



**LIGHT WITHOUT SHADOWS
AND DURABILITY
IN A BLINK OF AN EYE**



RURAL



INDUSTRIAL



COMMERCIAL



RESIDENTIAL



TRANSLUCENT



EXCELLENT COMBINATION OF LIGHT TRANSMISSION AND WEATHER RESISTANCE

Acrylit® is the only plastic laminate that combines the light transmission and durability of the acrylic resin with the high mechanical strength, especially the impact, offered by its fiberglass reinforcement.

Acrylit®, a product manufactured worldwide by Stabilit, is made with high quality raw materials and protected with gelcoat on both sides, guaranteeing its durability.

Applications

- Industrial units
- Shopping centers
- Sports centers
- Greenhouses

Advantages

✓ Main advantages of Acrylit®

Avoid yellowing

Acrylit® is a product that due to its chemical composition does not acquire yellowish tones over time, keeping its color firm and bright.

Light diffusion

Acrylit® is a plastic laminate that diffuses light by 95% providing better lighting, eliminating areas of gloom as well as indoor temperature concentrations.

Useful longer life

Thanks to being a product made with 100% acrylic resin, **Acrylit®** has a longer life compared to other laminates on the market, this is due to the great natural weather resistance offered by acrylic. The gelcoat layer, in addition to giving it a better appearance, increases its resistance to weathering, and reduces the loss of light with the passage of time.

Impact resistance

Its fiberglass reinforcement provides high mechanical resistance and impact.

Resistance to chemical products

Acrylit® has a high tolerance to the most commonly used chemicals, such as::

- **Acids** (concentrated at 15%)
Acetic acid, hydrochloric acid, nitric acid and sulfuric acid.
- **Bases**
Sodium hydroxide and ammonium hydroxide.
- **Organic solvents**
Linear hydrocarbons, acetone and ethanol.

For more specific data, consult **Stabilit Europa**.

Properties

Translucent and profiled **Acrylit®** sheets comply with product standard EN 1013.

THICKNESS RANGE
1.2 - 1.6 mm
Identified with colored threads

[*] consult **Stabilit Europa** our range of thicknesses.



Technical characteristics for Acrylit® in thickness 1.2 mm

PROPERTIES	RULE	VALUE
Thickness	EN 1013	1.2 mm
Light transmission	EN ISO 13468-1	Ice: 55%
Coefficient linear thermal expansion	EN 1013	$2,6 \times 10^{-5} \text{ K}^{-1}$ (0,026 mm/m°C)
Permeability to water vapor	EN 1013	$3,8 \times 10^{-5} \text{ mg/m h Pa}$
Thermal conductivity	EN 673	0,256 W/m K
Flexural strength	EN 14125	135 MPa
Tensile strength	EN ISO 527-4	75 MPa
Barcol hardness	EN 59	40 - 45
Reaction to fire	EN ISO 13501-1	E
Impact resistance of a large soft body (1200 joules)	XP P 38-505	According (in thickness ≥ 1.6 mm. Consult profiles that are in accordance with the test)

Installation

Storage

Moisture trapped between stacked sheets can cause them to stain and discolor, which can be greater when the laminates are exposed to the sun or extreme heat. Avoid storing the sheets in the sun or at very high temperatures.

Separation between purlins

The maximum separation between purlins must be determined for each profile, depending on the load to be supported and the maximum deformation admissible according to the application (consult Stabilit Europa in each case). The recommended maximum distance between purlins will be 1.50 m.

Long length sheets

In longitudinal sheets superior to 6 m with valley fixings and self-tapping screws, extreme care must be taken to allow the free expansion of the sheet (diameter of the drill, about 2 mm more than that of the screw shank).

Flight length of sheet

The flight length in the eaves will not be greater than 200 mm, reinforcing in this case its fixation on the lower purlin.

Overlaps

The lateral overlaps have to be opposite to the direction of the wind and rain

Security

Do not step directly on the sheets, they are not passable and in case it is necessary to do it on light wooden boards, scaffolding, etc., to avoid damaging the product and increase the safety of the workers.





Minimum recommended pendings

PROFILE	CREST HEIGHT (in mm)	MINIMUM RECOMMENDED PENDINGS
	> 42	≥ 10%
	≤ 30	≥ 15%
	> 42	≥ 5%
	30 - 42	≥ 8%
	> 42	≥ 10%
	30 - 42	≥ 10%
	≤ 30	≥ 10%



Overlap and accessories

Determination of overlap lengths and sealing accessories.



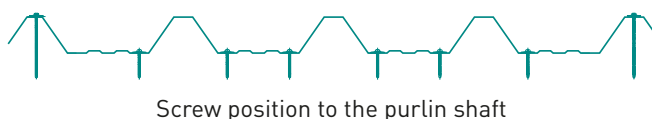
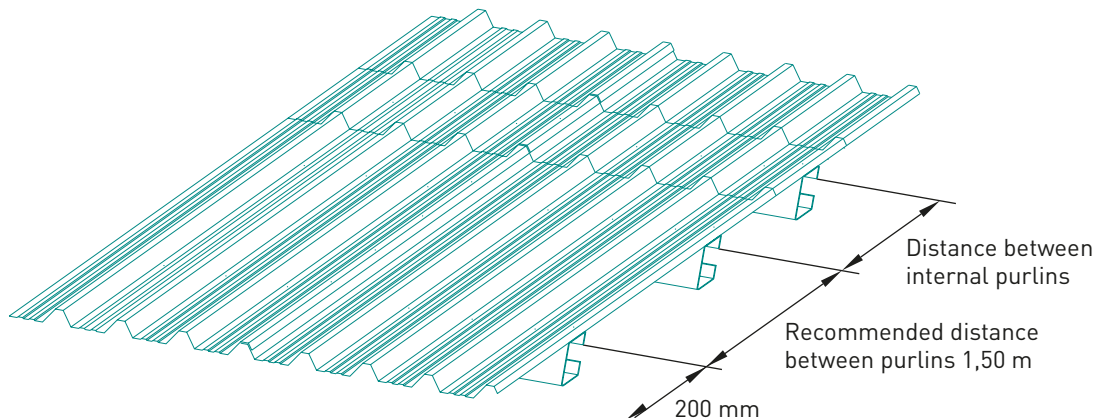
Zone 1 Zone 2 Zone 3

	INCLINATION	PENDING	mm	mm	ACCESORIE
Zone 1	5	10	200		T + L
	8	15	200		-
	11	20	200		-
	14	25	200	150	-
	17	30	150	100	-
	>20	>35	150	100	-
Zone 2	≤5	≤10	200		T + L
	8	15	200		T + L
	11	20	200		T
	14	25	200	150	-
	17	30	150	100	-
	>20	>35	150	100	-
Zone 3	≤5	≤10	200		T + L
	8	15	200		T + L
	11	20	200		T + L
	14	25	200	150	T
	>17	30	150	100	-
	>20	>35	150	100	-

Fixings

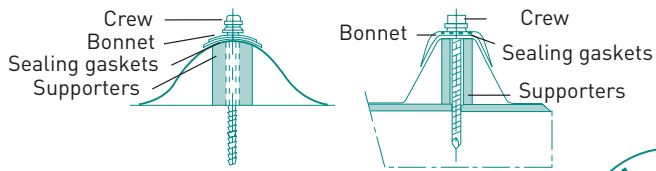
The fixings can be made by means of hooks, Solomon screw or self-tapping screws. With self-tapping screws and trapezoidal foils, valley fixation can be carried out, in other cases it must be carried out on a crest.

In the case of crest fixing, a support plate (made of expanded or metallic polystyrene) should be provided between the purlin and the sheet. The longitudinal covering ribs must be fixed on all purlins.

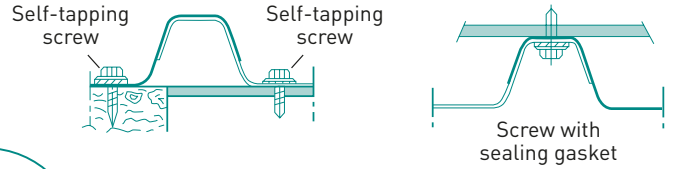


The sheets must be fixed on all the crests on the end supports and can be fixed to the staggered in the intermediate ones. Likewise all nerves must be fixed on the penultimate purlin before the ridge or eaves as well as on all the straps in exposed situations. The fixing points must be symmetrical. The holes for the passage of fixings must be made at a minimum distance of 50 mm from the edges of the sheets.

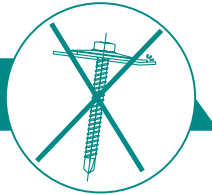
Crest fixation



Fixation in Valle



HOW NOT TO FIX SCREWS



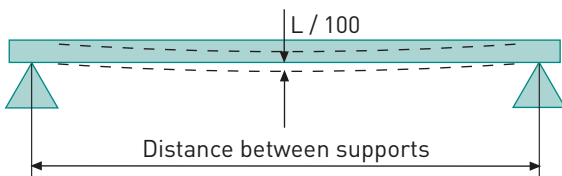
Permissible load



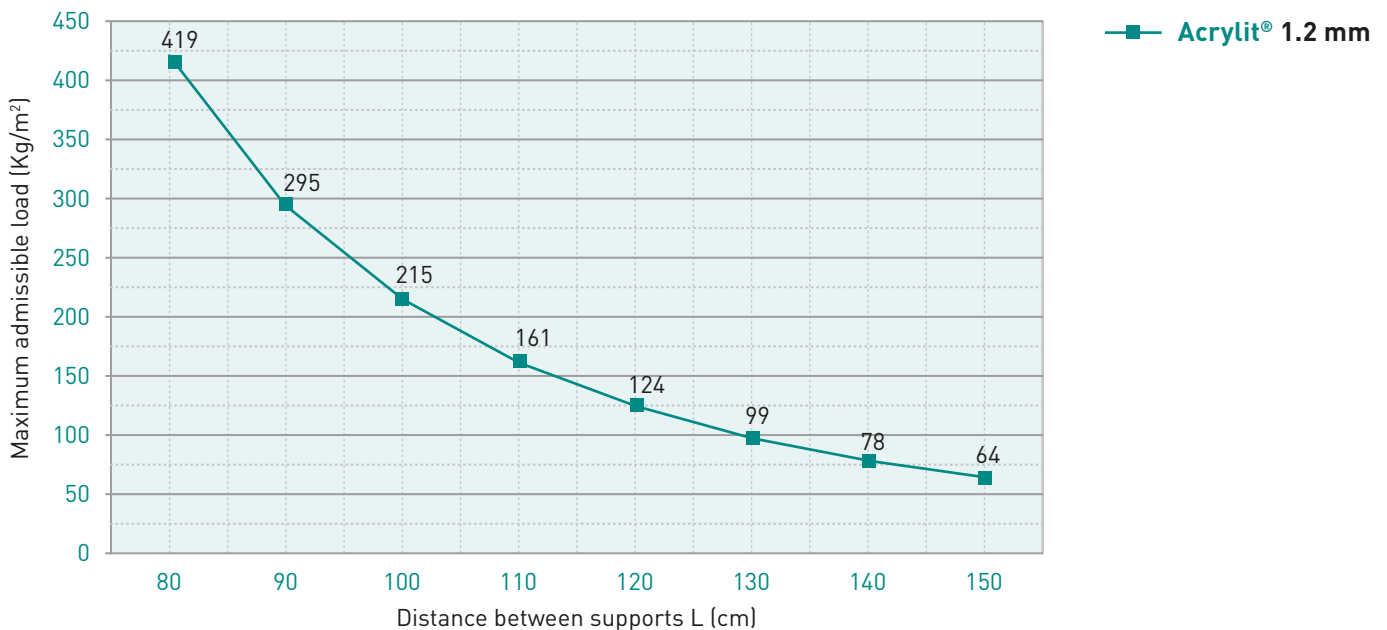
The following graphs shows the theoretical capacity of maximum permissible load uniformly distributed for a maximum deformation of $L/100$ on a sheet located between 2 supports at different distances between purlins.

Stabilit Europa recommends that the maximum distance between supports does not exceed 1.5 m.

The maximum permissible load does not represent the breaking load of the sheet, nor can it be extrapolated in the load capacity at a specific point of the same (point load), since the information refers to the uniformly distributed load.



Maximum allowable load for arrow = $L/100$



Consult diagram of loads of a profile and concrete thickness to **Stabilit Europa**.

Standard color

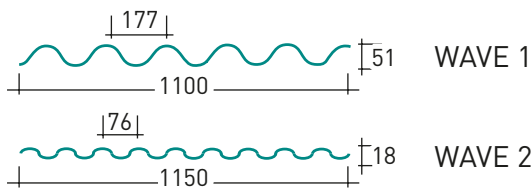
- Ice

Standard range of thicknesses

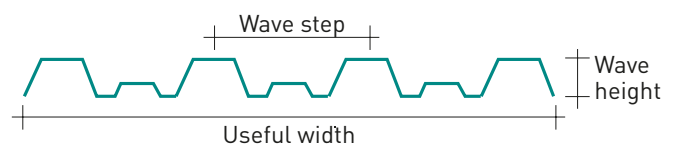
- 1.2 mm
- 1.6 mm

Range of profiles

STANDARD PROFILES



TRAPEZOIDAL PROFILES



* Different profiles adaptable to any type of metal sheet or fiber cement.

Other profiles: consult **Stabilit Europa**.

Certifications

Stabilit Europa is distinguished by having the Quality Management System certification according to the ISO 9001 standard in all its processes.

Fire reaction certificate in **Acrylit**® product according to EN 13501-1. Classification obtained: E.

Impact test certificate 1200 J in **Acrylit**® product.



Acrylit® products have a 10 year warranty.

Distributor



The information included in the catalog is purely indicative, based on the experience and tests carried out by the company; without this supposes any type of responsibility on his different applications, since **Stabilit Europa** does not have any control on his final use.