# Polycarbonate Systems



**Super Sky Products** also offers the following custom and standard glass products: Hurricane and Blast-Resistant, Building Integrated Photovoltaics (BIPV) and Point Supported Glass Systems.

From conception to completion, we guarantee to provide;

- Creative design and engineering capabilities
- Strong financial resources
- Advanced CAD/CAM systems
- State-of-the-art 115,000 sq.ft. manufacturing facility
- Dedicated/knowledgeable staff
- Competitive pricing
- Timely completions
- Ten (10) year manufacturer's warranty

For additional details, specifications, photographs and information regarding local representatives, visit Super Sky Products' website at:

www.supersky.com





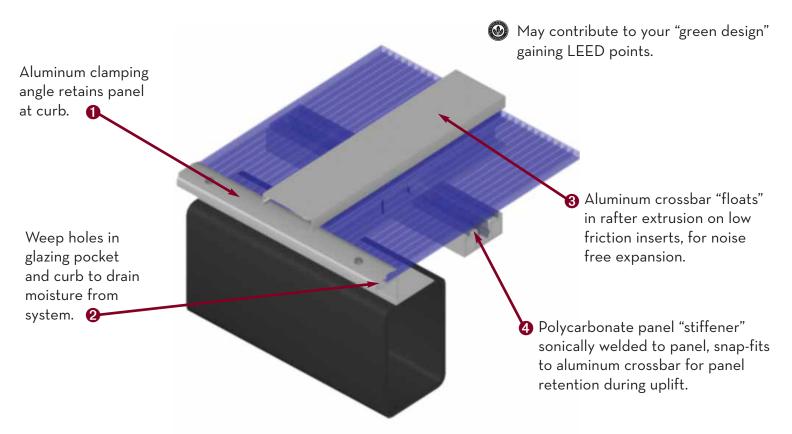
THE EDGE ... is a single layer system that is strong, silent, leak-free and fire safe. The EDGE skin system can be installed directly on steel supporting structures or with a self-supporting aluminum frame.

### **UNIQUE FEATURES:**

- **U-Value** 0.23 to 0.52
- Light Transmission 12% to 80%
- · Shading Coefficient .27 to .98
- Available Colors Clear, Opal, White, Bronze, Green. Venetian
- Ten (10) year manufacturer's warranty.
- Panel widths can vary up to 5'-0" for 10mm and 16mm and 4'-0" for 25mm.
- Panel lengths up to 30'-0" for 10mm, 16mm or 25mm and up to 20'-0" long for Venetian.
- Panels can be curved (cold formed) to a radius as small as 4'-8" for 10mm, 8'-0" for 16mm and 14'-0" for 25mm.
- Panels can be fabricated to any shape not limited to rectangular shapes.
- Up to 5'-0" unsupported spanning capabilities depending upon design load, panel width and thickness.
- Class I or II flamespread.

- · Flame retardant.
- Allows for unrestricted linear/lateral panel movement without noise and oil canning.
- · Can sustain high wind, gravity and snow loads.
- Impact resistance of 200 ft. lbs.
- Mechanical water seals, integral gutters and weeps allow permanent weather-proofing without wet seals.
- Floating connections relieve panel stress and improve product life without compromising weather performance.
- Polycarbonate EDGE® extrusions are sonically welded to the panel, insuring panel retention and structural performance.
- Positive mullion caps and retainers capture panels without the use of exposed fasteners.
- Continuous panels with concealed polycarbonate retention clips.

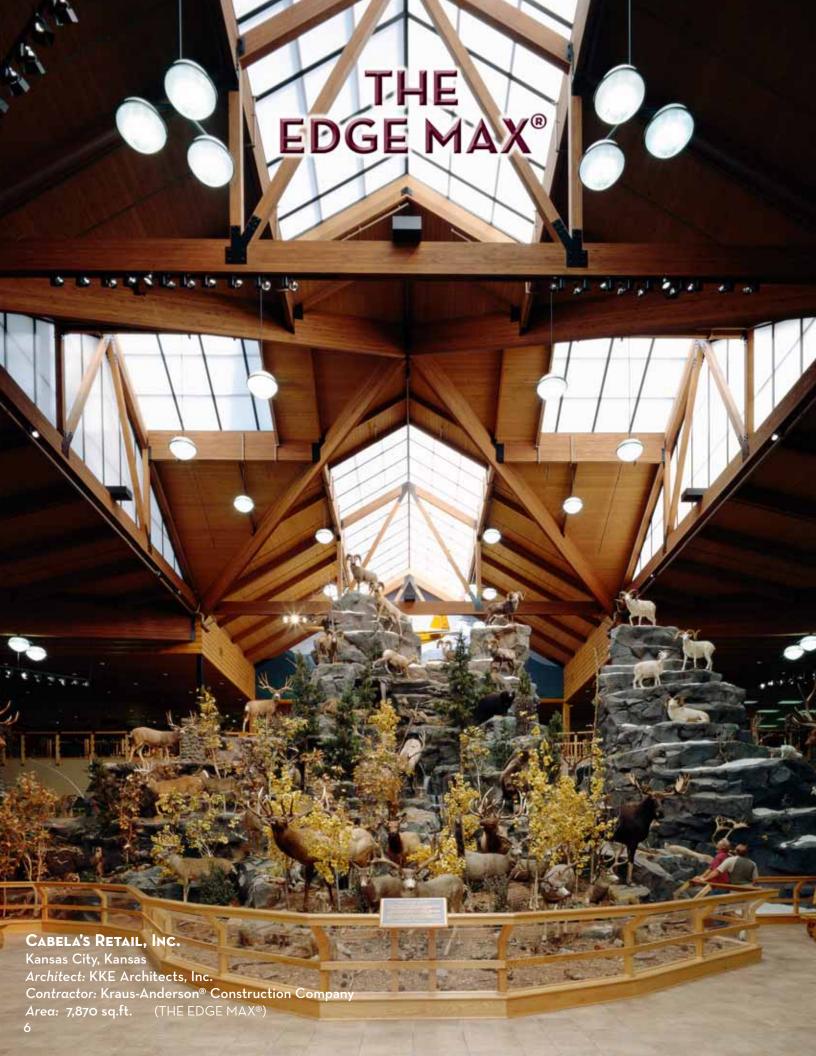
EDGE<sup>®</sup> polycarbonate panels can be filled with Nanogel<sup>®</sup> for increased performance values. See charts at the end of this brochure.











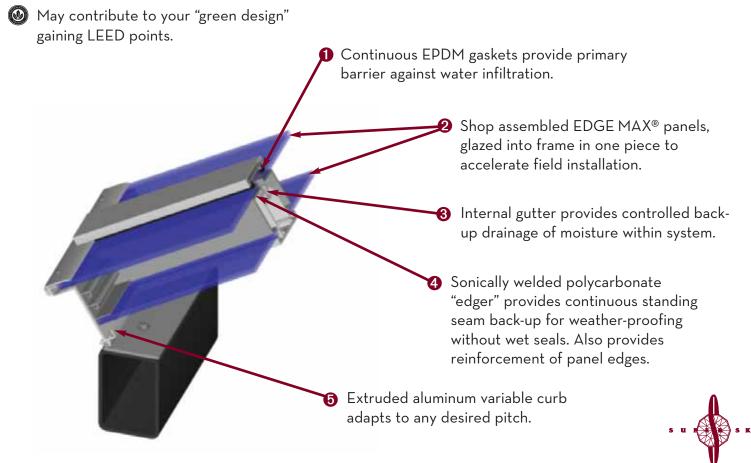
The EDGE MAX<sup>®</sup>... is a double layer system that offers the same features and benefits as the EDGE<sup>®</sup>, plus higher insulation value, improved shading properties and greater spanning ability.

### **UNIQUE FEATURES:**

- **U-Value** 0.19 to 0.26
- · Light Transmission 2% to 66%
- Shading Coefficient .14 to .94
- Available Colors Clear, Opal, White, Bronze, Green
- Ten (10) year manufacturer's warranty.
- · Comprised of two 10mm panels.
- EDGE MAX® provides a double-layer of insulation that increases energy efficiency. Within each of the composite panels reside aluminum extrusions that allow for unsupported spans up to 17'-0".
- · Panel widths can vary up to 5'-0".
- · Panel length up to 30'-0".
- · Panels can be curved.
- Panels can be fabricated to any shape not limited to rectangular shapes.
- · Class I or II flamespread.
- · Flame retardant.
- Allows for unrestricted linear/lateral panel movement without noise and oil canning.

- Floating connections relieve panel stress and improve product life without compromising weather performance.
- Impact resistance of 200 ft. lbs.
- · Can sustain high wind, gravity and snow loads.
- Mechanical water seals, integral gutters and weeps allow permanent weather-proofing without wet seals.
- Polycarbonate EDGE MAX® extrusions are sonically welded to the panel, insuring panel retention and structural performance.
- Positive mullion caps and retainers capture panels without the use of exposed fasteners.
- Continuous panels with concealed polycarbonate retention curbs.
- Panels are shop assembled for quality control and to simplify field installation.

EDGE MAX<sup>®</sup> polycarbonate panels can be filled with Nanogel<sup>®</sup> for increased performance values. See charts at the end of this brochure.





### ▲ EPA NATIONAL COMPUTER CENTER

Research Triangle Park, North Carolina Architect: O'Brien / Atkins Associates Contractor: Beers Construction - Davidson & Jones Group Area: 3,600 sq.ft. (THE EDGE MAX® & GLASS)

### **▼ Pepsi Center - Pedestrian Bridge**

Denver, Colorado Architect: Hellmuth-Obata & Kassabaum, Inc. Contractor: M.A. Mortenson Company Area: 5,500 sq.ft. (THE EDGE MAX®)







### ▲ St. Peter & Paul Cemetery - Garden Mausoleum

Springfield, Pennsylvania

Architect: George Donovan AIA & Associates

Contractor: Keystone Mausoleum Constructors, Inc.

*Area*: 2,320 sq.ft. (BDL)

### **▼ HENRY FORD COMMUNITY COLLEGE**

Dearborn, Michigan

Architect: Hobbs & Black Associates

Contractor: The Bell Company Area: 3,260 sq.ft. (BDL)



BDL... is a standing seam system which incorporates polycarbonate panels and batten caps, offering an inexpensive, high performing glazing system.

### UNIQUE FEATURES:

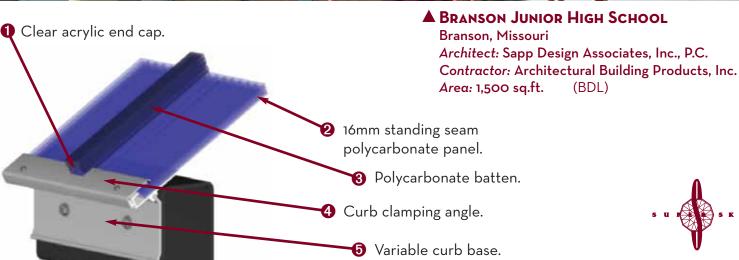
- · U-Value 0.20 to 0.37
- Light Transmission 13% to 63%
- · Shading Coefficient .39 to .77
- · Available Colors Clear, Opal, Ice Mist, Bronze, Green, Blue
- Ten (10) year manufacturer's warranty.
- Thickness 16mm.
- Width 600mm (23-5/8").
- Panel length up to 39'-0".
- Double sided U.V. protection.

- 3-piece aluminum clip allows for easy installation and noise free movement with panel expansion.
- · Can be installed with battens exposed to the exterior, or for a flush appearance, to the interior with aluminum battens.
- Impact resistance of 220 ft. lbs.

BDL polycarbonate panels can be filled with Nanogel® for increased performance values. See charts at the end of this brochure.

May contribute to your "green design" gaining LEED points.





## Revolutionary ... Environmentally Friendly ... Super Insulating







### SUPER SKY Polycarbonate Systems with NANOGEL® Light Diffusing Translucent Aerogel

Nanogel® Translucent Aerogel is Cabot Corporation's trade name for its family of hydrophobic silica aerogel products. Aerogel is considered the lightest and best insulating solid in the world. Nanogel is made up of 5% solids and 95% air. Translucent aerogel particles allow light to pass while serving as a highly effective thermal insulation. When placed in Super Sky's polycarbonate systems, insulation performance is maximized and resistance to condensation is improved.

### **BENEFITS**

- Superior insulation and diffuse light-transmitting technology.
- Ability to meet stringent building codes for thermal insulation and light transmission without trade-offs.
- Improved insulation performance, reduced energy consumption and HVAC costs.
- · Resistant to mold, mildew and fungus.
- Environmentally friendly.
- · Reduces sound transmission.
- Moisture resistant.
- Performance will not deteriorate over time.
- Thermal insulation will not degrade over time.
- 10 year manufacturer's warranty on workmanship, color stability and leakage.



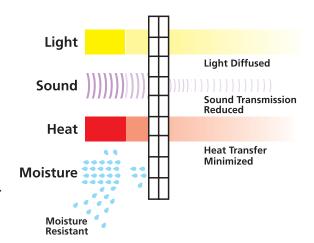
# SUPER SKY'S POLYCARBONATE SYSTEMS FILLED WITH NANOGEL®

### LIGHT TRANSMISSION

Nanogel's translucent, structure diffuses light evenly, preventing glare.

### **ACOUSTICAL INSULATION**

Nanogel's structure slows down the speed of sound, reducing sound transmission.

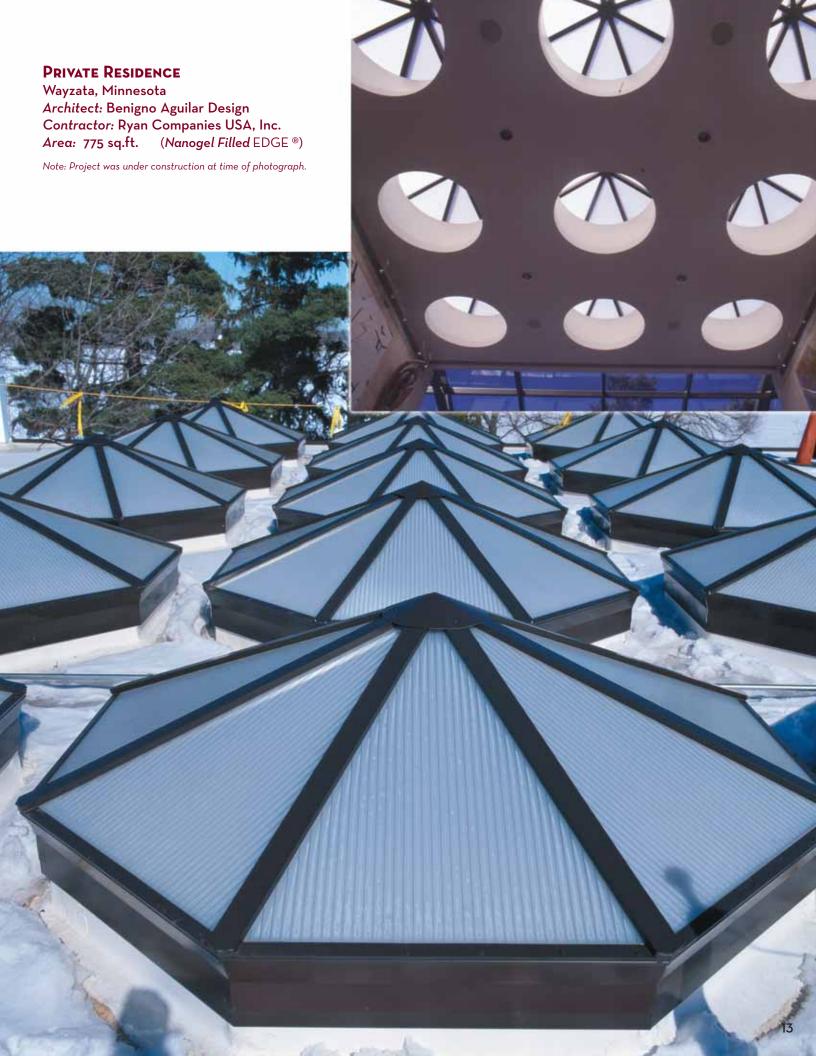


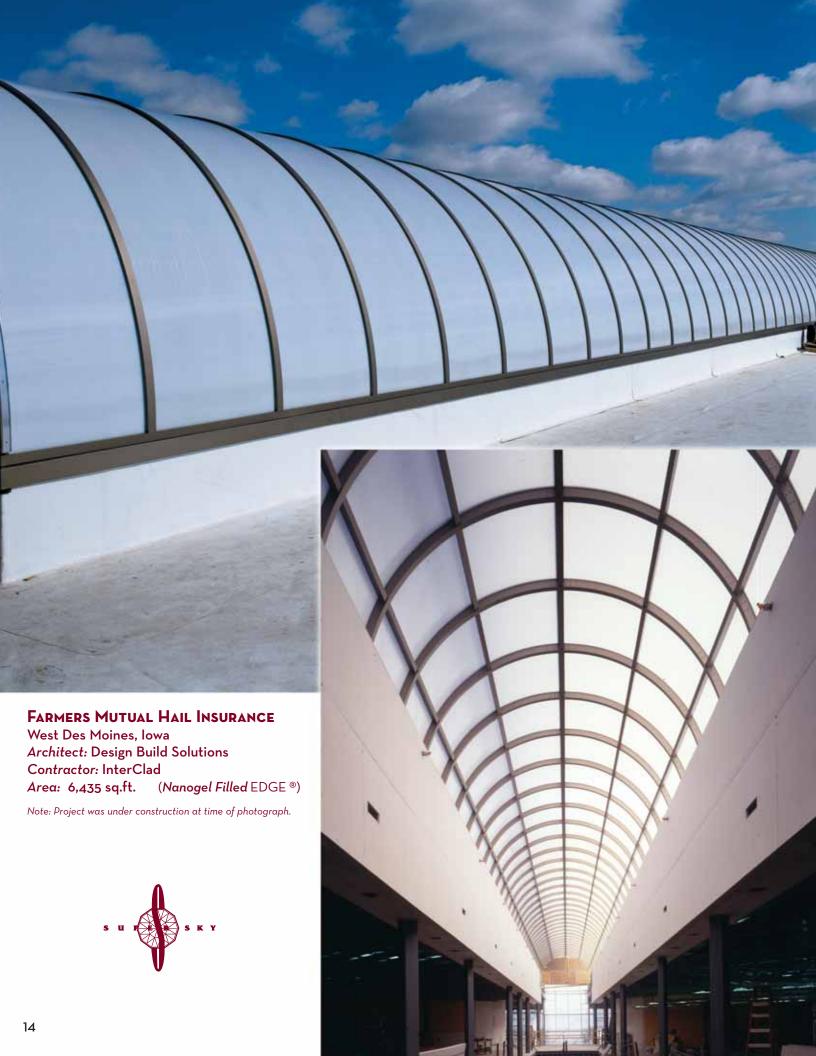
### THERMAL INSULATION

Nanogel's porous structure makes it an excellent thermal insulator by significantly reducing the conduction and convection of heat.

### **PERFORMANCE**

Nanogel's surface treatment prevents color change, resists mold and mildew, and will not have performance degradation.







# Performance Values

EDGE: 10mm	Light Transmission	Shading Coefficient	Solar Transmission	U-Value	R-Value
CLEAR	80%	O.98	85%	0.52	1.92
with Nanogel	52%	0.63	54%	0.34	2.94
OPAL	40%	0.70	50%	0.52	1.92
with Nanogel	26%	0.45	32%	0.34	2.94
WHITE	20%	O.53	30%	0.52	1.92
with Nanogel	13%	0.34	19%	0.34	2.94
BRONZE	50%	O.78	60%	0.52	1.92
with Nanogel	33%	0.50	38%	0.34	2.94
GREEN	66%	O.89	73%	0.52	1.92
with Nanogel	43%	O.57	47%	0.34	2.94
VENETIAN	35%	0.64	37%	0.52	1.92
with Nanogel	23%	0.41	24%	0.34	2.94

EDGE: 16mm	Light Transmission	Shading Coefficient	Solar Transmission	U-Value	R-Value
CLEAR	74%	O.95	82%	0.42	2.38
with Nanogel	45%	0.57	52%	0.23	4.35
OPAL	40%	0.70	50%	0.42	2.38
with Nanogel	25%	0.42	32%	0.23	4.35
WHITE	20%	0.53	30%	0.42	2.38
with Nanogel	12%	0.32	19%	0.23	4.35
BRONZE	50%	0.72	60%	0.42	2.38
with Nanogel	31%	0.43	38%	0.23	4.35
VENETIAN	33%	0.45	39%	0.42	2.38
with Nanogel	20%	0.27	25%	0.23	4.35

M	EDGE: 25mm	Light Transmission	Shading Coefficient	Solar Transmission	U-Value	R-Value
	CLEAR	61%	0.74	64%	0.28	3.57
	with Nanogel	28%	0.30	27%	0.17	5.88
	OPAL	36%	0.49	43%	O.28	3.57
	with Nanogel	16%	O.21	18%	0.17	5.88
	BRONZE	32%	0.48	42%	0.28	3.57
	with Nanogel	14%	0.20	18%	0.17	5.88

EDGE MAX: 10mm/10mm	Light Transmission	Shading Coefficient	Solar Transmission	U-Value	R-Value
CLEAR/CLEAR	66%	0.94	72%	0.26	3.85
with Nanogel	34%	0.47	36%	0.19	5.26
CLEAR/OPAL	32%	0.63	42%	0.26	3.85
with Nanogel	16%	0.31	21%	0.19	5.26
CLEAR/WHITE	16%	O.51	23%	0.26	3.85
with Nanogel	8%	0.25	11%	0.19	5.26
CLEAR/BRONZE	40%	0.73	51%	0.26	3.85
with Nanogel	20%	0.36	25%	0.19	5.26
CLEAR/GREEN	53%	O.86	61%	0.26	3.85
with Nanogel	27%	0.43	30%	0.19	5.26





EDGE MAX: 10mm/10mm	Light Transmission	Shading Coefficient	Solar Transmission	U-Value	R-Value
OPAL/CLEAR	32%	0.63	42%	0.26	3.85
with Nanogel	16%	0.31	21%	0.19	5.26
OPAL/OPAL	16%	0.49	26%	0.26	3.85
with Nanogel	8%	0.24	13%	0.19	5.26
OPAL/WHITE	8%	0.37	14%	0.26	3.85
with Nanogel	4%	O.18	7%	0.19	5.26
Opal/Bronze	20%	O.55	30%	0.26	3.85
with Nanogel	10%	0.27	15%	0.19	5.26
OPAL/GREEN	26%	0.62	36%	0.26	3.85
with Nanogel	13%	0.31	18%	0.19	5.26

EDGE MAX: 10mm/10mm	Light Transmission	Shading Coefficient	Solar Transmission	U-Value	R-Value
WHITE/CLEAR	16%	O.51	23%	0.26	3.85
with Nanogel	8%	0.35	11%	0.19	5.26
WHITE/OPAL	8%	0.37	14%	0.26	3.85
with Nanogel	4%	O.18	7%	0.19	5.26
WHITE/WHITE	4%	O.28	8%	0.26	3.85
with Nanogel	2%	0.14	4%	0.19	5.26
WHITE/BRONZE	10%	0.41	16%	0.26	3.85
with Nanogel	5%	0.20	8%	0.19	5.26
WHITE/GREEN	13%	0.47	20%	0.26	3.85
with Nanogel	7%	0.23	10%	0.19	5.26

BDL: 16mm	Light Transmission	Shading Coefficient	Solar Transmission	U-Value	R-Value
CLEAR	63%	0.77	67%	0.37	2.70
with Nanogel	39%	0.46	40%	0.20	5.00
OPAL	21%	O.55	48%	0.37	2.70
with Nanogel	13%	0.33	29%	0.20	5.00
ICE MIST	48%	O.68	59%	0.37	2.70
with Nanogel	29%	0.41	35%	0.20	5.00
Bronze	31%	O.65	57%	0.37	2.70
with Nanogel	19%	0.39	34%	0.20	5.00
GREEN	59%	0.74	65%	0.37	2.70
with Nanogel	36%	0.44	39%	0.20	5.00
BLUE	58%	0.73	64%	0.37	2.70
with Nanogel	36%	0.44	38%	0.20	5.00

Note: THE EDGE MAX® with Nanogel performance is based on both 10mm panels filled with Nanogel.

Note: The contents of this brochure are intended for product information only. All information and details within this brochure are subject to change without notice.



Since 1930, **Super Sky Products**, **Inc.** has designed, fabricated and installed skylighting systems that add natural light and beauty to commercial buildings and private residences. This tradition continues as we develop and expand the innovative polycarbonate EDGE<sup>®</sup>, EDGE MAX<sup>®</sup> and BDL systems for both sloped and vertical applications. We are extremely excited about our newest, revolutionary, super insulating solution - Nanogel<sup>®</sup> translucent aerogel, made by Cabot Corporation.

- The EDGE<sup>®</sup> system is a *single layer* system that is strong, silent, leak-free and fire safe. The EDGE<sup>®</sup> skin system can be installed directly on steel supporting structures or with a self-supporting aluminum frame.
- The EDGE MAX<sup>®</sup> system is a double layer system that offers the same features and benefits as the EDGE<sup>®</sup>, plus higher insulation value, improved shading properties and greater spanning ability.
- BDL is a standing seam system which incorporates polycarbonate panels and batten caps, offering an inexpensive, high performing glazing system.
- NANOGEL® is a premier translucent insulating material with a unique, highly porous structure. This material added to any Super Sky polycarbonate system, will improve the shading coefficient, solar transmission and U-values.

All the above polycarbonate glazing systems may contribute to your "green design" gaining LEED points for your building/project.



# Super Sky Products, Inc.

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