

# PALRUF® Rooflights Technical Guide

## Profile: 177/51 (5,6 waves)



24/01/2019

### Profile Drawing

Product name	Drawing
177 / 51 - 920	
177 / 51 - 1020	
177 / 51 - 1100	
177 / 51 - 1170	

### Profile Dimensions

Profile (mm)	Thickness (mm)	Length (m)	Overall width (mm)	Cover Width (mm)	Side-Lap (%)
177 / 51 - 920	0.8 – 2.0	1.5 - 11.8	9200	885	5.8
177 / 51 - 1020			1020	885	13.2
177 / 51 - 1100			1100	885 / 1062	20.6 / 4.8
177 / 51 - 1170			1170	1062	9.2

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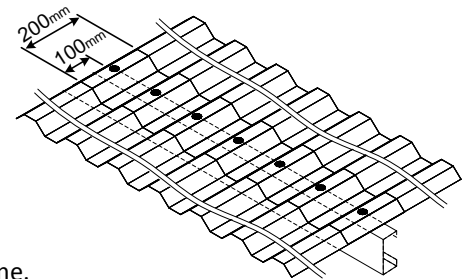
### Load / Span Data

Load (kg/m <sup>2</sup> )	Maximum Roof Span (mm)					
	1.0 mm		1.2 mm		1.5 mm	
	Mid Field	End Field	Mid Field	End Field	Mid Field	End Field
50	1600	1200	1800	1350	2000	1500
75	1500	1125	1700	1275	1900	1425
100	1400	1050	1600	1200	1800	1350
125	1300	975	1500	1125	1700	1275
150	1200	900	1400	1050	1600	1200

- The specified dimensions do not supersede the requirements of local construction codes.
- The maximum purlin spans are based on continuous beam calculation model and practical testing.
- The criterion for allowed deflections is  $L/20$ .
- The mentioned load refers to both wind and snow loads.
- Minimum recommended slope – 10%.

### Panel Length

- Maximum recommended panel length - 7.0 m.
- Recommended longitude overlaps of 200mm above purlin.
- Each panel to extend 100mm over the fixings line on the purlin.
- Panels should overhang Min. 50mm and Max. 150mm beyond the last fixings line.



### Curved Roof

- Minimum curving radius 20.0 m.



### Positioning

- **Do not install PALRUF over existing roof or ceiling, without prior consultation with the manufacturer PALRAM.**
- For contact details please refer to PALRAMs' official website at [www.palram.com](http://www.palram.com).
- Make sure the UV protected side faces out.
- Side-lap of PALRUF panels must be installed against the primary direction of rain.
- The PALRUF panels must be located and installed without any stresses.

Do not pull, stretch or force the sheets when the profiles are not perfectly matched.

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### Screws and Washers Specification

- Crest fixing: Self-drilling 5.5mm x 90mm (3.5") screw + matched metal crest rider (Storm washers) with EPDM gasket.
- Side Stitching: 5.5mm x 25mm (¼"x1") Stitching Screws (Grommet seals) with EPDM seal.

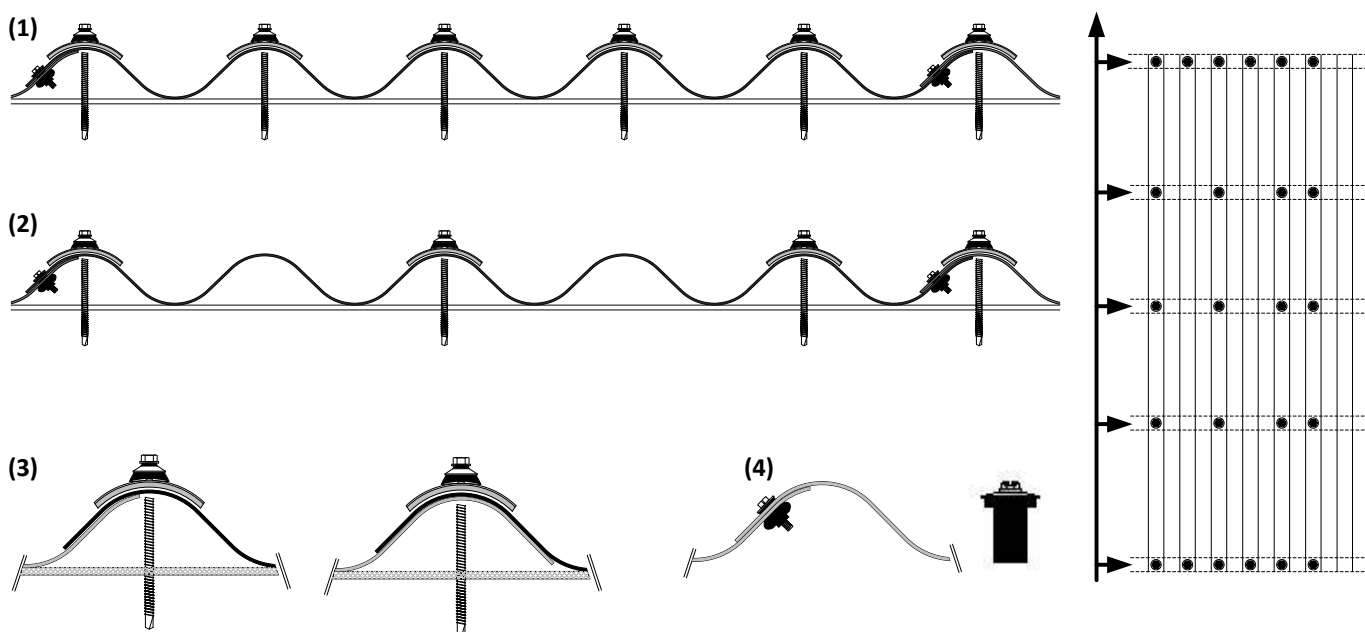


### Fastening

- Apply sealing tape over the PALRUF panel side-lap corrugation crests, where covered by the next panel.
- Apply sealing tape along the bottom and top End-lap (if there is), along screws centerline or two tapes on both sides of screw centerline.
- Pre-drill 10mm holes at crests where screws are positioned.
- Start fastening the screws from the first side-lap (left) through the pre-drilled holes (3).
- Start fastening the screws on the lower edge purlin (End-lap), on each corrugation crest (1).
- Fasten screws at the internal purlins, on the side-lap and on every second corrugation crest, starting at the same side (2, 3).
- Fasten screws at the upper edge purlins, at each corrugation crest, starting at the same side (1, 3).
- **Do not over-tighten!**
- Fasten the stitching screws at every 300-400 mm (4).



### Fastening Location



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### Important Notes

- **IMPORTANT:** Do not install Palruf over existing roof without proper ventilation of the air trapped between them.
- Use only PALRAM approved accessories, including EPDM rubber washers, silicones, sealing tape, closure fixtures etc.
- For clear PALRUF onto wooden purlins, apply white acrylic paint, or aluminum tape, in order to prevent over-heating of the purlins.



### Cutting Tips

- Use jigsaw or circular saw with fine tooth blades.
- Apply high blade speed with moderate feeding rate.
- Support the sheets near the cutting line.
- Clean the dust and cutting chips after cutting.



### Fastening Tips

- Use adjustable electric screwdriver.
- The screw must be installed perpendicular to the PALRUF sheet.
- **Important: Do not over-tighten.**



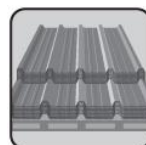
### Safety

- Do not step directly on the panel.
- Use stepping boards.
- Work according to local safety regulations.



### Handling and Storage

- Store in a dry shaded place, protect from direct sunlight and rain.
- Cover PALRUF stack with white opaque covering.
- Avoid covering the sheets with heat absorbing materials.
- Avoid contact or environment of chemicals.
- Protect the sheets from any physical damage.
- After installation keep sheets free of dust and soot.
- Sheets should be cleaned frequently with a water hose.



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