.84, which makes *Solarban 60* glass a high-performing, color-neutral Solar Control Low-E glass.

Solarban 60 glass also provides excellent insulation with a 1.66 K-Value.

PPG Industries

PPG began manufacturing glass in 1883 and has evolved into the chemical and coatings industries, producing automotive, aerospace, architectural and consumer products. PPG operates 125 manufacturing facilities in 20 countries and employs more than 33,000 people.

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Availability



PPG *Solarban* low-e glass is manufactured in North America and is currently available through PPG International Certified Fabricators in China. As a glass manufacturer, PPG began the Certified Fabricator Program in 2000 to offer quality, locally fabricated low-e glass products to the commercial construction market through independent, quality PPG-certified, glass fabricators.

