



**HIGH VISUAL COMFORT  
AND HIGH DURABILITY  
IN A BLINK OF AN EYE**



INDUSTRIAL



COMMERCIAL



RESIDENTIAL



SPORT CENTER



TRANSLUCENT



## EXCELLENT COMBINATION OF TRANSMISSION, DIFFUSION OF LIGHT AND HIGH DURABILITY

**Crystalit®** is a new-look plastic laminate that confers high visual comfort and high durability.

The gelcoat protection layer on its exterior face gives it greater protection against the outcrop of the fiberglass and gives it greater resistance to weathering prolonging its durability.

The “embossing” on the inside face side allows greater visual comfort and gives a completely new appearance, with a higher level of diffusion of light.

### Applications

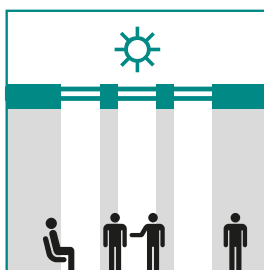
- Covers of sheet metal or panel for industrial buildings
- Fibrocement covers
- Shopping centers
- Sports centers

### Main advantages

- Easy installation
- Wide range of solutions
- Not subject to high dilatations
- High chemical resistance
- High mechanical strength
- High impact strength
- Good light transmission
- Uniform distribution of light

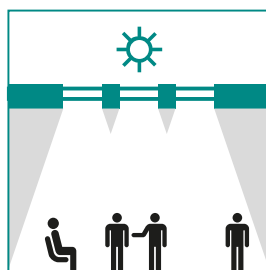


### High light diffusion

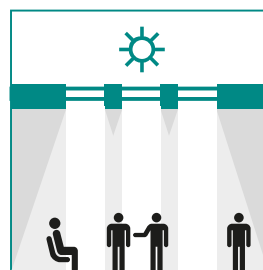


**Transmission**

Polyester and Polycarbonate



**Diffusion**  
**Crystalit®**



**Comparison**

#### DIFFUSION OF LIGHT (EN ISO 13468-1)

In transparent color:  
83%

## Properties

Translucent and profiled **Crystalit®** sheets are compliant with EN 1013.

THICKNESS RANGE
1.3 - 1.7 mm
Identified with colored threads

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



### Technical properties for Crystalit® in thickness 1.3 mm

PROPERTIES	RULE	VALUE
Thickness	EN 1013	1.3 mm
Light transmission	EN ISO 13468-1	Transparent: 77% White opal: 47%
Linear thermal expansion coefficient	EN 1013	$3 \times 10^{-5} \text{ K}^{-1}$ (0,03 mm/m°C)
Permeability to water vapor	EN 1013	$1,5 \times 10^{-5} \text{ mg/m h Pa}$
Flexural Strength	EN 14125	135 MPa
Tensile strength	EN ISO 527-4	70 MPa
Barcol hardness	EN 59	40 - 45
Reaction to fire	EN 13501-1	E
Impact resistance of a large soft body (1200 Joules)	XP P 38-505	According (in thickness $\geq 1.6$ mm. Consult profiles that are in accordance with the test)

## Installation

### Separation between purlins

The maximum separation between belts 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.

### 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 if necessary, do it on light wooden boards, scaffolding, etc., to avoid damaging the product and increase the safety of the operators.

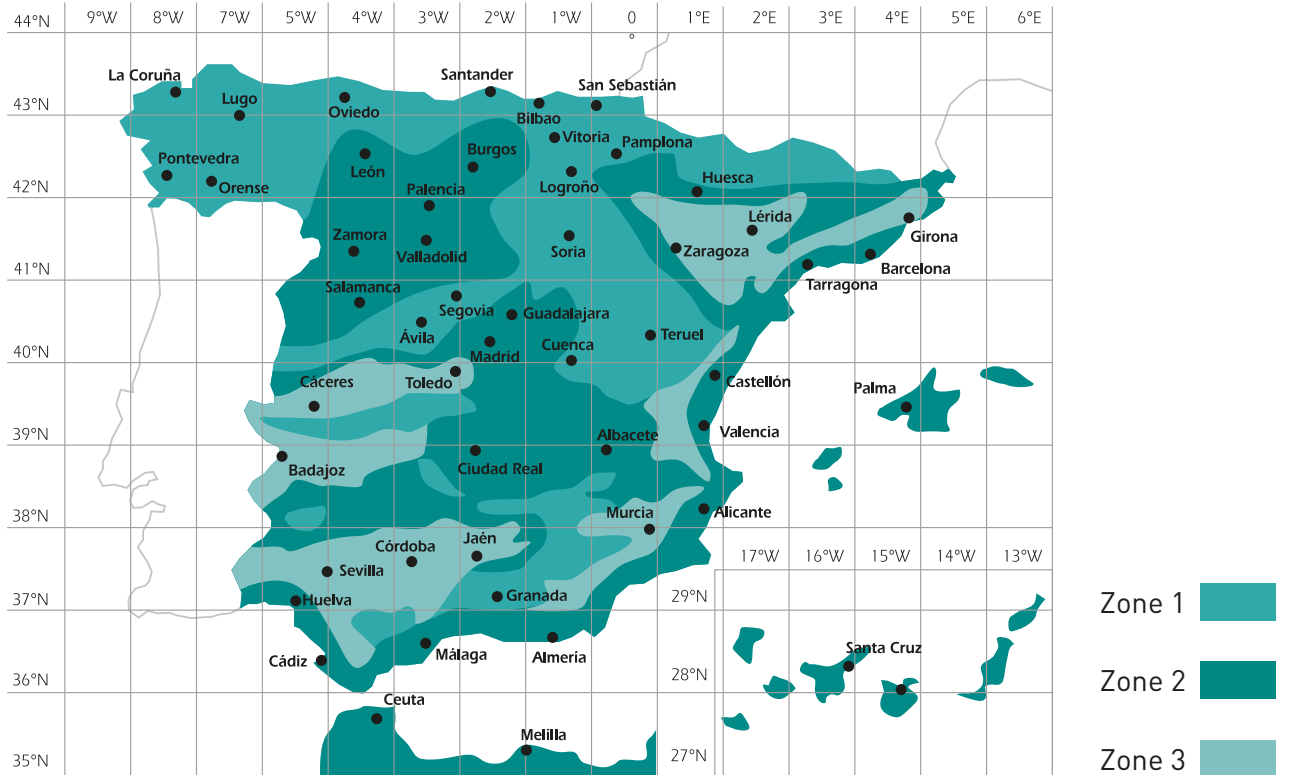
### Minimum recommended pendings

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.

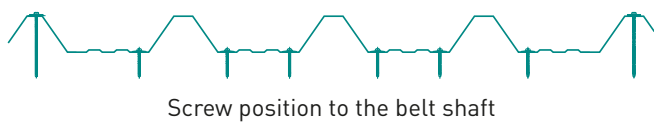
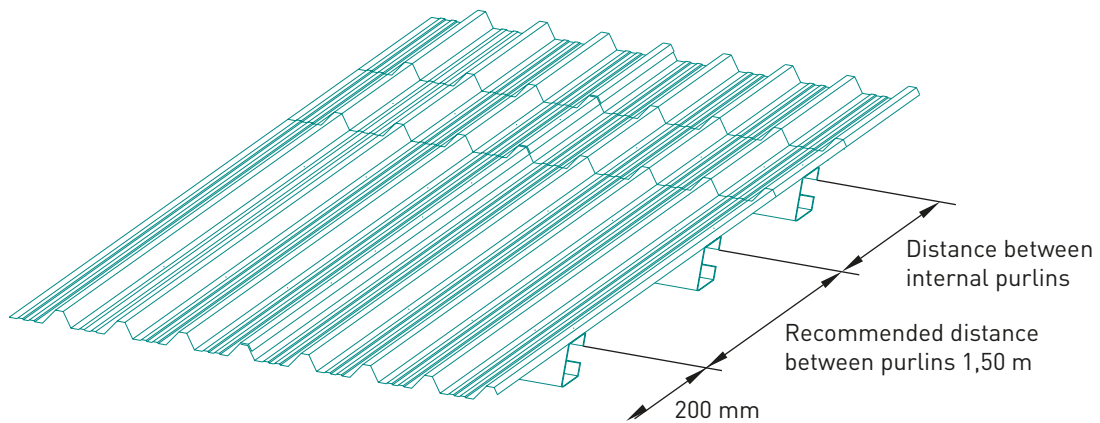


	INCLINATION	PENDING	mm	mm	ACCESSORIES	
<b>Zone 1</b>	5	10	200	↓	T + L	
	8	15	200		-	
	11	20	200		-	
	14	25	200		150	-
	17	30	150		100	-
	>20	>35	150		100	-
<b>Zone 2</b>	≤5	≤10	200	↓	T + L	
	8	15	200		T + L	
	11	20	200		T	
	14	25	200		150	-
	17	30	150		100	-
	>20	>35	150		100	-
<b>Zone 3</b>	≤5	≤10	200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

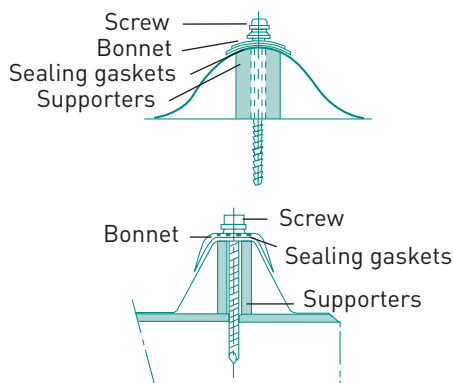
The fixings can be made by means of hooks, Solomon screw or self-tapping screws. With self-tapping screws and trapezoidal foils, valley fixation can be carried out, in other cases it must be carried out on a crest.

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

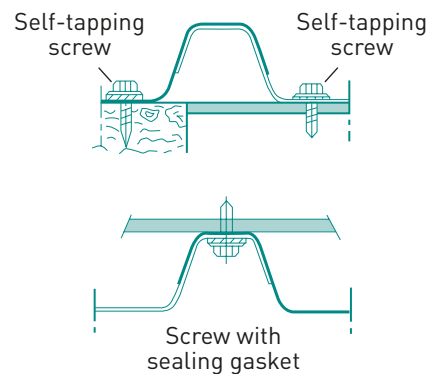


The sheets must be fixed on all the crests on the end supports and can be fixed to the staggered in the intermediate ones. Likewise all nerves must be fixed on the penultimate strap before the ridge or eaves as well as on all the straps in exposed situations. The fixing points must be symmetrical. The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

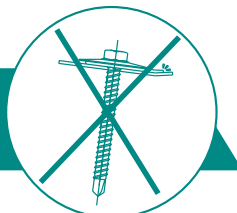
### Crest fixation



### Fixation in valle



**HOW NOT TO  
FIX THE SCREWS**



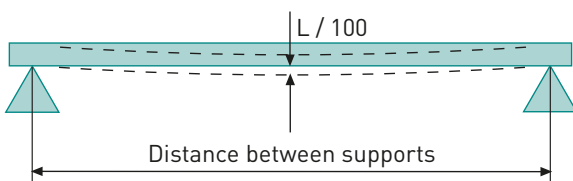
## Permissible load



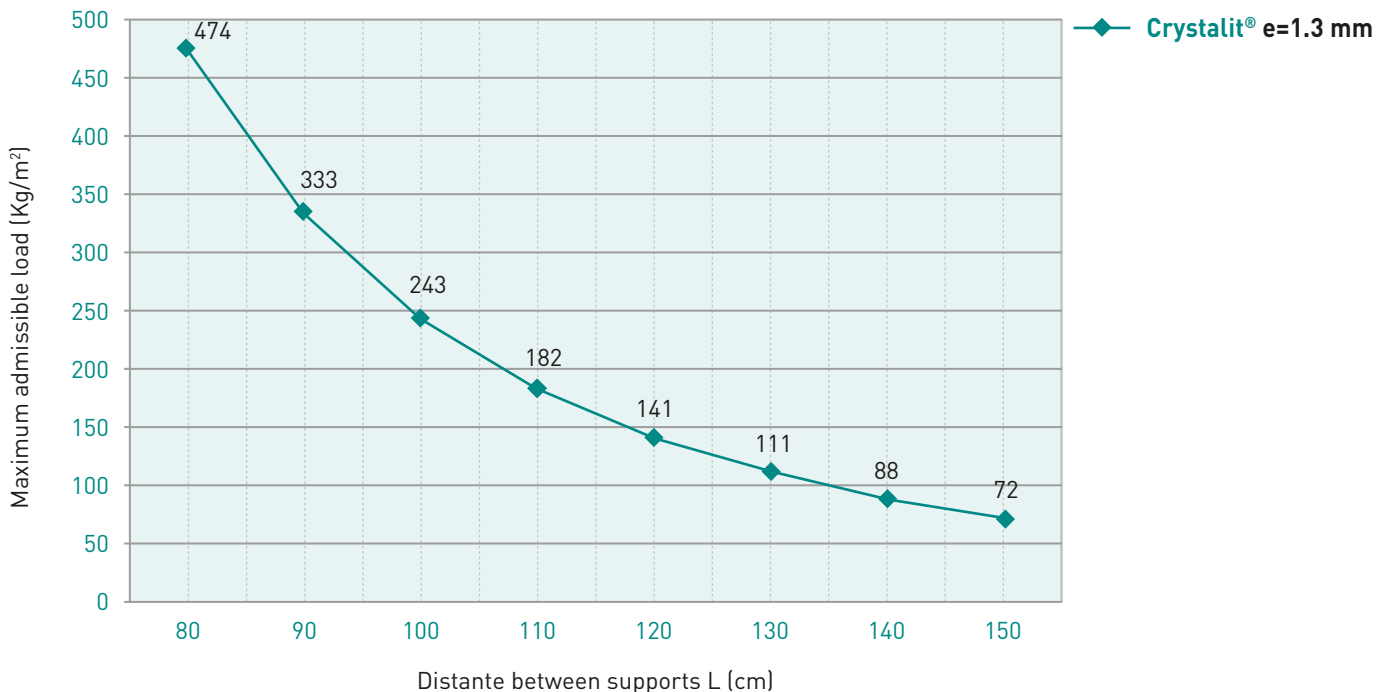
The following graph shows the theoretical capacity of maximum permissible load uniformly distributed for a maximum deformation of  $L/100$  on a sheet located between 2 supports at different distances between straps.

**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 range

- Transparent
- White opal

Other colors: consult **Stabilit Europa**

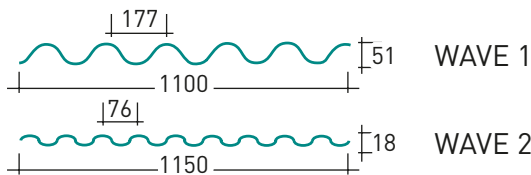
## Standard thickness range

- 1.3 mm
- 1.7 mm

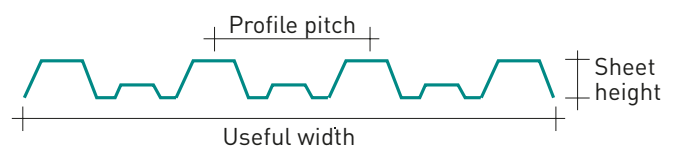
Consult **Stabilit Europa** our range of thicknesses

## Range of profiles

### STANDARD PROFILES



### TRAPEZIODAL PROFILES



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

Consult profile range to **Stabilit Europa**.

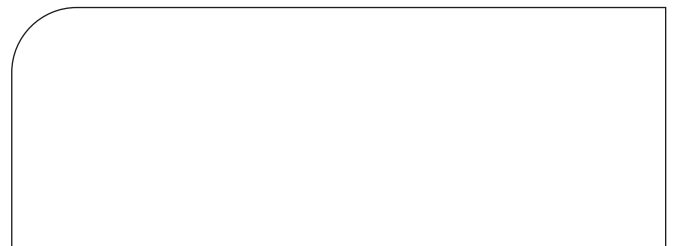
## Certifications

**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 **Crystalit®** product according to EN 13501-1. Classification obtained: E.

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

## 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.