100% natural. 100% free.

A well-lit factory thrives. A warehouse that’s bright and full of light makes it easier to pick, pull, package and ship. Agricultural buildings and livestock shelters seem more in-tune with Mother Nature when you let all the sun’s goodness shine through. The benefits of natural daylight for human and animal productivity are well documented. However, the much more obvious benefit is lighting and energy costs savings. How can you gain these benefits? At Palram, have the largest catalog of corrugated polycarbonate profiles in the world. And if we don’t have yours we’ll use our proprietary MetalMatch™ Technology to match virtually any profile you bring us.

Soft White SUNSKY Roof lights were installed in a 279,862 sq. ft. warehouse. As the photos show, the abundance of natural daylight transmitted through a mere 5% of the roof’s surface provides all the lighting necessary for the structure during the day. Soft White SUNSKY provides very high light transmission and 100% light diffusion, resulting in a bright, pleasant environment.
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Description

SunSky has been designed specifically to match up to the most popular metal panel profiles, making it a perfect choice for seamless skylights, roof lights, and sidelights. Durability is a hallmark of SunSky and has had no mechanical failures or cracks at the end of any test to measure ultimate load when tested to ICBO Evaluation Service Acceptance Criteria, AC 16 Plastic Skylights. SunSky features a high performance glazing that stands up to punishing exterior applications. SunSky Corrugated Polycarbonate Panels offer multiple advantages over traditional fiberglass corrugated panels: up to 20 times greater impact resistance, the highest light transmission rates, the lowest yellowing index, the highest load rating, and the highest resistance to wind uplift—outstanding properties confirmed in accredited laboratory testing and in installations worldwide since 1984.

SunSky Features:
- Virtually unbreakable
- Self extinguishing
- Resistant to yellowing
- Retains optical clarity
- Can handle extreme climates (-40°F to 250°F)
- Easily and safely installed

SunSky Available Colors
- Clear - 90% Light Transmission
- Soft White - 85% “Glare Free” Light Transmission
- White Opal - 45% Light Transmission

In addition to our standard line of SunSky, we have a range of enhanced SunSky for specific applications. See the following pages for details on Soft White and MetalMatch™ Technology.

Stock Profiles and Availability*

<table>
<thead>
<tr>
<th>Profile Name</th>
<th>Basic Profile Dimensions</th>
<th>Thicknesses (mm)</th>
<th>Standard Lengths (Ft.)</th>
<th>Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>SunSky 9”</td>
<td>3/4” × 36”</td>
<td>0.8 1.0 1.20</td>
<td>8’ 10’ 10’1/2’ 12’ 16’</td>
<td>Clear Soft White White</td>
</tr>
<tr>
<td>SunSky 12”</td>
<td>1-1/4” × 36”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SunSky Ridge Caps</td>
<td>Bend as required</td>
<td>a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Common Specialty Profiles* (Minimal stock available on hand, most subject to minimum order requirements. Other profiles available.)

- 9” Classic Rib
- 9” ProPanel II
- 9” Frontier (a.k.a. SUNTUF 6010)
- 7.2 MegaRib
- 2.67” LP
- 2.67” SP
- 5V Crimp

* Special dimensions and colors are available, subject to minimum order.
Increase Productivity while Reducing Energy Costs with SunSky Soft White.

SunSky Soft White is available in all of our standard or custom profiles. All of the features of our SunSky Clear panels... Without the Glare!

Let the beauty of natural sunlight in, without the harsh glare of direct sunlight. Translucent SunSky Soft White panels transmit 85% of the sun’s light with 100% diffusion, so light fills the room without unpleasant glare or stark, hard-edged shadows.

Soft White SunSky’s diffused, omni-directional ambient light, creates a more comfortable, worker-friendly environment for enhanced productivity. SunSky is perfect for skylights, ridge lighting and vertical sidelights, all of which can decrease energy costs by reducing the need for daytime electric lighting. And the Soft White coloration is co-extruded within the panel, so it will never peel or wear off.

SunSky Soft White isn’t just white PC with less white tint. It’s advanced technology, proven to provide 100% diffusion and 85% light transmission. Soft White spreads light and reduces harsh shadows and glare.

Benefits of SunSky Soft White
- 85% Light Transmission vs. 90% for Clear
- Soft/Diffused Light for a More Productive Environment
- Virtually Unbreakable
- Blocks 100% of Harmful UV Rays
- Service Temperature Range for All Climates
- Light Weight
- Easy to Install
In addition to the SunSky profiles shown on page 1, literally hundreds more profiles are currently available for production. Furthermore, if we don’t have a profile to meet your needs, there’s a very high likelihood that we can custom-match your profile using our MetalMatch™ Technology. The service is free of charge and does not delay supply schedules, in most cases.

It is easy to get your perfect match in a simple two-step process; either submit a detailed drawing or full width sample, then approve the drawing that Palram will return to you. It’s that simple.

**Benefits of SunSky Profile Matching**

- Maintain an even and consistent roof assembly
- Simple and easy installation
- Rooflight implementation with no additional fittings
- Reduce duration and cost of the installation
- Maximum impermeability
- Maximum flexibility in new roof designs
- Maximum flexibility when matched to existing roof

**Match virtually any profile with Metal Match**

Download our catalog of available profiles at PalramAmericas.com/Profiles.
**Radiation Filtering**

SunSky Panels transmit radiation selectively. They form a complete shield against harmful ultraviolet rays, while admitting most of the visible light, essential to healthy livestock and work environments. By completely blocking the far infrared rays, SunSky prevents heat loss at night. SunSky blocks both UV-A and UV-B, which prevents damage to items located underneath the panels due to UV exposure.

**Climatic Performance**

SunSky Panels perform flawlessly under extremely harsh climatic conditions. Service temperature range -40° to 215° F, enabling unlimited use throughout the world.

**Thermal Insulation**

SunSky’s heat conductivity is lower than fiberglass (FRP) sheets, which can result in considerable heating cost savings, compared to fiberglass.

**Weathering**

Due to its built-in co-extruded UV blocking layer, SunSky maintains its light transmission and physical properties and is resistant to yellowing. Arizona climatic exposure tests and accelerated QUV tests indicate a significant advantage of SunSky over competitive products such as fiberglass.

---

**SunSky Solar Optical Properties**

<table>
<thead>
<tr>
<th>SunSky Color</th>
<th>Light Transmission</th>
<th>Solar Heat Gain Coefficient (SHGC)</th>
<th>Shading Coefficient (SC)</th>
<th>Diffusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>90%</td>
<td>0.9</td>
<td>1.04</td>
<td>N/A</td>
</tr>
<tr>
<td>White Opal</td>
<td>45%</td>
<td>0.51</td>
<td>0.59</td>
<td>100%</td>
</tr>
<tr>
<td>Soft White</td>
<td>85%</td>
<td>0.85</td>
<td>0.98</td>
<td>100%</td>
</tr>
</tbody>
</table>

**QUV 1000 Hour Yellowing Test**

(roughly equivalent to 10 year actual exposure)

- Clear SunSky Polycarbonate
- White SunSky Polycarbonate
- Clear FRP Brand B
- White FRP Brand A
### Weathering Properties

SunSky Corrugated Polycarbonate Panels demonstrate greater resistance to yellowing, and transmit more light, than fiberglass panels. The results from QUV testing depicted below demonstrates the superior performance of SunSky compared to competing products. 100 hours of QUV exposure is roughly equivalent to 1 year of actual outdoor exposure in Arizona.

#### Yellowness Index

Note: Each 100 hours of weathering test roughly equivalent to one year actual weathering.

#### Yellowness Index after Weathering

- **Clear sheets**
  - **SUNSKY Polycarbonate**
    - 0: 91.2, % LT: 0, Yellowing Index: 1.26
    - 250: 90.7, % LT: -0.5, Yellowing Index: 4.27
    - 500: 89.7, % LT: -1.5, Yellowing Index: 6.69
    - 750: 90.9, % LT: -0.3, Yellowing Index: 3.78
    - 1000: 91.2, % LT: 0, Yellowing Index: 3.70
  - **Brand A FRP 5 oz.**
    - 0: 90.3, % LT: 0, Yellowing Index: 9.89
    - 250: 88.0, % LT: -2.3, Yellowing Index: 18.25
    - 500: 83.7, % LT: -6.6, Yellowing Index: 24.43
    - 750: 86.4, % LT: -3.9, Yellowing Index: 22.43
    - 1000: 83.3, % LT: -7.0, Yellowing Index: 27.88
  - **Brand A FRP 8 oz.**
    - 0: 85.8, % LT: 0, Yellowing Index: 15.10
    - 250: 75.4, % LT: -10.4, Yellowing Index: 31.98
    - 500: 82.7, % LT: -3.1, Yellowing Index: 27.42
    - 750: 79.3, % LT: -6.3, Yellowing Index: 29.89
    - 1000: 76.6, % LT: -9.2, Yellowing Index: 30.45
  - **Brand B FRP 5 oz.**
    - 0: 90.5, % LT: 0, Yellowing Index: 7.17
    - 250: 85.5, % LT: -5.0, Yellowing Index: 14.83
    - 500: 84.0, % LT: -6.5, Yellowing Index: 16.74
    - 750: 81.5, % LT: -9.0, Yellowing Index: 20.68
    - 1000: 83.8, % LT: -6.7, Yellowing Index: 19.47
  - **Brand B FRP 8 oz.**
    - 0: 83.5, % LT: 0, Yellowing Index: 12.61
    - 250: 81.7, % LT: -1.8, Yellowing Index: 22.56
    - 500: 79.2, % LT: -4.3, Yellowing Index: 19.61
    - 750: 78.2, % LT: -5.3, Yellowing Index: 21.62
    - 1000: 80.1, % LT: -3.4, Yellowing Index: 26.97

#### Yellowness Index after Weathering

- **Opal-White sheets**
  - **SUNSKY Polycarbonate**
    - 0: 91.2, % LT: 0, Yellowing Index: 1.26
    - 250: 90.7, % LT: -0.5, Yellowing Index: 4.27
    - 500: 89.7, % LT: -1.5, Yellowing Index: 6.69
    - 750: 90.9, % LT: -0.3, Yellowing Index: 3.78
    - 1000: 91.2, % LT: 0, Yellowing Index: 3.70
  - **Brand A FRP 5 oz.**
    - 0: 90.3, % LT: 0, Yellowing Index: 9.89
    - 250: 88.0, % LT: -2.3, Yellowing Index: 18.25
    - 500: 83.7, % LT: -6.6, Yellowing Index: 24.43
    - 750: 86.4, % LT: -3.9, Yellowing Index: 22.43
    - 1000: 83.3, % LT: -7.0, Yellowing Index: 27.88
  - **Brand A FRP 8 oz.**
    - 0: 85.8, % LT: 0, Yellowing Index: 15.10
    - 250: 75.4, % LT: -10.4, Yellowing Index: 31.98
    - 500: 82.7, % LT: -3.1, Yellowing Index: 27.42
    - 750: 79.3, % LT: -6.3, Yellowing Index: 29.89
    - 1000: 76.6, % LT: -9.2, Yellowing Index: 30.45
  - **Brand B FRP 5 oz.**
    - 0: 90.5, % LT: 0, Yellowing Index: 7.17
    - 250: 85.5, % LT: -5.0, Yellowing Index: 14.83
    - 500: 84.0, % LT: -6.5, Yellowing Index: 16.74
    - 750: 81.5, % LT: -9.0, Yellowing Index: 20.68
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    - 0: 83.5, % LT: 0, Yellowing Index: 12.61
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    - 500: 79.2, % LT: -4.3, Yellowing Index: 19.61
    - 750: 78.2, % LT: -5.3, Yellowing Index: 21.62
    - 1000: 80.1, % LT: -3.4, Yellowing Index: 26.97
Uniform Load

SunSky Corrugated Polycarbonate Panels had no mechanical failures or cracks at the end of any test to measure ultimate load when tested to “ICBO Evaluation Service Acceptance Criteria, AC 16 Plastic Skylights”.

**Note:** The tables below are provided only as a guideline. Information was obtained from tests using SunSky polycarbonate panels as roofing and siding. To avoid premature failure, all proposed spans should be tested in actual tests. In addition, a licensed engineer must verify the application.

<table>
<thead>
<tr>
<th>Profile</th>
<th>Panel Thickness</th>
<th>Span Between Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inch</td>
<td>mm</td>
</tr>
<tr>
<td>SunSky 9”</td>
<td>0.031</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>0.039</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.047</td>
<td>1.2</td>
</tr>
<tr>
<td>SunSky 12”</td>
<td>0.031</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>0.039</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.063</td>
<td>1.5</td>
</tr>
<tr>
<td>SunSky Greca 3”</td>
<td>0.031</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>0.039</td>
<td>1</td>
</tr>
<tr>
<td>SunSky 7.2”</td>
<td>0.031</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>0.039</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.063</td>
<td>1.5</td>
</tr>
<tr>
<td>5V Crimp</td>
<td>0.039</td>
<td>1</td>
</tr>
<tr>
<td>Suntuf Class Rib</td>
<td>0.031</td>
<td>0.8</td>
</tr>
<tr>
<td>2.67” SP</td>
<td>0.039</td>
<td>1</td>
</tr>
<tr>
<td>2.67” LP</td>
<td>0.039</td>
<td>1</td>
</tr>
<tr>
<td>9” Frontier</td>
<td>0.031</td>
<td>0.8</td>
</tr>
<tr>
<td>9” Propanel 2</td>
<td>0.031</td>
<td>0.8</td>
</tr>
</tbody>
</table>

**Notes:** The values are valid for mid spans only. The values are indicative of a roof light application and are not valid for a whole roof installation.

For detailed Installation Instructions, fastener and fastening pattern information as well as sealant information, Contact Palram Americas and request the SunSky Installation Guide. You can also quickly download this as a PDF document along with other SunSky documentation at: www.palramamericas.com/sunsky
SunSky 12 is Approved for Higher Loads and Wider Pulin Spans

1mm and 1.5 mm thick Sunsky for applications that require better loading capabilities, FBC approval, or greater spans between purlins.

Code Approvals

- FBC Approved 2010 Code
  (SunSky 12 in 1mm or 1.5mm required):
  • FL11238 Roof Deck
  • FL11240 Structural Wall Applications
- Miami - Dade County Product Control*
  • Approved Acceptance No. 13-0418.05
  *Most rigorous code standard in USA
- City of Los Angeles - Research Report RR25298

Typical Physical Properties

For detailed physical property information, please visit www.PalramAmericas.com/SunSky.

Wind Speed Map

The map below represents wind speeds for Florida, which can be a very challenging environment. SunSky is approved for use in all of Florida except in Miami Dade, Palm Beach and Broward Counties.

Hail Velocity

SunSky Corrugated Polycarbonate Panels demonstrate greater resistance to high-velocity impact (hail simulation test versus fiberglass panels.)
## 2010 FBC (Florida Building Code) Wind Load Tables

### Roofing / Skylight Applications

<table>
<thead>
<tr>
<th>Roof Zone*</th>
<th>Panel Thickness</th>
<th>1.0mm SunSky 12&quot; Windspeed Zone (mph)</th>
<th>1.5mm SunSky 12&quot; Windspeed Zone (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td>0.040” (1.0mm)</td>
<td>5’ 5’ 5’ N/A N/A N/A N/A</td>
<td>5’ 5’ 5’ 2’6” 2’6” 2’6” 2’6”</td>
</tr>
<tr>
<td>Zone 2</td>
<td>0.060” (1.5mm)</td>
<td>5’ 5’ 5’ 2’6” 2’6” 2’6” 2’6”</td>
<td>5’ 5’ 5’ 2’6” 2’6” 2’6” 2’6”</td>
</tr>
</tbody>
</table>

### Side Wall / Side Lighting Applications

<table>
<thead>
<tr>
<th>Wall Zone**</th>
<th>Panel Thickness</th>
<th>1.0mm SunSky 12&quot; Windspeed Zone (mph)</th>
<th>1.5mm SunSky 12&quot; Windspeed Zone (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 4</td>
<td>0.040” (1.0mm)</td>
<td>5’ 5’ 5’ N/A N/A N/A N/A</td>
<td>5’ 5’ 5’ 2’6” 2’6” 2’6” 2’6”</td>
</tr>
<tr>
<td>Zone 5</td>
<td>0.060” (1.5mm)</td>
<td>5’ 5’ 5’ N/A N/A N/A N/A</td>
<td>5’ 5’ 5’ 2’6” 2’6” 2’6” 2’6”</td>
</tr>
</tbody>
</table>

### Notes:
- Dimension (a) is defined as 10% of the minimum width of the building or 40% of the mean height of the roof, whichever is smaller, however, (a) cannot be less than either 4% of the minimum width of the building or 3 feet.
- Buildings having a Roof Mean Height ≤ 20’-0”, 0.5:125 Roof Slope < 2:12, Gable Roof: Wind Speeds 120-180 mph, Exp C, Risk Factor 1-4, Enclosed Building, based on FBC 2010. Load table based on wind pressures calculated per ASCE 7-10 (Kd=0.85) multiplied by 0.6 per FBC 2010 Section 1609.1.
10-Year Limited Light Transmission Warranty*
It is warranted that for a period of 10 years, SunSky polycarbonate panels shall not lose more than 10% of their light transmitting capability, as a direct and exclusive result of the impact of solar radiation (as measured pursuant to the procedures specified in ASTM D-1003-77. See warranty for complete details: www.palramamericas.com/sunsky_docs

10-Year Limited Hail Damage Warranty*
It is warranted that for a period of 10 years, SunSky polycarbonate panels shall not break as a direct and exclusive result of the impact of hail measuring up to one inch diameter in size, and attaining up to 20 meters/sec. in velocity. See warranty for complete details: www.palramamericas.com/sunsky_docs

* This brochure contains statements of general company policy concerning customer satisfaction. There are no warranties which extend beyond that which are specifically set forth in the two limited warranties above. Palram Americas reserves the right to change product specifications and/or information contained in this brochure.

For detailed installation instructions visit www.PalramAmericas.com/SunSky and download the SunSky Installation Guide, or call Palram Americas at (800) 999-9459 to request a printed copy.

Also Available:
Suntuf® Corrugated Polycarbonate Panels,
SunLite® Multi-Wall Polycarbonate Panels, and
AgTuf® PVC Panels for residential, agricultural and commercial applications.
Palsun® Flat Polycarbonate Sheet

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