

RECOMMENDED WASHERS & FASTENERS:

Metal structures: Self-Drilling Tapping Screw

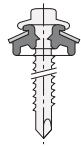
Wood structures: Tapping Screw

Side Stitching: Sharp Point Self-Tapping Screw

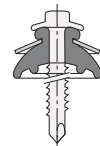
Washer: Palram metal washer with EPDM gasket (see figures 15a, 15b, and 15c; *15c required for FBC-approved installations*)

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

Palram Metal Washers w/Concave EPDM Gasket



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



1" (25 mm)
Washer/gasket
Figure 15b

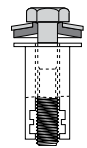
Metal Washer w/EPDM Gasket



#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)

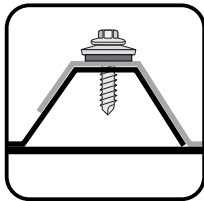


Figure 16a

Grommet

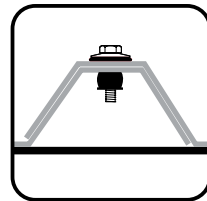


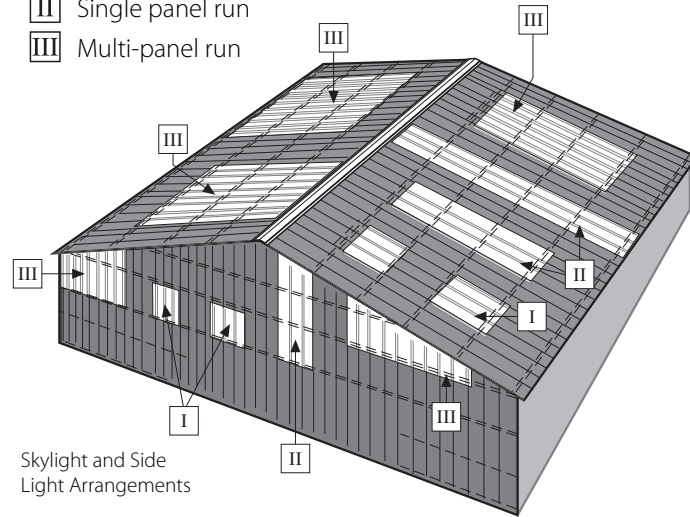
Figure 16b

SUGGESTED FASTENER TYPES AND PLACEMENT

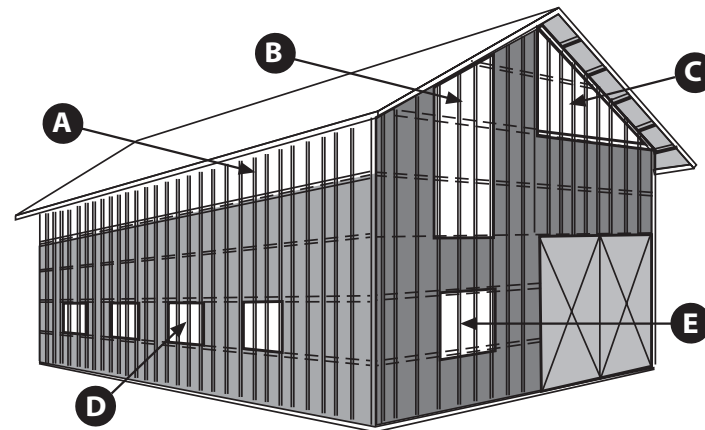
| | SunSky 9" | SunSky 12" |
|----------------------------|---------------------------------|---------------------------------|
| Fastening at crown | 1/4" x 2" with 3/4" washer | 1/4" x 2-1/2" with 1" washer |
| Fastening at valley | 1/4" x 1-1/2" with 1" washer | 1/4" x 1-1/2" with 1" washer |

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 Sun-Sky 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

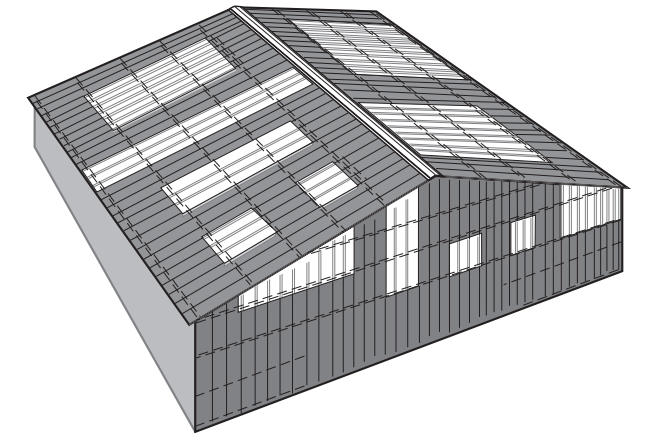
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Premium Corrugated Polycarbonate Panels



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.



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.

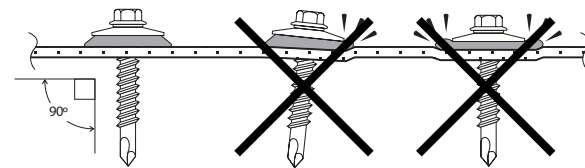
Roof Pitch: SunSky performs best when installed at pitch rates of 10% or more. When installed at a lower pitch, additional sealing should be applied to insure weather resistance. We recommend a minimum 5% pitch rate.

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 overtightening the fasteners. Allow gaskets to squeeze slightly until full contact with panel. Overtightening 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 | | .05" (1.2mm) thickness | | .06" (1.5mm) thickness | |
|----------------------------|------------------------|----------|------------------------|----------|------------------------|----------|------------------------|----------|
| | End Span | Mid Span | End Span | Mid Span | End Span | Mid Span | End Span | Mid Span |
| 10 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| 20 | 49 | 60 | 52 | 60 | 56 | 60 | 60 | 60 |
| 30 | 43 | 50 | 45 | 54 | 49 | 57 | 52 | 60 |
| 40 | 38 | 45 | 42 | 49 | 44 | 52 | 48 | 56 |
| 50 | 36 | 42 | 38 | 45 | 40 | 48 | 44 | 51 |
| 60 | 33 | 39 | 36 | 43 | 38 | 45 | 42 | 49 |
| 70 | 32 | 37 | 34 | 40 | 37 | 43 | 39 | 46 |
| 80 | 31 | 36 | 33 | 38 | 34 | 42 | 38 | 44 |
| 90 | 30 | 34 | 31 | 37 | 33 | 39 | 36 | 43 |
| 100 | 28 | 33 | 30 | 36 | 32 | 38 | 34 | 40 |

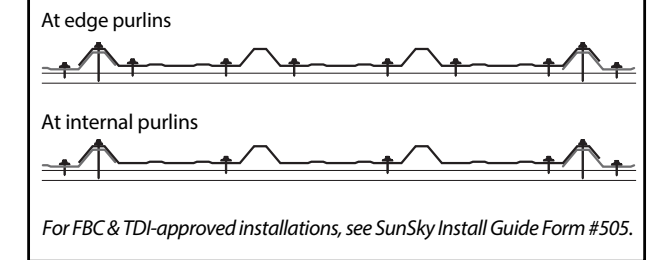
SUNSKY 9 MAXIMUM ROOF SPAN (INCHES)

| Load (lb/ft ²) | .03" (0.8mm) thickness | | .04" (1.0mm) thickness | | .05" (1.2mm) thickness | |
|----------------------------|------------------------|----------|------------------------|----------|------------------------|----------|
| | End Span | Mid Span | End Span | Mid Span | End Span | Mid Span |
| 10 | 36 | 48 | 37 | 50 | 39 | 52 |
| 12.5 | 33 | 44 | 36 | 48 | 37.5 | 50 |
| 15 | 30 | 40 | 33 | 44 | 36 | 48 |
| 25 | 27 | 36 | 30 | 40 | 33 | 44 |
| 30 | 24 | 32 | 27 | 36 | 30 | 40 |
| 35 | 21 | 28 | 24 | 32 | 27 | 36 |
| 50 | 18 | 24 | 18 | 24 | 18 | 24 |

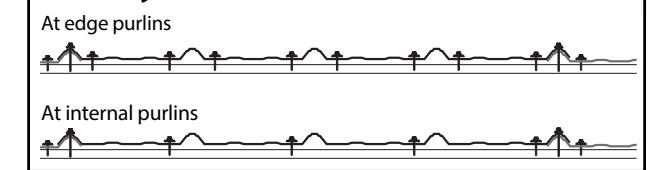
POSITIONING OF FASTENERS

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%.