



# Self-Tinting Interlayer for Dynamic Windows



# SUNTUITIVE<sup>®</sup> INTERLAYER



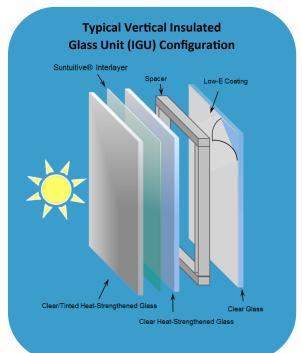
What's happening above:

All of the windows above have the same exterior tint of glass. *Only one pane does not contain Suntuitive interlayer.* 

Pleotint produces Suntuitive<sup>®</sup> interlayer that darkens gradually in response to rising temperatures caused by direct sunlight on the window, then cools as the sun moves across the sky, returning to a clear, neutral state in cloudy or dark environmental conditions when direct sun is no longer present.



# INNOVATIVE GREEN TECHNOLOGY

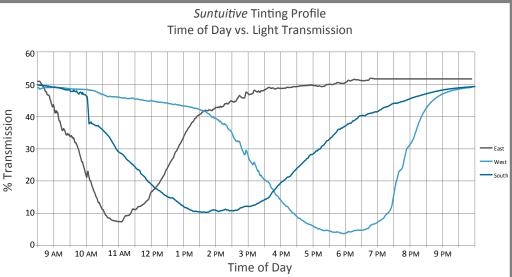


### Why Use Suntuitive?

As part of a dynamic window system, *Suntuitive* interlayer can help manage a building's changing needs for passive solar gain, solar control and natural daylight transmittance. Ultimately, that can lower costs associated with air conditioning, artificial lighting and heating, which together can represent up to 70 percent of a building's total energy consumption.

In addition, because of its laminated glass design, windows made with *Suntuitive* interlayer reduce outside noise and enhance building security.

Building tenants also enjoy more consistently comfortable temperatures, reduced interior glare, more natural lighting and clear views of the outdoors every day of the year.



Acapts

Suntuitive dynamically darkens to balance the sun's heat entering a building throughout the day.

This creates a more consistent level of illuminance and temperature in a building throughout the year increasing occupant comfort.

### Occupant comfort is maximized by:

- Clear view of the outdoors
- Allowing for increased use of daylighting
- More consistently comfortable tempera
  tures
- Reduced glare

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# **BENEFITS**

### **Preserving Your View**

*Suntuitive* preserves your window's view by reducing the need for shades, blinds, exterior overhangs and other light-blocking devices.

- Suntuitive interlayer gradually darkens to a neutral gray
- *Suntuitive* helps block ultraviolet light and reduces absorbed heat and light which are significant causes of fading to:

Wall coverings, carpet, flooring, furniture, fabric, artwork, photographs

• As a laminated glass system, Suntuitive provides:

Impact resistance, sound reduction, insulation, enhanced building security, reduced interior glare

# SUNTUITIVE IS SMART AND SUSTAINABLE 🗢

#### Green:

- Powered by heat from direct sunlight
- No manual, mechanical or electrical intervention
- With Suntuitive, occupants can quite literally see and experience the energy savings and well-being the technology offers
- Durable and maintenance-free

GreenSpe

 Suntuitive is a GreenSpec<sup>®</sup> listed product putting it in the top 10% of green building products





### **Energy Savings:**

- *Suntuitive* interlayer can help manage a building's changing needs for passive solar gain, solar control and natural daylight transmittance.
- *Suntuitive* can lower costs associated with air conditioning, artificial lighting and heating (which is up to 70% of a building's total energy consumption).
- Potential to significantly downsize a building's heating and cooling systems.
- The greatest energy savings come during time of peak energy consumption when energy costs are higher. That saves you money and is also good for the environment.



## Suntuitive is Off-the-Grid



Many dynamic window systems require mechanical support, such as electricity and computer software, to transition between states of high and low transmission. These required devices not only add to the initial and on-going maintenance costs, but also increases their potential for failure.

Suntuitive interlayer eliminates those worries by drawing all of its operational energy directly from the sun. Because the darkening process is entirely self-sustaining, windows made with Suntuitive interlayer do not require any energy or manual intervention so they are virtually impervious to mechanical failure.

#### No wires, no worries.

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Suntuitive interlayer can contribute toward LEED certification in:

EAp2: Minimum Energy Performance	EQc8.1: Daylight and Views – Daylight	RPc1: Regional Priority
(Required)	(Possible 1 point)	(Possible 4 points)
EAc1: Optimize Energy Performance	EQc8.2: Daylight and Views – Views	EQc2: Acoustic Environment (Healthcare)
(Possible 19 points)	(Possible 1 point)	(Possible 2 points)
EQc6.2: Controllability of Systems -	IDc1: Innovation in Design	EQc7.1: Thermal Comfort - Design
Thermal Comfort (Possible 1 point)	(Possible 5 points)	(Possible 1 point)

# **DESIGN OPTIONS**

### The *Suntuitive* Solution

In a typical window, the configuration and tint are fixed – but the environmental conditions are variable. Finding the right balance of visible light transmission (VLT) and solar heat gain has typically been a compromise. Now, *Suntuitive* interlayer offers a solution that provides a window with the ability to adapt to these variable environmental conditions when necessary.

#### Suntuitive Helps Create a Natural Balance

### Suntuitive is perfect for:

retrofits, new installations, commercial and residential use including replacement windows

### Applications possible:

Vertical or sloped windows that can be curved or shaped

#### The possibilities are endless...

*Suntuitive* interlayer can be combined with most tints of glass and paired with many different low-e coatings

# **PRODUCT DETAILS**

### Installation:

Windows with *Suntuitive* install the same as any other typical window (or IGU)

Size: Approx. 5' x 10'

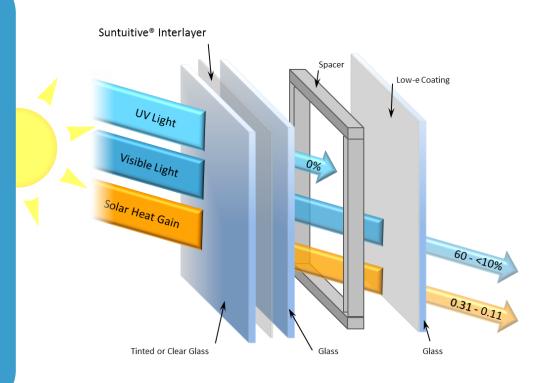
### **Durability**:

Pleotint conservatively calculates a life span of 20+ years based on our own durability tests as well as:

- 8,000 hours of accelerated aging tests under ASTM E2141-06
- Independent testing at the National Renewable Energy Laboratory (NREL) and Qlab Corporation

#### Modeling:

Pleotint's *Suntuitive* interlayer is available on the International Glazing Database (IGDB)



# INSTALLATIONS



Wolverine Enclosures Allegan, Michigan



Private Residence Fenton, Michigan



Hotel Shenzhen, China



Linel Architectural Glass & Metal Solutions Mooresville, Indiana



Palm Springs Installation Palm Springs, California



Private Residence Holland, Michigan



Visit us: www.pleotint.com Email us: info@pleotint.com Call us: (616) 662.7216

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REHAU® MONTANA ecosmart house in Bozeman, Montana Photo courtesy REHAU® MONTANA ecosmart house

