

Skyglaze Translucent Glazing System

This informational package is submitted as back-up for the attached Skyco Skylights quotation for our SkyGlaze Translucent glazing system, which is being quoted as an alternate to the Fiberglass Reinforced Plastic (FRP) translucent system specified. Skyco believes that our Skyglaze translucent panel system is a superior product, both in the initial performance, as well as long-term weathering capabilities and aesthetic appearance. Skyglaze does not yellow, does not have fiberbloom deterioration as an inherent problem, does not require a periodic gel coating to maintain the warranty, and out-performs fiberglass when utilized in skylights, sloped glazing applications, and vertical glazing applications.

Included in this package are the following documents:

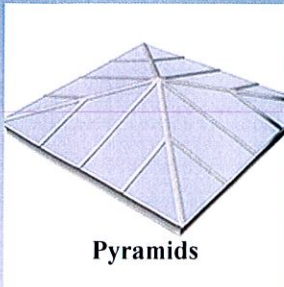
- 1) Skyco Skylights Skyglaze Translucent System Flyer – 2 pages
- 2) Skyglaze Translucent system technical data sheet
- 3) Comparison between Skyglaze Translucent glazing and the FRP system specified
- 4) Chemical resistance chart indicating the chemicals which Skyglaze is resistant to

If there are any questions concerning our quotation, or if you need additional information regarding Skyco Skylights Skyglaze translucent panel system, please feel free to contact Skyco Skylights at 949 629-4090.

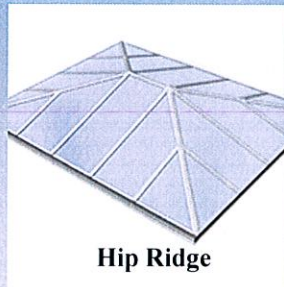
Thank you for considering Skyco Skylights.



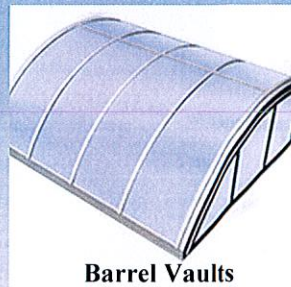
SKYGLAZE TRANSLUCENT SYSTEM



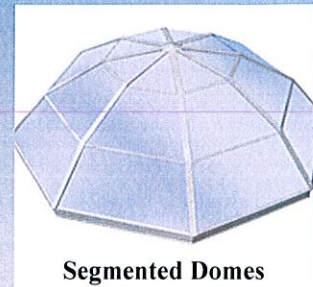
Pyramids



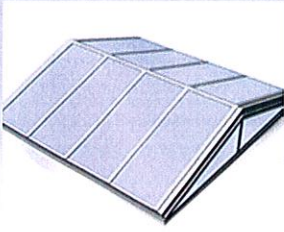
Hip Ridge



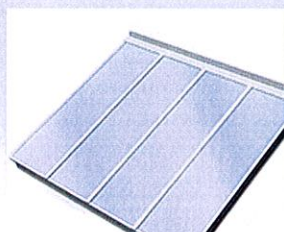
Barrel Vaults



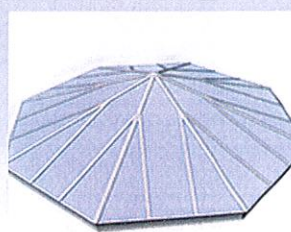
Segmented Domes



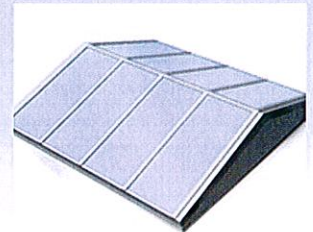
Ridgelite



Single Slope



Polygon



Ridge

- Translucent glazing system available with a wide assortment of skylight configurations
- Multi-wall high-impact polycarbonate sandwich panel construction
- Variations on Solar Heat Gain and Visible Light Transmittance to suit project requirements
- Standard panel is 2 3/4" thick. Other options from 1/ 1/2" to 4" thick
- Maintenance free glazing—simply clean with mild soap and water as necessary
- Impact strength is 200 times stronger than glass
- An assortment of frame finishes to meet the specific project requirements
- Light-weight system allows for a value engineered substructure and resulting savings
- Contact our Sales & Engineering team for specs, details and design options

Our Customers' Satisfaction is the driving force behind everything we do!

SKYCO Skylights
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Phone: 949 629-4090

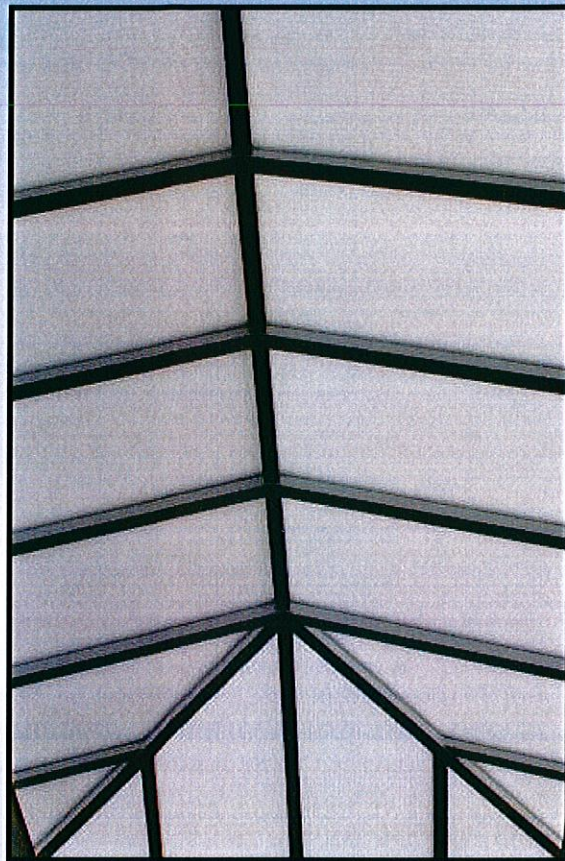
www.skycoskylights.com

SKYCO
SKYLIGHTS

SKYGLAZE TRANSLUCENT SYSTEM



Fiberglass Translucent Panels



Skyglaze Translucent System

Which translucent glazing system has superior weathering performance? You be the judge!

- Skyglaze—no exterior coating required to maintain weather resistant warranty
- Skyglaze—Standard Class A Fire Rating on Exterior and Interior Surfaces
- Standard 10 year non pro-rated warranty for yellowing, discoloration and breakage
- Contact Skyco Skylights to view an interesting fire test video demonstrating the fire resistance of multi-wall polycarbonate glazing versus fiberglass (FRP) glazing

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Member



AIA Approved LU
Presentations available.
Contact Skyco Skylights
to schedule

Skyglaze Translucent Glazing System

Technical Data Sheet

Construction: Skyglaze is a polycarbonate translucent panel assembly constructed of two layers of multiwall polycarbonate sheet, with an aluminum spacer between panels. A standard Skyglaze translucent panel features a 16mm twin-wall polycarbonate sheet over 10mm polycarbonate sheet with an overall panel thickness of 2 3/4" thick. Thicknesses up to 4" are available to meet project specific energy performance requirements.

Features and Benefits:

- Panel surface is virtually unbreakable, with an impact strength tested at 200 times that of glass
- Flexible performance values for U-Values, Solar Heat Gain and Visible Light Transmission. Flexibility in performance allows Skyglaze to meet the exact energy performance criteria required on a project-by-project basis. There is virtually an unlimited selection of options available to meet the project requirements
 - 1) Light Transmittance – available from 80% to 0% depending on thickness and color
 - 2) SHGC (Solar Heat Gain Coefficient) May be adjusted by panel color and thickness to meet the specific project performance criteria
- Option to add IR Coatings to provide higher performing SHGC values to reduce heat infiltration
- Standard Skyglaze panel has a Class A Fire Rating on both the inside and outside surfaces to insure interior and exterior safety
- Guaranteed Weather-Resistant, backed by a standard 10 year non-prorated warranty against discoloration and breakage. Extended Warranty to 15 years available
- The Skyglaze does not require after-market maintenance to maintain the warranty
- The Skyglaze panel systems are all Class A, CC1 Tested for Flammability Ratings
- The Skyglaze panel provides a thermally-broken system for added insulating values
- Sustainable Green Product: Skyglaze is completely recyclable and does not end up in landfills when disposed of. LEED points for recycling are available.
- Skyglaze is maintenance free, only requires periodic cleaning with mild soap and water
- The Skyglaze panel framing system is available in a full range of finishes including anodized, powder coat, or Kynar paint in 2-coat or 3-coat systems
- All types of designs, shapes and configurations are available to meet the specific project design criteria and achieve the exact aesthetic appearance required
- Lighter in weight than glass allowing for more economical substructure systems
- Systems available for sloped glazing, translucent wall assemblies and translucent roof assemblies
- Optional self-cleaning coating available for exterior surface for reduced maintenance

Testing and Performance:

- Structural Analysis by Professional Engineer for Entire System
- Class A Fire Rating for all surfaces
- Tested to ASTM D 635 and ASTM E 84 for surface burning characteristics and flame spread and smoke generation
- Smoke Density tested per ASTM D2843
- Self-ignition temperature tested per ASTM D1929
- System tested for Air Infiltration per E 283
- System tested for Water Infiltration per E 331
- System Tested for Structural Strength per E 330
- Chemical Resistance tested per ANSI Z26.1
- Shear Modulus tested per ASTM D732
- Light Transmission tested per ASTM D1925 @ 90 degrees
- Coefficient of Thermal Expansion tested per ASTM D696
- Thermal Conductivity tested per ASTM C177
- Heat Deflection Temperature tested per ASTM D648
- U-Factor/R-Value tested per ASTM D236
- Shading Coefficient tested per ASHRAE
- Solar Transmission tested per ASHRAE
- Refractive Index tested per ASTM D542
- UL 972 Listed for Impact Resistance
- Passed Sports Ball Impact Test per DIN Standard 18032

For questions or additional information, please contact Skyco Skylights at (949) 629-4090.

www.skycoskylights.com

Skyglaze Translucent Panel System vs FRP Comparison

Skyglaze Translucent Panel vs Fiberglass Reinforced Panels (FRP)

	FRP	Skyglaze Panel
Structural Analysis by PE	Yes	Yes
Sizes as indicated on drawings	Yes	Yes
Leak free Warranty	varies 1 – 5 years	10 years
Warranty of Light Transmission	1 year	10 years
Warranty against hail damage	not addressed	10 years
Warranty against yellowing	1 year	10 years
Warranty against Fiberbloom	1 year	Not applicable
Warranty against delamination	1 year	Not applicable
Finish Warranty	1 year	5 years
Aluminum framing system	Yes	Yes
Horizontal Burn Rate per ASTM D635	CC-1 Rating	CC-1 Rating
Smoke Density less than 450 per ASTM E-84	Yes	Yes
Class A Fire Rating Inside and Outside surfaces	No	Yes
Class A Fire Rating Inside Only	Yes	Inside and Outside
Sheet color	as selected	as selected
U Factor	Varies	Flexible
R-Value	Varies	Flexible
Standard System Thickness	2 ¾"	nominal 2 ¾"
Custom System Thickness as required	No	Yes
Thermally broken	Yes	Yes
Light Transmittance	Varies	Flexible
Condensation resistance on grid line	yes	Not applicable
Impact resistance	withstands 60 ft.lbs	withstands 200 ft.lbs.
Adhesive specifications	Yes	Not applicable
Finish as Specified	Yes	Yes

The Skyglaze Translucent Panel is:

- 1) Virtually unbreakable with an impact strength tested at 200 times that of glass.
- 2) U-Values are flexible to suit project requirements
- 3) Guaranteed weather resistant, backed with a 10 year non-prorated warrantee against discoloration and breakage
- 4) Relatively maintenance-free, only requires periodic cleaning with mild soap and water
- 5) No After-Market Maintenance required to maintain warranty. Does not require periodic gel-coating of glazing surface to prevent fiberbloom, yellowing or to maintain warranty.
- 6) Standard Panel has a Class A Fire Rating for both inside and outside surfaces, unlike FRP Panels which only have a Class A Rating on the interior surface for a standard panel
- 7) Typical panel has a U-Factor of .22 (R-Value of 4.55). Light transmittance is flexible and may be deigned to suit the specific project requirements.
- 8) The Skyglaze panel thickness can vary from 1 ¾" to 4", to suit specific project requirements, desired U-Value, Light Transmittance and U Values

**Chemical Resistance of Skylglaze
Translucent Panel System**

Chemicals	Resistant	Conditionally Resistant	Non-Resistant
Acetone			X
Ammonia			X
Carbon Dioxide, moist	X		
Citric Acid 10%	X		
Ethyl Alcohol, 96% Pure	X		
Hydrochloric Acid, 20%	X		
Isopropyl Alcohol		X	
Kerosene	X		
Ozone	X		
Petroleum		X	
Propane Gas	X		
Sulphur Dioxide		X	
Sulphuric Acid, 50%	X		
Detergents	Resistant	Conditionally Resistant	Non-Resistant
Ajax Cleanser	X		
Laundry Soap	X		
Soft Soap	X		
Lubricating Oils	Resistant	Conditionally Resistant	Non-Resistant
Automatic Switch Grease	X		
Silicone Oils	X		
Brake Fluid			X
Cable Insulating Oil IG 1402	X		
Cable Insulating Oil KH 190	X		
Diesel Oil		X	
Drilling Oil			X
Fish Oil	X		
Heating Oil		X	
Jet Fuel (JP4)		X	
Parrafin	X		
Silicone Fluid	X		
Turpentine		X	
Varnish		X	

Adhesives	Resistant	Conditionally Resistant	Non-Resistant
All-Purpose Glue		X	
Gypsum	X		
Insulating Tape	X		
Putty	X		
Rubber	X		
Various	Resistant	Conditionally Resistant	Non-Resistant
Battery Acid		X	
Cement	X		
Floor Polish	X		
Natural Rubber	X		
Ocean Water	X		

Note: Chemical Resistance of Skyglaze translucent system is determined at 73° F
 Chemical Resistance may be effected by the chemical concentration, duration of exposure,
 degree of pressure, and temperature at the time of contact.