

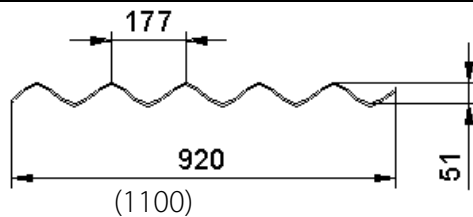
PALRUF[®] 177 / 51 (5,6 waves)

Installation Guide



Profile Dimensions

Profile (mm)	Thickness (mm)	Length (m)	Width (mm)	Effective Width (mm)	Side-Lap (%)
177 / 51	1.0 – 3.0	1.5 - 11.6	920	885	3.8
			1100	1062	3.4
			1100	885	19.5



Load / Span Data

Load (kg/m ²)	Maximum Roof Span (mm)		
	2.0 mm	2.5 mm	3.0 mm
50	1400	1600	1800
80	1300	1500	1700
110	1200	1400	1600

- The dimensions depicted do not supersede the requirements of local construction codes.
- Purlins spans are based on the panel's structural properties, sheet deflection, potential wind and snow load, hail and other applicable factors according to construction practice, professional expertise and previous field experience.
- In vertical walls the spans can be increased by 10%.
- Minimum recommended slope for a new roof – 10%.
- Maximum recommended sheet length – 7.0 m.

Safety

- Do not step directly on the sheets - before, during or after installation.
- Work according to local safety regulations.
- Use stepping ladder or crawling boards.



Positioning

- The sheets must be laid on the roof against the primary direction of wind and rain.
- The PALRUF sheet must be installed without any stresses and deformation.



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Curved Roof Fastening

- Minimum curving radius along the corrugations - 20.0 m.



Roof and Wall Positioning and Fastening

- Start fastening the screws on the Side lap where the PALRUF sheet Over-lap the previously installed sheet.
- Fasten the screws on the lower edge purlin, each corrugation crest, starting at the same side.
- Fasten at the internal purlins, at each second crest.
- Fasten the screws at the upper edge purlin, at each corrugation crest, starting at the same side.
- Fasten the stitching screws at the overlaps, starting at the same side, approximately every 300 mm.
- Wall mounting (cladding) – The fasteners at the valley, except the side-lap one.



Internal Purlin Fastener location



External Purlin Fastener location

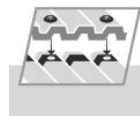
Side-Lap

- Use 1¹/₃ corrugations Side Lap where the slope smaller than 10%, long spans and large rain loads.
- Start from the side where the PALRUF sheet over-lap on top of the other sheet.
- Apply sealing tape along the side of the crest.
- Use sheet- to- sheet (stitching) fasteners between the purlins, through the sealing tape, every 300-400 mm.



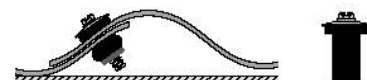
End-Lap

- Maximum overhang up to 200 mm from screw centerline.
- Minimum overhangs 50 mm from screw centerline.
- Apply sealing tape along screws centerline.
- Roof edge – not more than 200 mm



Stitching screw

Are needed for improving side lap sealing in cases of slope smaller than 10%, long spans and large rain loads.



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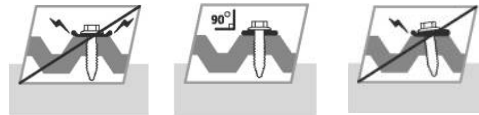
Screws and Washers

- Crest fixing - Self-drilling ¼"x 3 1/2" screw.
- Recommended washer/gasket: 25mm diameter- galvanized / aluminum / stainless metal washer attached to EPDM rubber gasket of 55 to 65 shore hardness.
- **PALRAM washers are highly recommended.**
- When installing a curved roof it is recommended to use a compatible crest rider with EPDM attached gasket.
- It is recommended to pre-drill the screw holes in the PALRUF sheets, 3-4 mm bigger than the screw diameter.



Fastening Tips

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



Cutting / Sawing tools

- Table or Portable circular saw with small teeth.
- When Sawing, use high blade speed and slow feed rate.
- Support the sheet in the vicinity of the cut and clean dust and splinters away.



Handling and Storage (Packed sheets)

- Store in a shaded place. Protect from direct sunlight and rain.
- Avoid covering the sheets with heat absorbing materials.
- Avoid contact or storing in incompatible chemicals environment.
- Protect the sheets from any damage.



Accessories

Use only PALRAM approved accessories

- Compatible Silicone.
- Butyl Rubber or Expanding Sealing tape.
- Closure Fixtures.



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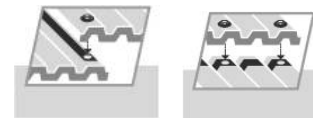
Drilling

- Hole diameter must be 3-4 mm larger than the screw diameter.
- Support the sheet in the vicinity of the hole and clean dust and splinters away.
- The drill should be held perpendicular to the sheet surface.



Applying the Sealing tape

- Clean the surface before applying the tape.
- Apply the tape slowly, uniformly and with no stresses.
- Apply one tape line along the screw holes location or 2 tape lines on both sides of the screw holes line.



Important Notes

- Avoid any stress source.
- **Pre drilled holes – Oversized holes should be 3-4mm wider than the screw diameter.**
- Do not over-tighten.
- Use only approved accessories, including rubber washers, silicones, sealing strip, closure fixtures etc.
- Avoid contact with non-compatible chemicals and materials.
- **NOTE - Clear PALRUF application requires special care at warm conditions, including whitening the purlins contact surface and providing free ventilation to the internal face of the Clear PALRUF.**

For information about accessories, please refer to the CATALOGUE OF FINISHING ACCESSORIES.



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