

CLASSIFICATION
TO FIRE
B s2 d0



**OPAQUE LAMINATE,
IDEAL FOR
CORROSIVE ENVIRONMENTS
IN A BLINK OF AN EYE**





IDEAL FOR COATINGS IN AGGRESSIVE ENVIRONMENTS

Opaque plastic laminates, made from polyester resin, with a gelcoat finish on both sides highly resistant to corrosive environments..

Opalit® adapts to any structure and reduces the concentration of heat in interior spaces.

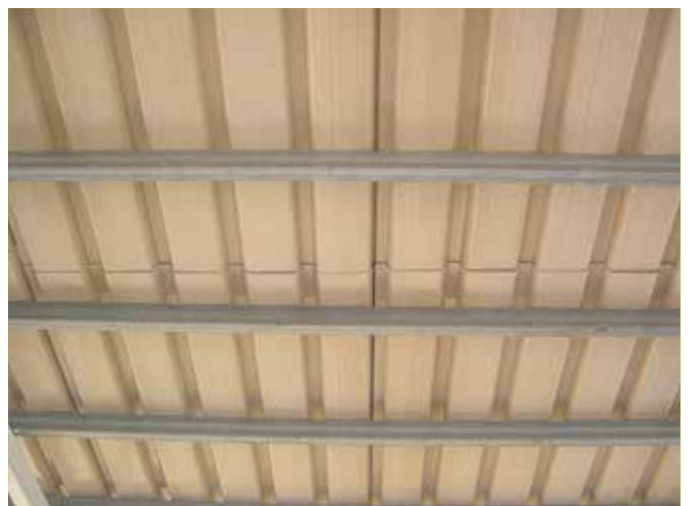
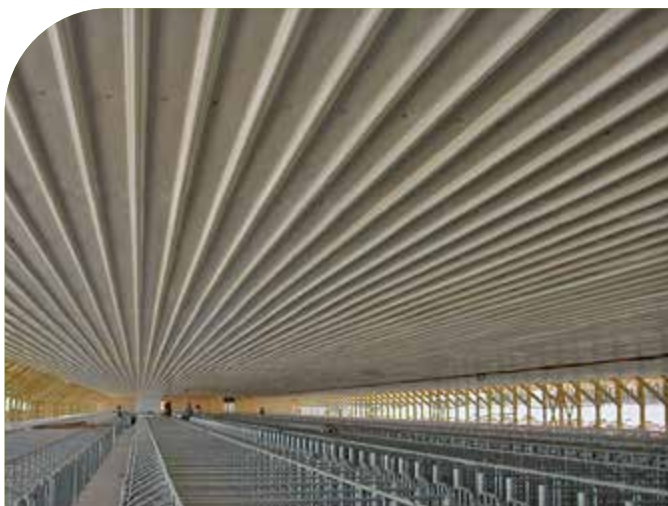
The range of **Opalit®** FR (Fire retardant) contain excellent fire retardant properties that prevent the spread of fire in case of fire.

Applications

- Agricultural and pig farms
- Service stations
- Sheds and warehouses
- Warfs and quays
- Any construction where an opaque structure is required, light and resistant to corrosive environments

Main advantages

- High resistance to corrosive environments
- Resistance to the weather, even in extreme temperatures
- Lower concentration of heat inside
- Lightweight structure for easy, quick and economical installation
- Minimum maintenance



Characteristics

Opalit - Opalit® FR - Fire retardant

THICKNESS RANGE
1.6 - 2.0 mm

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

Technical properties of Opalit® thickness 1.6 mm

PROPERTIES	RULE	VALUE
Thickness	EN 1013	1.6 mm
Coefficient linear thermal expansion	EN 1013	$3 \times 10^{-5} \text{ K}^{-1}$ (0,03 mm/m°C)
Permeability to water vapor	EN 1013	$1,5 \times 10^{-5} \text{ mg/m h Pa}$
Thermal stability	-	-40 °C a 130 °C
Flexural strength	EN 14125	140 MPa
Tensile strength	EN ISO 527-4	55 MPa
Barcol hardness	EN 59	40 - 45
Reaction to fire	EN 13501-1	E

Opalit® FR (Fire Retardant): Reaction to fire certificate according to EN 13501-1.
Classification obtained: **B s2 d0**. On request.
Consult with commercial area.

Chemical characteristics

The high resistance to polyester chemical agents provides an excellent performance against corrosion, resisting the acid atmospheres (hydrochloric, phosphoric, sulfuric, nitric), the basic ones, the salts, saline solutions, hydrocarbons, alcohols, etc. Does not resist certain organic solvents or certain acids or concentrated bases. By its nature, it does not form galvanic pairs with fixations.

Installation

Distance 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 the **Stabilit Europa** technical services in each case). The recommended maximum distance between purlins will be 1.50 m.

Long 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.

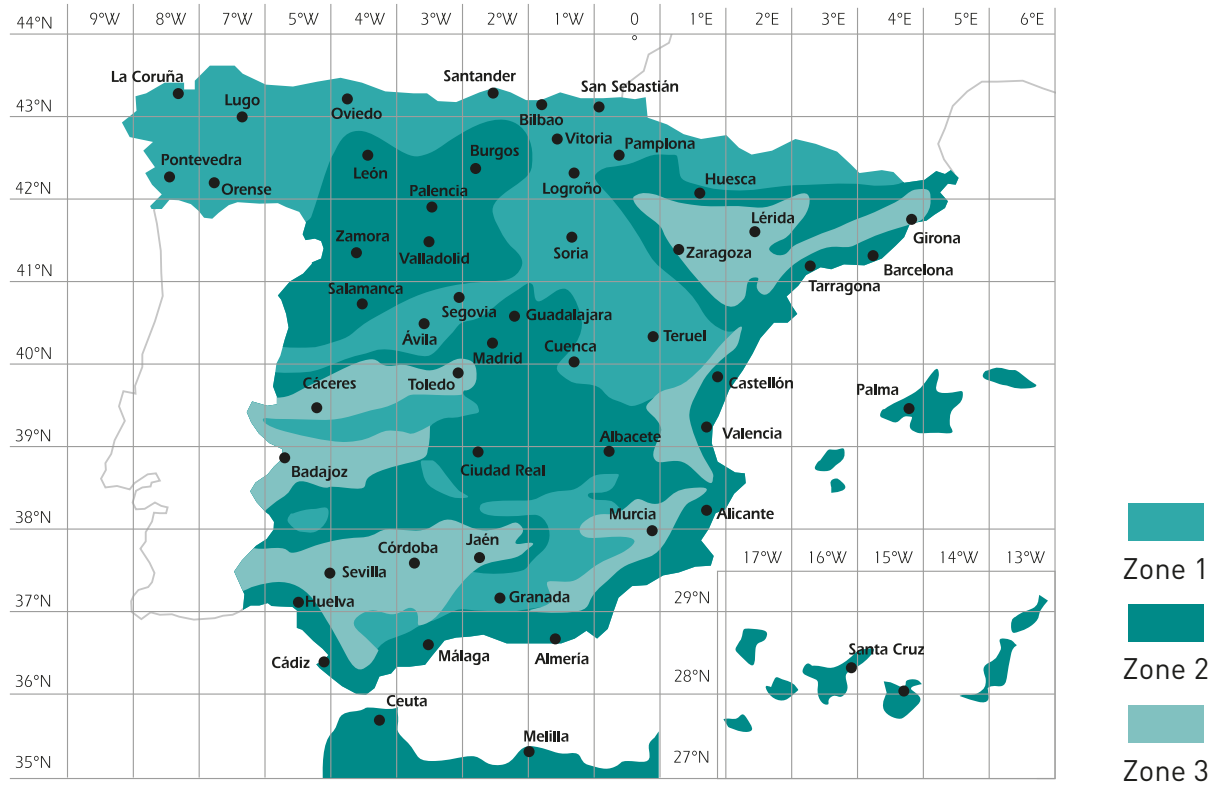
Minimum recommended pendings

PROFILE	CREST HEIGHT (en mm)	MINIMUM RECOMMENDED PENDINGS
	> 42	≥ 10%
	> 42 30 - 42	≥ 10% ≥ 10%



Overlap and accessories

Determination of overlaps lengths and sealing accessories.

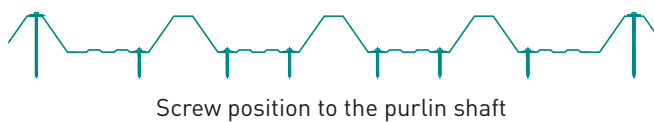
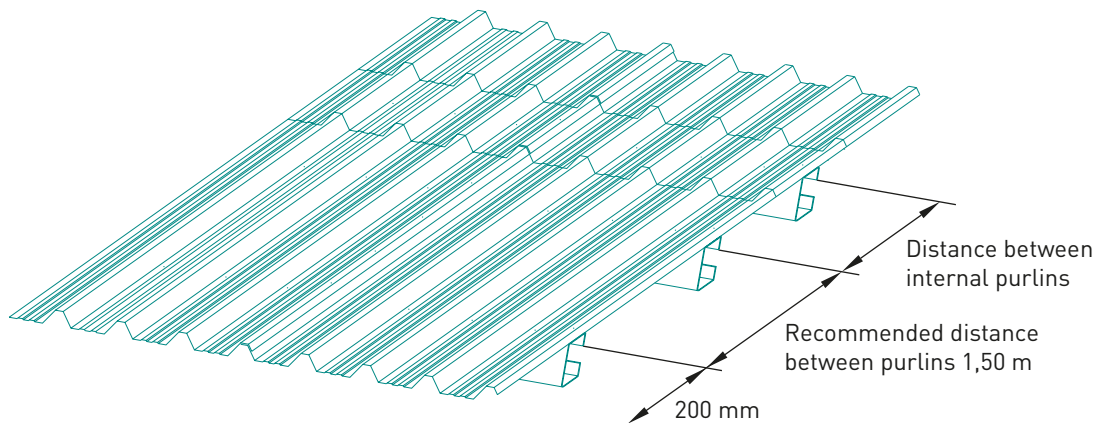


	INCLINATION	PENDING	mm	mm	ACCESSORIES
Zone 1	5	10	200	↓	T + L
	8	15	200	↓	-
	11	20	200	↓	-
	14	25	200	150	-
	17	30	150	100	-
	>20	>35	150	100	-
Zone 2	5	10	200	↓	T + L
	8	15	200	↓	T + L
	11	20	200	↓	T
	14	25	200	150	-
	17	30	150	100	-
	>20	>35	150	100	-
Zone 3	5	10	200	↓	T + L
	8	15	200	↓	T + L
	11	20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

Fixings

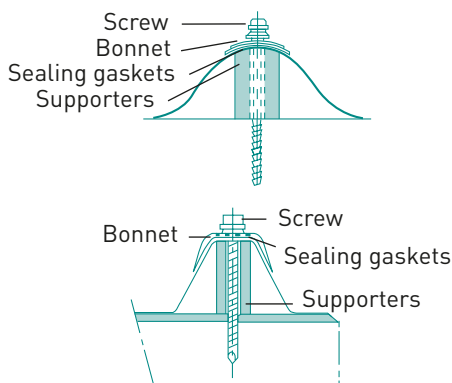
The fixings can be made by means of hooks, Solomonian screw or self-tapping screws. With self-tapping screws and trapezoidal foils, valley fixation can be carried out, in other cases it must be carried out on a crest.

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

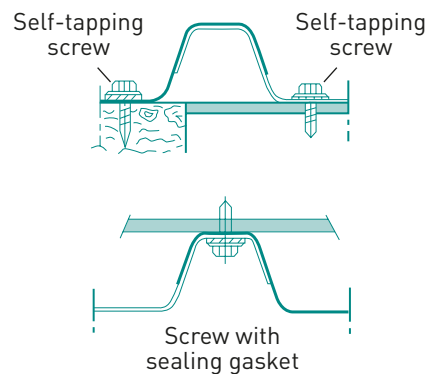


The sheets must be fixed on all the crests on the end supports and can be fixed to the staggered in the intermediate ones. Likewise all nerves must be fixed on the penultimate strap before the ridge or eaves as well as on all the straps in exposed situations. The fixing points must be symmetrical. The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

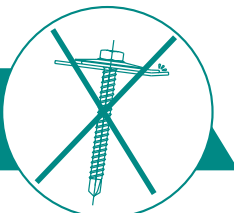
Crest fixation



Fixation in valle



**HOW NOT TO
FIX THE SCREWS**



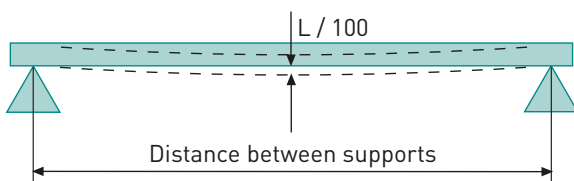
Permissible load



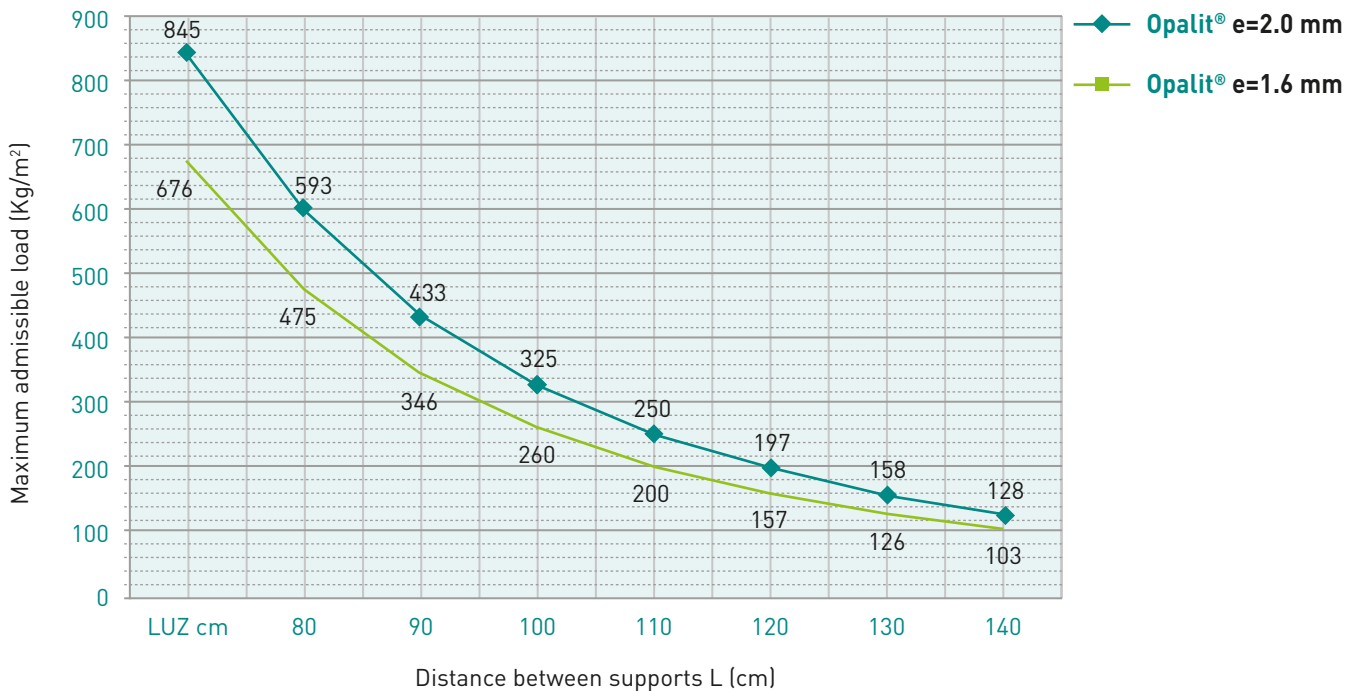
The following graph shows the theoretical capacity of maximum permissible load uniformly distributed for a maximum deformation of $L/100$ on a sheet located between 2 supports at different distances between purlins.

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

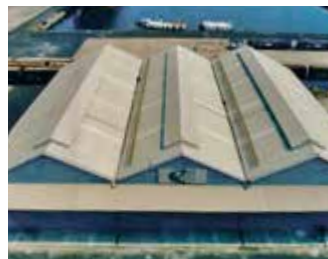
The maximum permissible load does not represent the breaking load of the sheet, nor can it be extrapolated in the load capacity at a specific point of the same (point load), since the information refers to the uniformly distributed load.



Maximum allowable load for arrow = $L/100$



Consult the loading diagram of a specific profile and thickness to **Stabilit Europa**



Standard color range

- Any color available subject to minimum order.

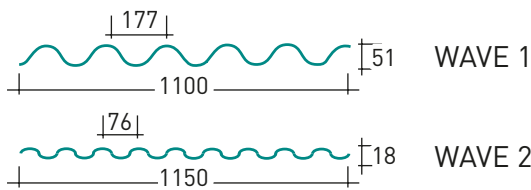
Standard thickness range

- 1.6 mm
- 2.0 mm

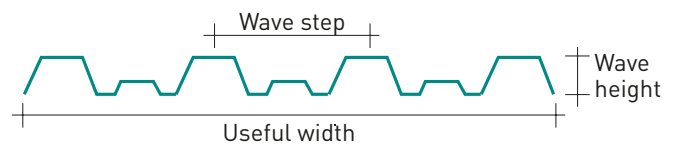
Other thickness: consult **Stabilit Europa**.

Profiles range

STANDARD PROFILES



TRAPEZIODAL PROFILES



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

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

Fire reaction certificate in **Opalit**® FR product according to EN 13501-1. Classification obtained: B s2 d0. (On request).

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.