

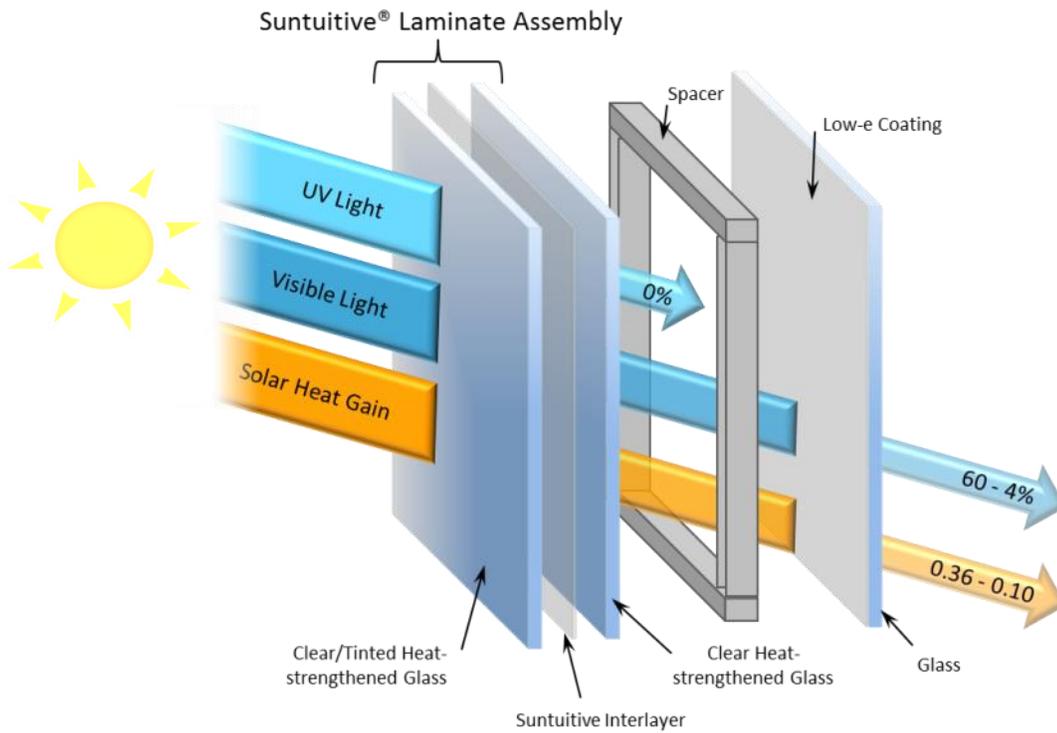


# suntuitive<sup>®</sup>

Self-tinting Glass<sup>™</sup>

## Technical Information

### Typical Vertical Construction



Visit: [www.Suntuitive.com](http://www.Suntuitive.com)  
Call: 616.662.7216





\*Depending on glass tint and low-e used

## ABOUT SUNTUITIVE<sup>®</sup> GLASS

Suntuitive, produced by Pleotint, LLC, is a thermochromic interlayer for dynamic glass which lightens and darkens by itself – with absolutely no mechanical or electrical intervention – based on heat from direct sunlight. The more direct and intense the sunlight is on the glass the darker it will become. The system maximizes natural daylight while minimizing solar heat gain. •No wires •No controls •No power supplies •No maintenance

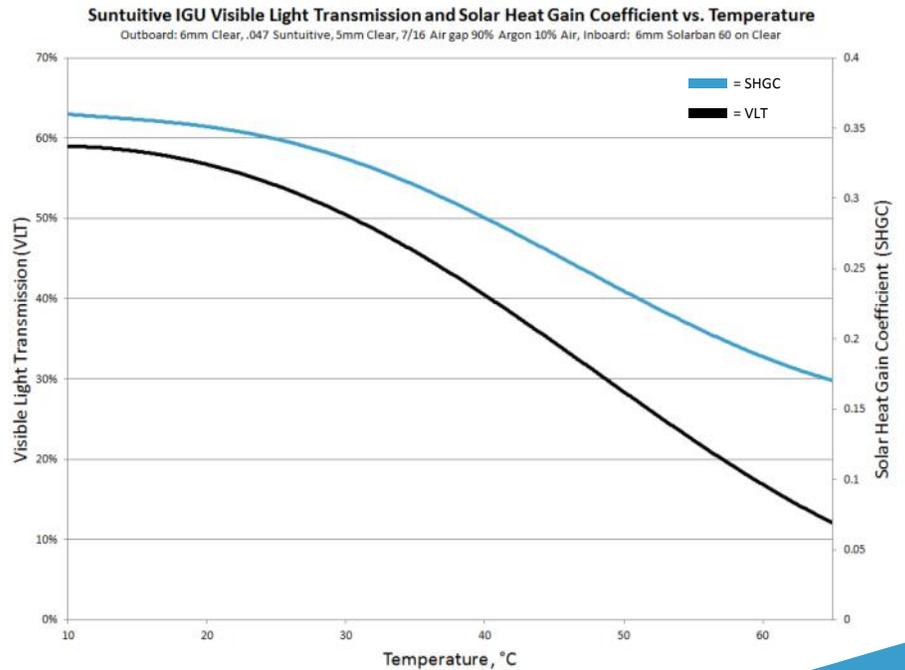
As part of a dynamic window system, Suntuitive glass can help manage a building's changing needs for passive solar heat gain and natural daylight. All together this can lower costs associated with heating, air conditioning and artificial lighting. Suntuitive glass also provides all of the benefits of safety laminated glass. Suntuitive glass puts the view back in windows again by reducing the need for shades, blinds and other devices that block your view.

With Suntuitive glass, architects, building owners, building professionals and home owners can specify an adaptive glass system that transitions seamlessly between light and dark throughout the day, every day of the year. Simply put, Suntuitive glass is the next generation of glass technology and provides the ultimate in comfort and view.

## QUICK FACTS

- Suntuitive is an extruded polyvinyl butyral (PVB) interlayer
- Suntuitive is incorporated into a laminate as part of an insulated glass unit, providing safety glass benefits
- Suntuitive is a thermochromic technology that continuously adjusts tint level in response to environmental conditions
- Suntuitive glass passively adapts with the heat from the sun
- No wires, electricity or control systems required
- Interlayer thickness: 0.048 inches (1.22 mm)

## PERFORMANCE



### Installation:

Windows with Suntuitive glass install the same as any other typical window (or insulated glass unit)

### Size:

Maximum size is 64" x 144"

### Modeling:

Data for Suntuitive interlayer is available in the International Glazing Database (IGDB)

National Fenestration Rating Council (NFRC) Ratings are available with Suntuitive interlayer

### Durability & Testing:

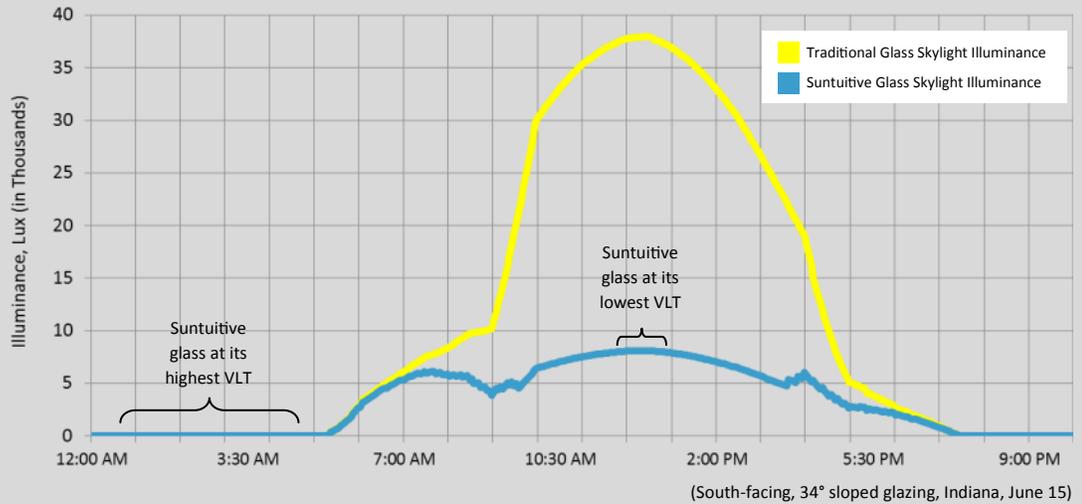
Pleotint is committed to long-term durability and in addition to continuous and vigorous internal testing, Suntuitive interlayer has:

- Completed 8,000 hours of accelerated aging testing under ASTM E2141-06
- Completed 2,500 hours of accelerated aging testing at the National Renewable Energy Laboratory (NREL) and QLab Corporation
- Completed independent testing at the Lawrence Berkeley National Laboratory (LBNL) and Architectural Testing, Inc (ATI)
- Passed Impact Test: CPSC 16 CFR 1201
- Passed research Hurricane D-missile impact and cycling tests
- Passed Forced Entry Test: UL972
- Completed Acoustic Test: ASTM E90-09



## DESIGN OPTIONS

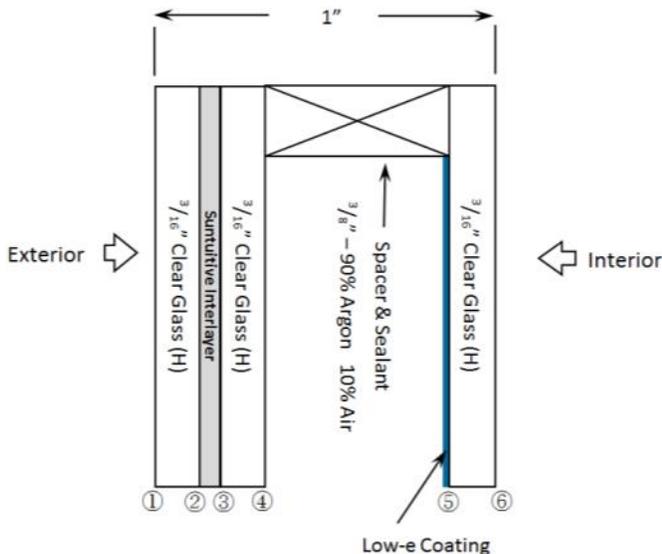
- Suntuitive glass can be used in retrofit, replacement and new construction in both commercial and residential applications
- Suntuitive glass can be used in vertical or sloped glazing
- Suntuitive glass can be curved or shaped
- Suntuitive glass can be combined with most tints of glass and paired with many different Low-e coatings



## DAYLIGHTING

The graph above shows the amount of illuminance, or daylighting, entering through a traditional glass skylight (yellow) versus a Suntuitive glass skylight (blue) throughout the day. Suntuitive glass provides more consistent daylighting throughout the day and balances what would normally be a spike in illuminance that traditional glass lets in. During times of peak sun exposure, when Suntuitive glass will have its lowest visible light transmission, it is still letting in the highest amount of daylight.

## HOW TO SPEC SUNTUITIVE® GLASS



Suntuitive interlayer is laminated between two pieces of heat strengthened or tempered glass and placed into an insulated glass unit (IGU) with a low emissivity coating. A warm edge spacer is also recommended.

- The construction on the left shows a typical 1" overall thickness IGU that is recommended
- Suntuitive glass can be used in IGUs with an overall thickness of 3/4" or greater
- Suntuitive glass can be used in standard laminate IGUs, double laminate IGUs, triple pane IGUs and in some applications monolithic Suntuitive glass can be appropriate
- Bid specification information available by request

## HOW TO BUY

Suntuitive glass is available for most window manufacturer frames and framing options. Call or click today to discuss your project and we will connect you with a local representative or an authorized Suntuitive glass distributor.

CALL: 616.662.7216 or CLICK: [www.Suntuitive.com](http://www.Suntuitive.com)

Suntuitive Glass Performance		Visible Light Transmission (VLT)		Solar Heat Gain Coefficient (SHGC)		Total Solar Transmission		U-Value
Exterior Tint	Low-e	Clear ↔ Tinted		Clear ↔ Tinted		Clear ↔ Tinted		
Starphire <sup>®</sup>	Solarban <sup>®</sup> 60	56%	8%	0.38	0.17	26%	7%	0.24
Starphire <sup>®</sup>	Solarban <sup>®</sup> 70XL	50%	7%	0.31	0.12	18%	3%	0.23
Clear	Solarban <sup>®</sup> 60	54%	8%	0.36	0.16	24%	6%	0.24
Clear	Solarban <sup>®</sup> 70XL	48%	7%	0.30	0.12	17%	3%	0.23
Azuria <sup>®</sup>	Solarban <sup>®</sup> 60	41%	6%	0.25	0.11	15%	3%	0.24
Azuria <sup>®</sup>	Solarban <sup>®</sup> 70XL	37%	6%	0.23	0.10	12%	2%	0.23
Optiblue <sup>®</sup>	Solarban <sup>®</sup> 60	39%	6%	0.30	0.15	19%	5%	0.24
Optiblue <sup>®</sup>	Solarban <sup>®</sup> 70XL	35%	5%	0.25	0.11	13%	2%	0.23
Solarbronze <sup>®</sup>	Solarban <sup>®</sup> 60	32%	5%	0.26	0.13	15%	4%	0.24
Solarbronze <sup>®</sup>	Solarban <sup>®</sup> 70XL	29%	4%	0.21	0.11	11%	2%	0.23
Solargray <sup>®</sup>	Solarban <sup>®</sup> 60	27%	4%	0.23	0.12	13%	3%	0.24
Solargray <sup>®</sup>	Solarban <sup>®</sup> 70XL	24%	4%	0.19	0.10	9%	2%	0.23

Configuration assembly of vertical window used above: 1/4" (Clear/Colored Glass) + Suntuitive Interlayer + 3/16" CLEAR + 7/16" 90% ARGON + 1/4" (Solarban<sup>®</sup> 60/Solarban<sup>®</sup> 70XL)

Clear values represent 10°C and tinted values represent 65°C. Center of Glass Values calculated with LBNL Optics 6.0 and LBNL Window 7.3.4.0 at NFRC Standard Conditions. 90° Tilt. The exterior glass tints and Low-e coatings mentioned in the chart above are registered trademarks of PPG Industries, Inc.

Please contact us for additional constructions and performance information.

## CONTACT US TODAY

Visit: [www.Suntuitive.com](http://www.Suntuitive.com)

Call: 616.662.7216

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