

RECOMMENDED WASHERS & FASTENERS:

Metal structures: Self-Drilling Tapping Screw

Wood structures: Tapping Screw

Side Stitching: Sharp Point Self-Tapping Screw

Washer: Palram metal washer with EPDM gasket (see figures 15a and 15c; *15c required for FBC-approved installations*)

Grommet: Expanding rubber fastener (see fig. 15d & 16b; *required for FBC-approved installations*)



Palram Metal Washer with Concave EPDM Gasket

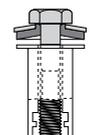
3/4" (19 mm)
Washer/gasket
Figure 15a

Metal Washer w/EPDM Gasket



#12-14 x 1-1/4" HWH w/1-1/8"
Oversize Bonded Washer
(*pre-drilling w/oversize holes required*)
Figure 15c

Grommet Fastener



1/4" x 1" Grommet
(*pre-drilling required*)
Figure 15d

Protite® Metal 1" (Stitch Screw Alternative)

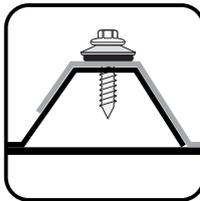


Figure 16a

Grommet

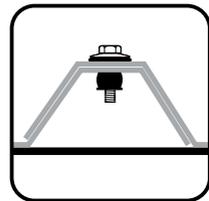


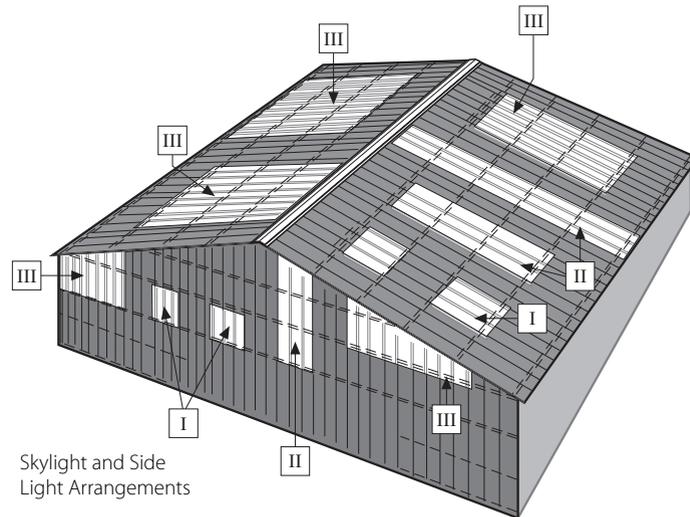
Figure 16b

SUGGESTED FASTENER TYPES AND PLACEMENT

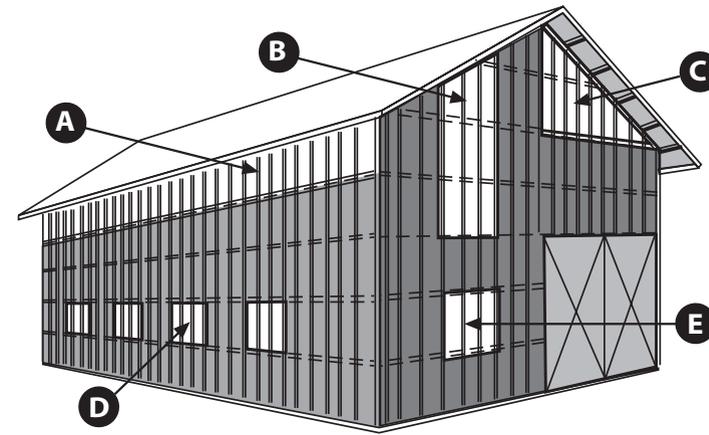
	SunSky 9"	SunSky 12"
Fastening at crown	1/4" x 2" with 3/4" washer	1/4" x 2-1/2" with 1" washer
Fastening at valley	1/4" x 1-1/2" with 1" washer	1/4" x 1-1/2" with 1" washer

VARIOUS SUNSKY SKYLIGHT & SIDE LIGHT ARRANGEMENTS

- I Single panel, single span
- II Single panel run
- III Multi-panel run



Skylight and Side Light Arrangements



SIDE LIGHT NOTES

Using SunSky in a side light application is similar to that of SunSky roof installation.

Side light options include:

- A. Multi-panel, single span
- B. Single panel, multi-span
- C. Multi-panel, multi-span
- D. Single panel, single span
- E. Framed side light, independent on surrounding cladding type

FBC Approved Installation Instructions



To obtain FBC approval, certain installation requirements must be met. The icon shown at left is used within this guide to call out optional FBC-approved installation methods and requirements.

For information about Florida Building Code requirements, visit the FBC web site at: <http://www.floridabuilding.org>. Product approval numbers are 11238 (roof decks) and 11240 (structural walls).



TDI Approved Installation Instructions

Sunsky 12 in 1mm and 1.5mm thicknesses are approved by the Texas Department of Insurance (TDI) for use in Tier III coastal counties. The FBC installation instructions must also be followed for this approval.

Authorized Palram Dealer



PALRAM AMERICAS

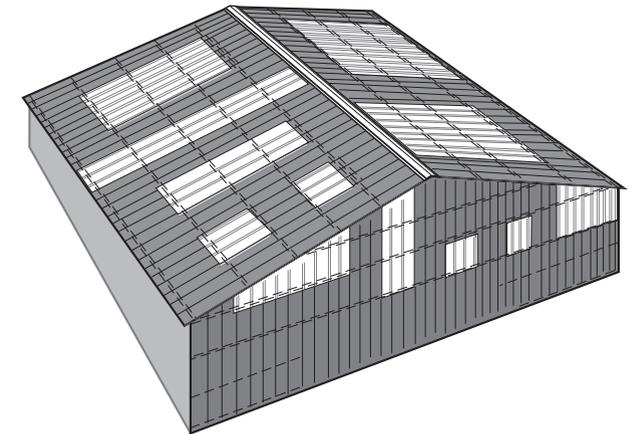
9735 Commerce Circle, Kutztown, PA 19530
Phone: 800-999-9459 • Fax: 610-285-9928
Web Site: www.PalramAmericas.com

Inasmuch as Palram Americas has no control over the use to which others may put the product, it does not guarantee that the same results as those described herein will be obtained. Each user of the product should make his own tests to determine the product's suitability for his own particular use including the suitability of environmental conditions for the product. Statements concerning possible or suggested uses of the products described herein are not to be construed as constituting a license under any Palram Americas patent covering such use or as recommendations for use of such products in the infringement of any patent. Palram Americas or its distributors cannot be held responsible for any losses incurred through incorrect installation of the product. In accordance with our company policy of continual product development you are advised to check with your local Palram Americas supplier to ensure that you have obtained the most up to date information.

Palram Americas reserves the right to change product specifications and/or information contained in this brochure without notice.



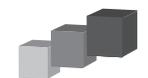
Premium Corrugated Polycarbonate Panels



Installation Overview

IMPORTANT!

This is an abbreviated installation overview for SunSky Premium Polycarbonate Panels. For complete installation details, see Form #505, titled SunSky Installation Guide, available at www.PalramAmericas.com, or by contacting Palram Americas by phone at (800) 999-9459.



Build On.

BEFORE YOU BEGIN

Be sure to read these instructions completely before beginning. Before installation, check local building codes for relevant specifications and recommendations. Follow local codes at all times.

Transportation, Handling and Storage: Transport and store SunSky panels horizontally, on flat, sturdy pallets, equal or longer than the longest panels. Short panels should be secured and fastened to the pallet during transportation. Do not transport, leave or store panels in direct sun before installation. For outdoor storage, cover the panels securely with a white opaque polyethylene sheet, corrugated cardboard, or other materials that do not absorb or conduct heat.

INSTALLATION STEPS

Apply the sealing tape along the purlin line 2" to 4" above and below the SunSky panel. Apply the sealing tape to the corrugation crests immediately adjacent to the opening as shown.

Place the SunSky panel exactly in place. Attach the SunSky panel with 1-1/2" fasteners with Palram-approved bonded washer/gaskets. **NEVER USE SOFT PVC (vinyl) washer/gaskets.** Soft PVC is totally incompatible with polycarbonate and will harm the panel.



NEVER USE NAILS to fasten SunSky panels. The use of nails can damage the panel at the fastening point. Using nails will also prevent the panel from properly expanding and contracting with temperature change, thus resulting in buckling.

For panels longer than 12', pre-drill holes at all fastening points, 1/4" larger than the shank of the fastener. For panels 12' in length or less, pre-drill a hole 1/8" larger than the diameter of the fastener shank. Palram recommends that Sunsky panels are not installed below 40°F or above 80°F.

INSTALLATION NOTES

To Cut Panels: Use a circular saw with small teeth rotating at high speed; advance saw slowly. A portable electric saw (jig saw) or sheet metal shears can also be used. Support the sheet in the vicinity of the cut; clean away debris after cutting.

Drilling: Use a power drill with standard high speed bit intended for metal, rotating at about 1000 rpm.

Sealants: Use only Palram approved sealants. Visit Palramamericas.com/sealants for the most up to date list.

Sealing Tape: Side-laps and end-laps of any SunSky profile should be treated with butyl rubber sealing strips, placed between the overlapping panels at all edges. In shallow pitch roofs (less than 5%) double (parallel) sealing strips are recommended at end-laps.

Panel Orientation: SunSky's exterior surface is UV resistant, indicated by labeled strips on the protected side. Install panel with labeled side out. The protected side is up when panel edges are both pointing down. For multi-panel runs, begin installation of SunSky on the side away from wind and rain direction.

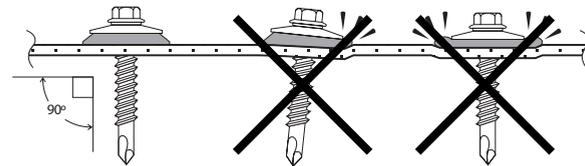
Roof Pitch: SunSky performs best when installed at pitch rates of 10% or more. When installed at a lower pitch, additional sealing should be applied to insure weather resistance. We recommend a minimum 5% pitch rate.

Safety Measures: Use ladders, crawling boards and other safety equipment required for safe installation. Use all safety measures required according to local safety regulations. Do not step on installed panels between purlins. Never leave SunSky panels unattended on the roof until all the required fasteners have been appropriately installed or the panels secured to the supporting structure.

Extra Fastening: On length runs, where SunSky overlaps metal panels on both sides, we recommend side stitching fasteners connecting the SunSky to the frame. These should be spaced along the side-laps about 12" to 16" apart.

IMPORTANT INSTALLATION COMMENTS

Avoid over tightening the fasteners. Allow gaskets to squeeze slightly until full contact with panel. Over tightening induces undue internal stresses, leading to premature failure. Regular Washer/ Gaskets (Tek Screws) for metal panels apply excessive pressure, are inadequate for SunSky sealing, and cause undue internal stresses in the panel. The stresses result in crazing, fractures, and eventual failure.



Never apply paints, shading compounds, paint thinners or any material that may chemically attack SunSky, without first verifying compatibility to the panel by contacting Palram Americas or its distributor, or refer to www.PalramAmericas.com/Tech and view the Chemical Resistance of Palram Polycarbonate Products document. Use only Palram approved sealants. Incompatible sealing or bonding material may damage the panels, causing

failure that is not covered by the limited warranty. For the name of an approved sealing or bonding product, consult your Dealer, Distributor, Palram Americas or refer to www.Palramamericas.com/sealants for the most up to date list.

Prior to installing clear SunSky, it is advisable to paint purlins using white **acrylic** paint, or to cover with aluminum tape, in order to prevent over-heating and/or charring of the purlins.

SunSky profiles were designed to closely match commonly used metal profiles. Other panels, appearing to be similar, differ in small but important ways and an exact match may be difficult to achieve. Slight detail differences such as corrugation height, slant, wave distance etc. will hinder exact matching of such a panel with a SunSky profile. This may lead to insufficient sealing, water leakage and forced installation, putting undue stresses on the SunSky panel while trying to adapt it to an "almost similar" metal profile. Undue stress may lead to premature failure, which is not covered by the limited warranty.

MAXIMUM RECOMMENDED LOADS

SUNSKY 12 MAXIMUM ROOF SPAN (INCHES)

Load (lb/ft ²)	.03" (0.8mm) thickness		.04" (1.0mm) thickness		.059" (1.5mm) thickness	
	End Span	Mid Span	End Span	Mid Span	End Span	Mid Span
10	60	60	60	60	60	60
20	49	60	52	60	60	60
30	43	50	45	54	52	60
40	38	45	42	49	48	56
50	36	42	38	45	44	51
60	33	39	36	43	42	49
70	32	37	34	40	39	46
80	31	36	33	38	38	44
90	30	34	31	37	36	43
100	28	33	30	36	34	40

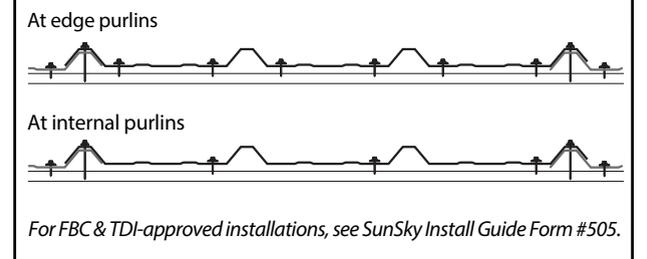
SUNSKY 9 MAXIMUM ROOF SPAN (INCHES)

Load (lb/ft ²)	.03" (0.8mm) thickness		.04" (1.0mm) thickness		.059" (1.5mm) thickness	
	End Span	Mid Span	End Span	Mid Span	End Span	Mid Span
10	36	48	37	50	42	55
12.5	33	44	36	48	41	54
15	30	40	33	44	41	53
25	27	36	30	40	36	47
30	24	32	27	36	33	43
35	21	28	24	32	30	39
50	18	24	18	24	21	27

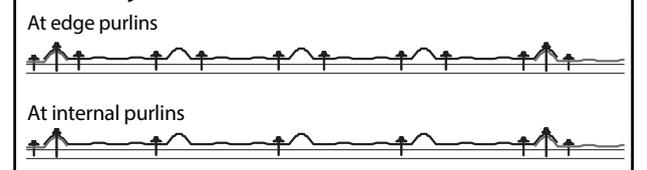
POSITIONING OF FASTENERS

Install the fasteners along the purlin line as shown below.

SunSky 12" Figure 14a



SunSky 9" Figure 14b



Notes About Maximum Roof Spans

- The specified dimensions do not supersede the requirements of local construction codes.
- The given spans are according to deflections criterion of L/20, and minimum slope of 10%.
- The maximum roof spans are based on calculation model and practical testing.
- The mentioned load refers to wind and snow load only.
- For vertical application spans can be increased by 10%.