

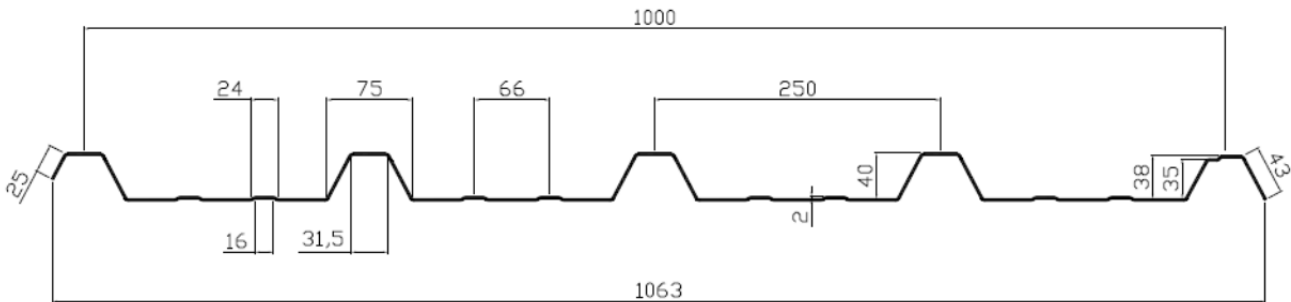
DURASHIELD® Technical Guide

Profile: Industrial Rib

Updated: February 2016



Profile Drawing



Profile Dimensions

Profile (mm)	Thickness (mm)	Length (m)	Overall width (mm)	Cover Width (mm)	Side-Lap (%)
250 / 40	2.0 – 3.0	1.5 - 11.6	1063	1000	5.9

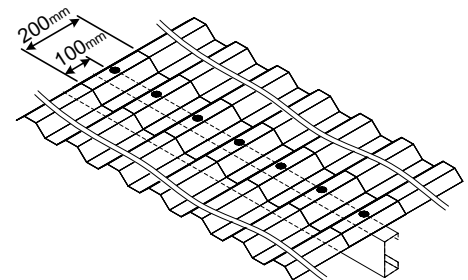
Load / Span Data

Load (kg/m ²)	Maximum Roof Span (mm)					
	2.0 mm		2.5 mm		3.0 mm	
	Mid Span	End Span	Mid Span	End Span	Mid Span	End Span
50	1800	1350	1900	1425	2000	1500
75	1700	1275	1800	1350	1900	1425
100	1600	1200	1700	1275	1800	1350
125	1500	1125	1600	1200	1700	1275
150	1400	1050	1500	1125	1600	1200
175	1300	975	1400	1050	1500	1125
200	1200	900	1300	975	1400	1050

- **2mm sheet tested to AS1562.3 2006, AS4040.4 2006 (Sand Bag) over 1200 End Span & 1600 Mid Span.**
- 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%.
- For vertical application spans can be increased by 10%.

Panel Length

- Maximum recommended panel length - 7.2 m.
- Recommended longitude overlap 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 16 m.



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Positioning

- Do not install DURASHIELD panels over existing roof, without proper ventilation of the air gap between.
- Side-lap of DURASHIELD panels should be installed against the primary direction of rain.
- The DURASHIELD panels should be located and installed without any stresses.
Do not pull, stretch or force the sheets when the profiles are not perfectly matched.

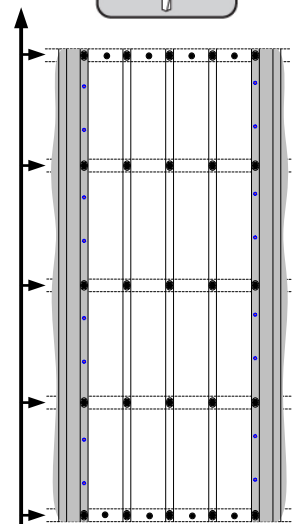
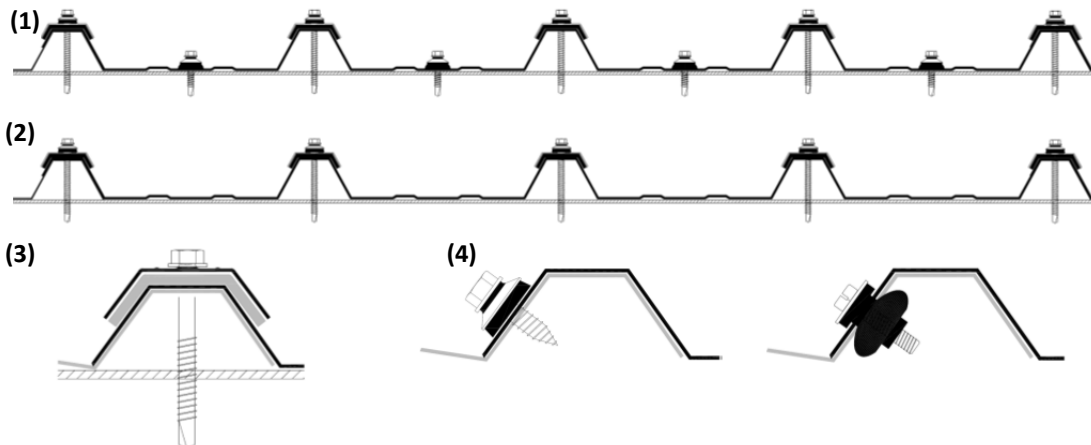


Fastening

- Apply sealing tape over the DURASHIELD 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.
- Fasten screws in the edge purlins at each corrugation crest and valley (1).
- Fasten screws at the internal purlins, at each corrugation crest, starting at the same side (2).
- Do not over-tighten!**
- Fasten the stitching screws at every 300-400 mm (3).



Fastening Location



Screws and Washers Specification

- USE SUNTUF SCREWS**
- Crest fixing: Self-drilling - 14g x 90mm screw with EPDM seal.
- Valley fixing: Self-drilling - 14g x 45mm screw with EPDM seal.
- In areas with strong winds and/or snow loads, and where spans between purlins are large use Cyclone washer with EPDM gasket**
- Side Stitching: 14g x 19mm self-tapping screw with EPDM seal or 9.5mm x 25mm Stitching Screws (Grommet seals) with EPDM seal.

Important Notes

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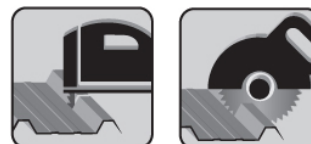
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- Use only Palram approved accessories, including EPDM rubber washers, silicones, sealing tape, closure fixtures etc.
- For clear Durashield onto wooden purlins, apply white acrylic paint, or aluminum tape, in order to prevent over-heating of the purlins.

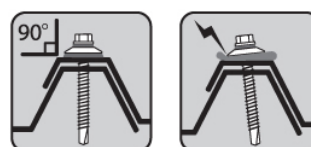
Cutting Tips

- 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 DURASHIELD 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 DURASHIELD 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.


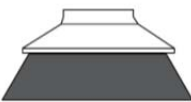


Screws

	Illustration	Length mm (in.)
Self - Drilling Screw		25, 38, 64, 76, 89, 121 (1, 1½, 2½, 3, 3½, 4¾)
Self - Tapping Screw		25, 38, 64, 76, 89, 121 (1, 1½, 2½, 3, 3½, 4¾)

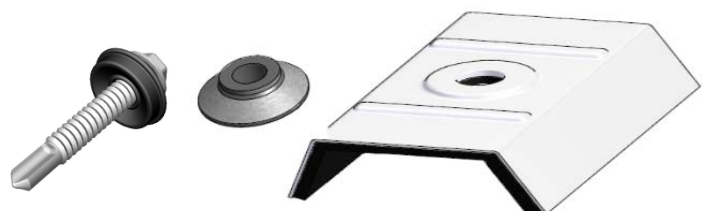
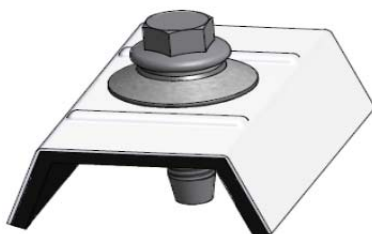


Washers

	Illustration
19mm Washer/Gasket	
25mm Washer/Gasket	



Cyclone Washer



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