

FOR ROOFS AND COVERS IN SALINE AND CORROSIVE ENVIRONMENTS

RelonPlus[®] is a profiled opaque plastic laminate, manufactured from polyester resin reinforced with fiberglass mesh and protected on both faces with a high-resistance gelcoat that gives it greater protection against external agents.

The **RelonPlus**® formulation gives the panel high resistance against atmospheric or chemical agents and against water absorption.

RelonPlus® has been designed especially to resist saline and corrosive environments and adapts to any type of structure.

Applications

- Agricultural and pig ferms
- Wharfs and guays
- Sport center
- Suitable for new structures as for rehabilitation
- Any construction that requires a lightweight, opaque structure resistant to saline or corrosive environments

Main advantages

- Resistant to corrosive and saline environments
- Impact resistant
- Resistant to temperature changes
- Long Useful life
- Non-toxic
- Absorption of noise
- High mechanical resistance, but with lightness and ease of handling





Characteristics



f General properties

THICKNESS RANGE

2.0 - 2.5 mm

Technical properties for RelonPlus® in thickness 2.0 mm

| PROPERTIES | RULE | VALUE |
|--------------------------------------|--------------|--|
| Thickness | EN 1013 | 2.0 mm |
| Coefficient linear thermal expansion | EN 1013 | 3 x 10 ⁻⁵ K ⁻¹ (0,03 mm/m°C) |
| Permeability to water vapor | EN 1013 | 1,5 x 10 ⁻⁵ mg/m h Pa |
| Flexural strength | EN 14125 | 175 MPa |
| Tensile strength | EN ISO 527-4 | 130 MPa |
| Barcol hardness | EN 59 | 40 - 45 |
| Reaction to fire | EN 13501-1 | Е |
| Reaction to external fire | EN 13501-5 | B roof |



^(*) consult range of thicknesses in Stabilit Europa.



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 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

RelonPlus® sheets are NOT passable.



Permissible load

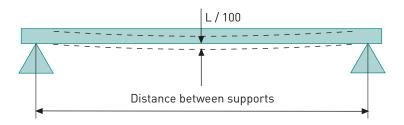


The data refers to the technical capacity of maximum permissible load uniformly distributed over the surface of the sheet to generate a deformation or arrow equal to the distance between supports divided by 100 (L/100).

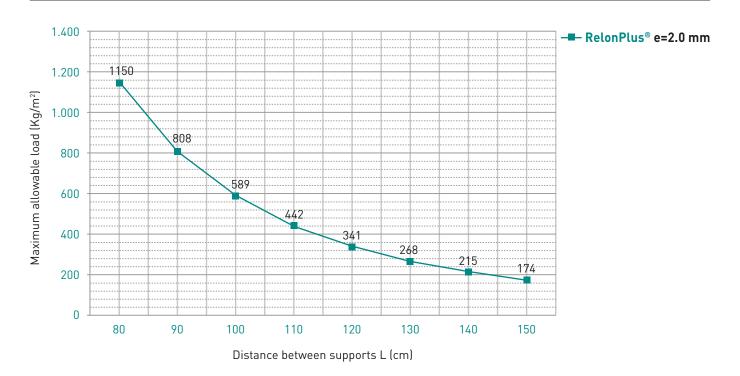
It does not represent the maximum load that the sheet can bear to reach the breakage, but the load that leads to a deformation of L/100.

The data does not refer to point loads at any specific point of the sheet, but to load uniformly distributed.

The calculations have been obtained based on the tests defined in the standard XPP38-504:2000 and fixing the plate in the outer frets and in the two central frets.



Maximum allowable load for arrow = L/100



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



Chemical resistance

| PRODUCT | CONCENTRATION (%) | TEMPERATURE (°C) |
|--------------------------|-------------------|------------------|
| Sodium Acetate | 100 | 40 |
| Benzoic Acid | 100 | 40 |
| Boric Acid | 100 | 40 |
| Citric Acid | ≤ 50 | 40 |
| Ácido Esteárico | 100 | 40 |
| Phosphoric Acid | ≤ 80 | 40 |
| Lactic Acid | ≤ 10 | 40 |
| Seawater (3 ≤ pH ≤ 8) | - | 40 |
| Starch (3 ≤ pH ≤ 8) | - | 40 |
| Sodium Bicarbonate | 100 | 40 |
| Sodium Bromate | 100 | 40 |
| Sodium Bromide | 100 | 40 |
| Sodium Chlorate | 100 | 40 |
| Ammonium Chloride (pH>9) | 100 | 40 |
| Barium Chloride | 100 | 40 |
| Calcium Chloride | 100 | 40 |
| Magnesium Chloride | 100 | 40 |
| Potassium Chloride | 100 | 40 |
| Sodium Chloride | 100 | 40 |

| PRODUCT | CONCENTRATION (%) | TEMPERATURE (°C) |
|-------------------------|-------------------|------------------|
| Ethanol | ≤ 20 | 40 |
| Ethylene Glycol | 100 | 40 |
| Potassium Fluoride | 100 | 40 |
| Sodium Fluoride | 100 | 40 |
| Fosfato de Amonio | 100 | 40 |
| Fuel oil (non-aromatic) | 100 | 40 |
| Gasoil (non-aromatic) | 100 | 40 |
| Isobutanol | ≤ 20 | 40 |
| Naphtha (aliphatic) | 100 | 40 |
| Calcium Nitrate | 100 | 40 |
| Magnesium Nitrate | 100 | 40 |
| Octanes | 100 | 40 |
| Ammonium Sulphate | 100 | 40 |
| Calcium Sulphate | 100 | 40 |
| Copper Sulphate | 100 | 40 |
| Iron Sulphate | 100 | 40 |
| Sodium Sulphate | 100 | 40 |
| Sodium Sulfite | 100 | 40 |
| Triethylene Glycol | 100 | 40 |



Standard colors range

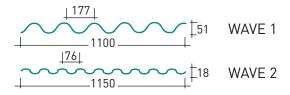
Gray RAL 7016

Red RAL 3016

Other colors: consult Stabilit Europa.

Profiles range

STANDARD PROFILES



TRAPEZOIDAL PROFILES



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

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.

Certified reaction to fire in RelonPlus® product according to EN 13501-1. Classification obtained: E.

Certified reaction to external fire in **RelonPlus®** product according to EN 13501-5. Classification obtained: B roof.

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 Europe** does not have any control on his final use.



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