



## PPG Solarban R100 Neutral Reflective Low-E Glass

Solarban R100 glass is a neutral-reflective low-e glass manufactured by PPG Industries and available in Insulated Glass Units fabricated by Vitrum Glass Group. As a PPG Certified Fabricator, Vitrum Glass Group is able to offer the complete line of Solarban products to meet a variety of design and performance requirements.

### Solarban R100 Features

- Excellent SHGC, U-Value and Visible Light
- Cradle to Cradle Certified
- LEED® Credit Opportunities

### Aesthetics

Solarban R100 glass uniquely balances reflectivity and colour-neutrality, it can be paired with a variety of substrates offering a clean neutral appearance on clear glass or can be paired with tinted substrates to create bold, rich and vibrant glazing solutions. The low to moderate exterior reflectance offers crisp clean reflections that harmonize with the spandrel areas and other building elements.

Inside the building, Solarban R100 glass has an interior reflectance as low as 9% and transmits a pleasant cool blue-gray appearance that reduces glare without creating an obtrusive reflected or transmitted colour.

### Performance

Solarban R100 offers an exceptional Solar Heat Gain Coefficient (SHGC) ranging from 0.16 to 0.27, reducing excessive solar heat gain and reducing glare creating not only a more comfortable environment but also lowering energy use by reducing cooling requirements. Paired with a Light to Solar Gain (LSG) Ratio of 1.83 – when used on clear glass – Solarban R100 is up to 29 percent more efficient than competitive reflective, low-e glasses, making it one of the best-performing low-e glass products Vitrum offers.

Solarban R100 performs equally well in both hot and cold climates offering a winter U-Value of 0.24 when used in an insulated glass unit filled with argon. For additional insulating performance, Solarban R100 can be used on the second surface of a triple glazed unit offering U-Values as low as 0.12.

### Fabrication

When using Solarban R100 glass as a second-surface coating on a clear or tinted substrate heat treatment (fully tempered or heat strengthened) is required to prevent thermal breakage. Due to the reflective nature of Solarban R100 Vitrum recommends choosing their premium tempered glass, TrueForm™ to deliver a clean, crisp exterior reflection. Heat Soaking is also recommended to lower the risk of spontaneous breakage due to Nickel Sulphide inclusions.

## Additional Resources & Samples

Solarban R100 is just one of the many solar control, low-e glass solutions offered by Vitrum Glass Group. For more information or to obtain samples of Solarban R100 glass, visit [www.vitrum.ca](http://www.vitrum.ca), or call 1-888-391-1166.

# PPG Solarban® R100 Glass Performance

1" Insulated Glass Unit Using 1/4" (6mm) Glass

Product	Interior Glass	Transmittance		Reflectance		U-Value				
		Visible %	Ultraviolet %	Exterior %	Interior %	Winter Night Time	Argon	SHGC	Shading Coefficient	LSG
<b>Clear</b>	Clear	79%	50%	15%	12%	0.47	0.42	0.70	0.81	1.13
<b>Starphire Solarban R100 (2)</b>	Starphire	44%	16%	33%	57%	0.29	0.24	0.23	0.27	1.91
<b>Clear Solarban R100 (2)</b>	Clear	42%	12%	32%	41%	0.29	0.24	0.23	0.27	1.83
<b>Solexia Solarban R100 (2)</b>	Clear	36%	6%	25%	17%	0.29	0.24	0.21	0.24	1.71
<b>Atlantica Solarban R100 (2)</b>	Clear	32%	3%	20%	11%	0.29	0.24	0.19	0.22	1.68
<b>Azuria Solarban R100 (2)</b>	Clear	32%	8%	21%	11%	0.29	0.24	0.19	0.22	1.68
<b>Optiblu Solarban R100 (2)</b>	Clear	30%	8%	19%	31%	0.29	0.24	0.20	0.23	1.50
<b>Optigray Solarban R100 (2)</b>	Clear	29%	6%	18%	13%	0.29	0.24	0.20	0.22	1.45
<b>Solarblue Solarban R100 (2)</b>	Clear	26%	6%	15%	17%	0.29	0.24	0.19	0.22	1.37
<b>Solarbronze Solarban R100 (2)</b>	Clear	25%	5%	15%	20%	0.29	0.24	0.18	0.21	1.39
<b>Solargray Solarban R100 (2)</b>	Clear	21%	5%	12%	16%	0.29	0.24	0.17	0.19	1.24
<b>Pacifica Solarban R100 (2)</b>	Clear	20%	3%	11%	9%	0.29	0.24	0.16	0.19	1.25



Clear



Atlantica Solarban R100 (2)



Solarblue Solarban R100 (2)



Starphire Solarban R100 (2)



Azuria Solarban R100 (2)



Solarbronze Solarban R100 (2)



Clear Solarban R100 (2)



Optiblu Solarban R100 (2)



Solargray Solarban R100 (2)



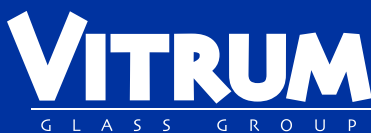
Solexia Solarban R100 (2)



Optigray Solarban R100 (2)



Pacifica Solarban R100 (2)



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All performance data calculated using LBNL Window 7.3 software. The glass colors represented in this brochure are approximate and reflect the effects of the photographic processes. Capabilities, product offering and performance values are subject to change without notice. For the most up to date information visit [www.vitrum.ca](http://www.vitrum.ca)

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