

### Product description

Macrolux<sup>®</sup> Rooflite are sheets manufactured by extrusion of polycarbonate pellets protected by one or two layers co-extruded to guarantee resistance to UV rays.

### Application

- Sheet metal roof
- Sawtooth

### Advantage

- Transparency
- Impact resistance
- Cold bending

### Technical characteristics

Properties	Value
Thickness	0,9 mm
Length	Maximum suggested 7 m
Cold vending radius	20 m
Light transmission	Clear: 90 % Ice: 60 %
Thermal expansion coefficient	$6,5 \times 10^{-5} \text{ K}^{-1}$ (0,065 mm/m°C)
Thermal transmittance	0,21 W/m K
Service temperature (without load) (short term)	-40°C a +120°C
Fire certification	Bs1do

### Recommended installation\_



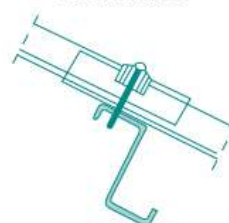
#### Fixation system

The fastening system must allow the free expansion of the sheet, therefore the rigid fixings or through bolts are not recommended.

LATERAL SOLAPE PROFILE



CREST FIXATION



**Structure.** The sheets require a transverse support structure that can be of any nature or geometry. In the modulation the maximum dimensions of the sheet must be respected according to the profile and the loads to be supported.

**Support structure.** The maximum separation between purlins must be determined for each profile, depending on the load to be supported and the maximum allowable deformation. In any case, it can never be higher than 1,20 m. In case of separations between important purlins (greater than 1.20 m), intermediate supports should be placed.

**Dilation of the sheets.** The coefficient of thermal expansion of polycarbonate is significantly higher than that of structures and other plastic products, therefore, it is essential to provide systems that allow the free expansion of the sheets. It is necessary to make drills with a diameter 3 mm greater than that of the screw.

**Length of the sheets.** The sheets of great length (more than 7 meters) accumulate longitudinal dilations of high absolute value so they should be avoided whenever possible.

**Fixation of the sheets.** The profiles can be drilled using standard drills and must be firmly fixed to avoid vibrations: taking special care when drilling at a right angle. The holes must always be made at a minimum distance of 50 mm from the edges of the sheet.

The washers must be of a sufficient diameter so that the clamping force can be distributed and keep the flat sheet for a good seal.

**Sealant.** Always use neutral silicone. Under no circumstances can polyurethane foam be used.



### Overlap

The longitudinal overlap is made in the opposite direction of wind or rain. The transverse overlap must not be less than 200 mm above the purlin. Each sheet must overlap 100 mm from the purlin's fixing line



### Security

Do not step on the sheet. The **sheets are not passable**

The information referred to in this Technical Data Sheet is based on the experience and the tests carried out by the company, without this implying any kind of responsibility for its different applications, given that Stabilit Europa does not have any kind of control over its final use.