

Polycarbonate Multiwall installation instructions

General guidelines:

Storage

Polycarbonate sheet should be stored and protected against atmospheric influences like, sun, rain, etc.

Sheets should be stacked horizontally in such way that unsupported overhang is avoided. The stacks should be supported on timber bearers.

Handling

As with all glazing materials, care should be taken to avoid scratches and damage to sheet edges.

Sawing

PC sheet can be cut easily and accurately with standard workshop equipment.

Circular saw should have fine-toothed blades.

Blow away saw dust off the channels with dry compressed air. Make sure that saw dust is not blown inside the sheet channels.

Drilling

Holes can be drilled by a power drill using standard High Speed twist drills.

Cleaning

Never use watery solutions that may contain abrasive or aggressive solvents, aromatic or halogenated solvents like toluene, benzene, gasoline, acetone or carbon tetrachloride.

Use regular non-alkaline soaps, warm but not hot water, and soft sponges only.

Installation

Thermal expansion

Allowance for thermal expansion must be secured in both length and width dimensions of the sheet.

In general, approximately 3 mm per each meter shall be secured to allow for a temperature difference of 50 °C.

Sheet edge clamping conditions

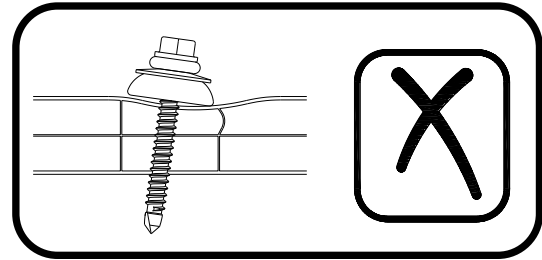
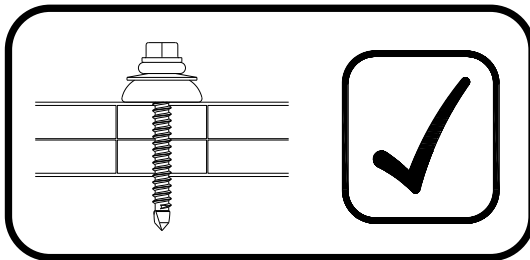
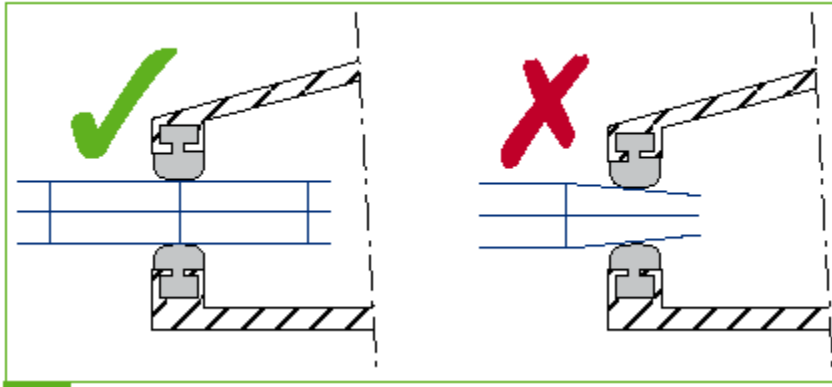
It is extremely important that the edges of the sheet are correctly clamped.

In general the total rebate depth for each profile should include a minimum of 20 mm sheet edge engagement and an allowance for thermal expansion.

Open end sealing

The upper sheet end is to be sealed with aluminum adhesive tape. It is recommended that the lower end will be sealed by a special aluminum tape with micro perforations ("vent-

tape”) in order to avoid insects and dust from getting into the channels, while allowing water vapour to get out.



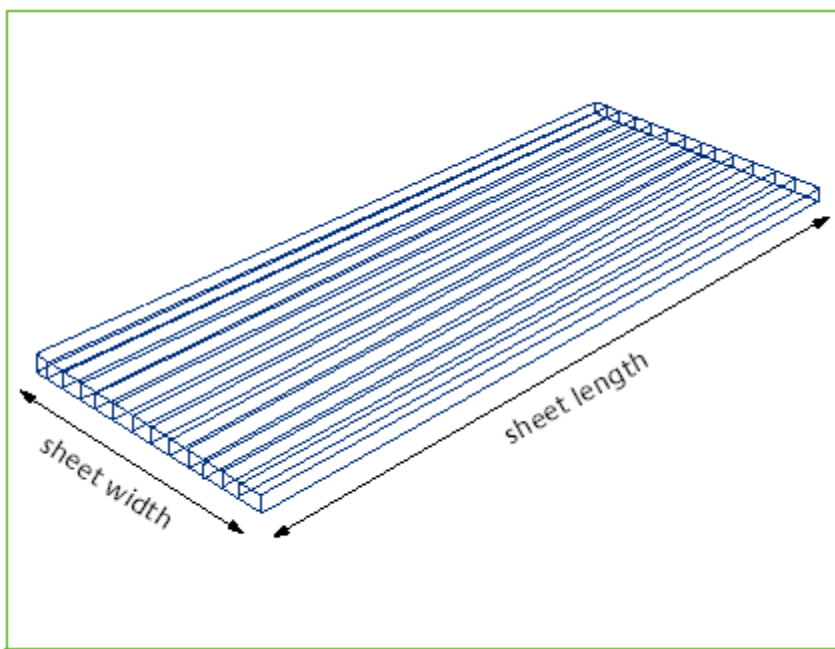
Gaskets/sealants

Compatible Neoprene, EPT or EPDM rubbers with an approximate Shore Hardness of the A65 are recommended. Silicone sealants are generally recommended. When using other sealants check the chemical compatibility with Polycarbonate.

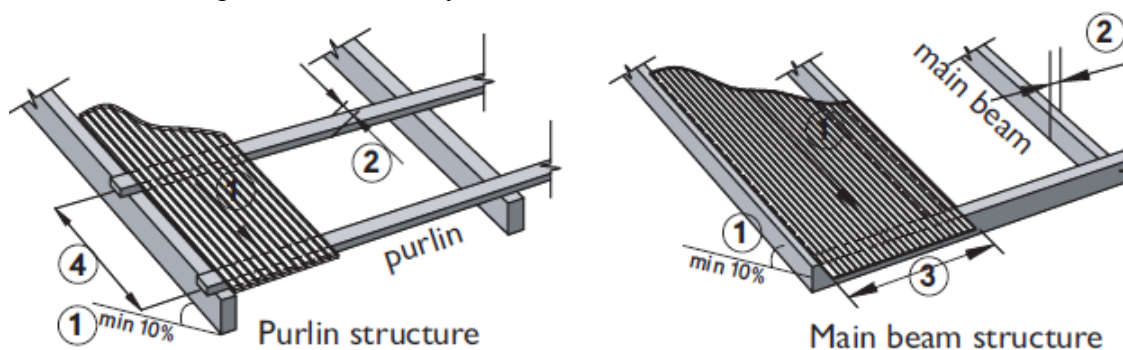
Do not use PVC gaskets as the softener in PVC can attack the Polycarbonate.

Support

The sheet should always be installed with the channels sloping downwards. Sheet “width” is the dimension perpendicular to the rib structure; “length” is the dimension parallel.



The UV-protected surface should always face outwards.
Remove masking film immediately after installation.

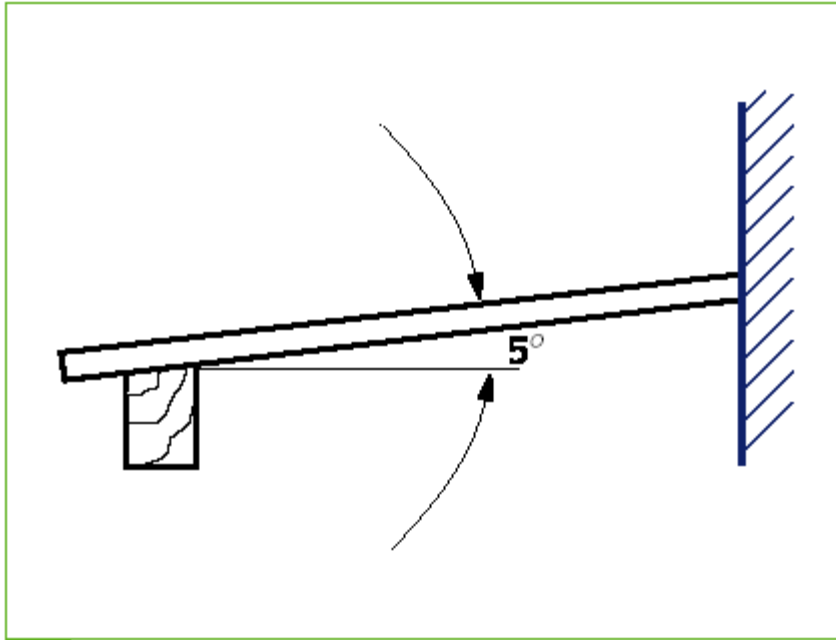


Supporting beams must be at least 30 mm wide to ensure good anchorage of sheets and fastening accessories.

Sheet thickness	Distance (cm) between supporting main beams (sheet width)	Distance between purlins acc. to sheet width		
		Up to 70 cm	Up to 100 cm	Up to 125 cm
6 – 10 mm	75	120	115	90
16 mm	105/120	150	125	120

Sloped roofing

For sloped applications a minimum slope of 5° (9 cm/m sheet length) is advised to allow for rainwater drainage.



Site safety

On roof constructions the sheet should not be used to support a person's weight. A temporary wooden beam or other device, supported by the roof members, should always be used.

