

# LASERLITE<sup>®</sup>

POLYCARBONATE

## Installation Guide



[laserlite.com.au](http://laserlite.com.au)

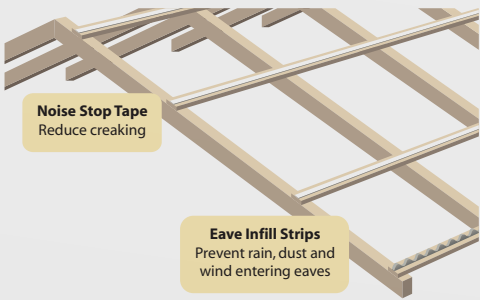
Lifetime  
Platinum  
WARRANTY\*

\*Refer to full Warranty Terms & Conditions at [laserlite.com.au](http://laserlite.com.au).



# Installation Guide

## Step 1 Purlins & Accessories



1. Ensure that your roof pitch is at least 5°, i.e. 88mm rise per lineal metre. This will ensure adequate water run off.



2. Allow for ventilation, particularly at the highest point, to minimise heat build-up and provide air circulation. Good ventilation will also minimise condensation in cold weather.

3. For roofing, purlin/batten spacings should be no more than those shown in Table X - Maximum Purlin Spacings.

Table X - Maximum Purlin Spacings		
Profile	End Span	Mid Span
Corrugated	800mm	1000mm
Greca	900mm	1200mm
5 Rib	900mm	1200mm

For curved structures, the maximum purlin spacing should be 750mm.

Sheet Length (mm)	Depth of Curve (mm)	
	Corrugated /Greca	5-Rib
6000	800	600
4500	400	300
3600	200	200

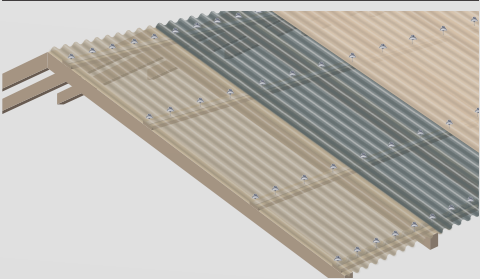
Use Laserlite® Noise Stop Tape on all battens, purlins or noggings to minimise the noises associated with expansion and contraction.

4. Lay Laserlite® Noise Stop Tape to avoid creaking.

5. Lay Laserlite® Eave Infill Strips at eaves to avoid rain, dust and wind entering the eaves.

6. For installations under a gutter, fit metal back channel with Back Channel Infill Strips prior to laying sheet

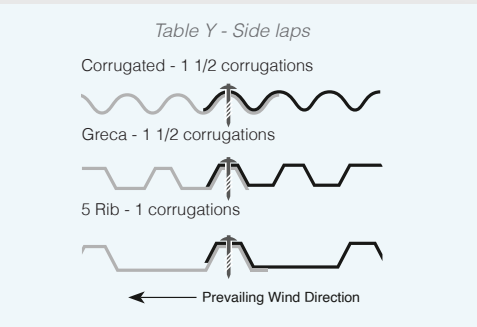
## Step 2 Sheet & Fixings



## Step 2 Continued...

1. Ensure that the UV surface protected side faces the sun. This is the side of the label and the inkjet marking. When installed as a wall or fence it is recommended that the UV protected side is facing the most sun. The life of the sheet may be shortened and discolouration may occur due to the unprotected side being exposed to UV radiation.
2. The sheet can be easily cut with a pair of shears, a fine-toothed handsaw or a circular saw with a cut-off blade suitable for plastic.
3. For roof laying, start with the lower sheets first, keeping side laps away from prevailing wind. Allow an overhang of 50mm. Temperature changes will cause expansion and contraction, so make allowances for thermal movement. Resistance to movement can cause buckling.

4. Side laps will differ by profile. Install as shown below:



5. To ensure maximum performance of the sheet, and to avoid buckling, it is necessary to oversize the holes and centre the fixings. It is recommended that Laserlite® Polycarbonate fixings are used. They come complete with their own hole saw that cuts an expansion hole as you drill. The screw is centred every time and the cutter holds the plug of material removed. If using a fixing without a hole cutter, pre-drilling is required. Use a 10mm drill for sheets up to 4.2m long and a 12mm drill for sheets longer than 4.2m. Fix the sheet through the centre of the pre-drilled holes, perpendicular to the purlins/battens. A (5/16") Drill hex driver bit should be used. Only tighten the fixings enough to prevent rattling. Over tightening may cause distortion and undue stress with possible failure resulting. Use only Laserlite® branded fixings as these are designed to be compatible with Laserlite® Polycarbonate Roofing. Any failure of the sheet due to fixings other than Laserlite® branded will void the Laserlite® warranty.

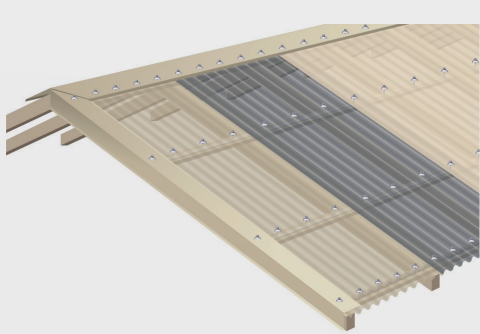
In normal conditions, use the fixing spacings shown in Table Z - Fixing spacings.

As a guide, you will need approximately 7 fixings per lineal metre. This depends on your purlin spacings and wind conditions. In high wind areas fix Corrugated and Greca on every second corrugation on each purlin/batten. It is suggested that barge capping be used. Fix the sheet through the valleys for walls with Laserlite® Polycarbonate Fixings. Using Laserlite® Polycarbonate fixings eliminates requirement for pre-drilling.

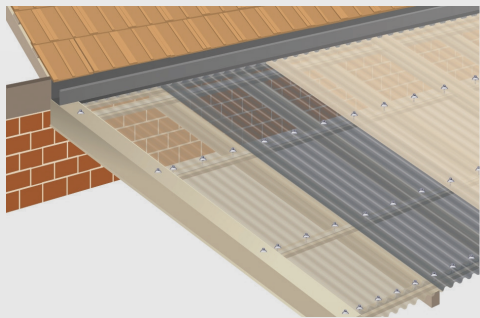
6. End overlaps should be 150mm for steep pitch or 200mm for shallow pitch.

Table Z - Fixing Spacing		
Profile	End Purlin	Mid Purlins
Corrugated	every 2nd crest	every 3rd crest
Greca	every 2nd crest	every 3rd crest
5 Rib	every crest	every crest

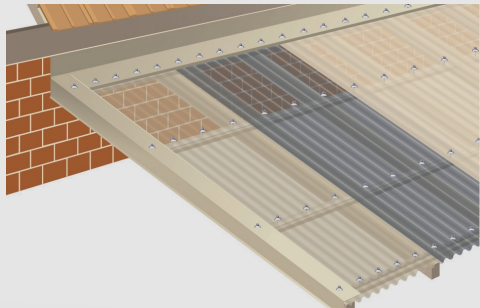
## Step 3 Capping & Flashings For various Installations



APEX ROOF - Fit metal barge capping\* to the edge of sheet and metal ridge capping to the apex.



UNDER A GUTTER - Fit back channel flashing with foam infill strips under gutter prior to laying sheets and metal barge capping to edge of sheet.



AGAINST A WALL/FASCIA - Fit metal barge capping to edge of sheet and metal apron flashing at the wall or fascia.

## Safety Recommendations

- Always exercise extreme care when walking on a roof.
- Never walk on or apply your load directly to sheeting.
- In particular consider all safety requirements when working at heights above 2m.
- For safety reasons we recommend the use of safety mesh for installations above 3m.
- Use appropriate personal protective equipment (PPE) such as safety footwear, glasses and gloves.
- All safety practices must comply with the applicable local building and/or work cover code(s).
- We do not recommend the collection of drinking water from any roof without appropriate precautions and filtration. Check with your local water authority for further advice.

**CAUTION:** To maximise the life cycle of your Laserlite® roofing, Laserlite® recommends avoiding exposure of polycarbonate sheeting to excess heat from patio heaters. Maintain a distance of 1 metre minimum between the sheets and the heater with adequate ventilation at all times and temperature to below 90°C beneath the sheeting. If the temperature rises above 90°C, remove the heater immediately.