



ROOF SYSTEM

EASYROOF **CURVED EASYROOF** **SKL 30** **GRECATEC** **GRECATEC 28**

VERSION *01*
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Technical Office

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ROOF SYSTEM

INTRODUCTION

ROOF SYSTEM is a modular panel system suitable for the construction of translucent roofings and skylights.

It consists of different types of polycarbonate panels (EasyRoof, Curved EasyRoof, SKL 30, GrecaTec, GrecaTec 28); for some of these panels are available accessories for a complete solution.

These panels are planned for an easy and safe installation combined with sandwich panels and metal corrugated sheets.

Specification

For EasyRoof panel:

- ✓ Realization of translucent roofings and skylights with multiwall polycarbonate panel **EASYROOF**, UV protected by co-extrusion on external side, 4-wall inner structure, thickness 30 mm, weight 3,6 kg/m², thermal insulation 1,6 W/m² K (1,4 kcal/h m² °C), colour clear or opal, aluminium tape sealing for heads; dimensions: modul width 930 mm (span between wings 1000 mm), lenght on request; 10 year warranty, available European fire certification.

For Bended EasyRoof panel:

- ✓ Realization of translucent roofings and skylights with curved multiwall polycarbonate panel **CURVED EASYROOF**, UV protected by co-extrusion on external side, 4-wall inner structure, thickness 30 mm, weight 3,9 kg/m², thermal insulation 1,6 W/m² K (1,4 kcal/h m² °C), colour clear or opal, aluminium tape sealing for heads; dimensions: modul width 930 mm (span between wings 1000 mm), lenght on request; 10 year warranty.

For SKL 30 panel:

- ✓ Realization of translucent roofings and skylights with multiwall polycarbonate panel **SKL 30**, UV protected by co-extrusion on external side, 4-wall inner structure, thickness 30 mm, weight 3,6 kg/m², thermal insulation 1,6 W/m² K (1,4 kcal/h m² °C), colour clear or opal, aluminium tape sealing for heads; dimensions: modul width 930 mm, lenght on request; 10 year warranty.

For GrecaTec panel:

- ✓ Realization of translucent roofings, skylights and vertical glazing with corrugated multiwall polycarbonate panel **GRECATEC**, UV protected by co-extrusion on external side, 3-wall inner structure, thickness 10 mm, weight 2,3 kg/m², thermal insulation 3,9 W/m² K (3,35 kcal/h m² °C), colour clear or opal, thermosealing of panel's heads; dimensions: modul width 1000 mm, lenght on request (possibility of overlapping on pitch), height of greca 80 mm; 10 year warranty, available European fire certification, test 1200 J positive.

Accessories:

- steel screw (6,3 x 120 mm) with gasket
- PE spacer
- overlapping joining element
- half ridge profile, pre-painted steel grey-white, thickness 6/10 mm, lenght 1140 mm
- reinforcing wing 80 mm

For GrecaTec 28 panel:

- ✓ Realization of translucent roofings, skylights and vertical glazing with corrugated multiwall polycarbonate panel **GRECATEC 28**, UV protected by co-extrusion on external side, 2-wall inner structure, thickness 6 mm, weight 2,1 kg/m², thermal insulation 5,2 W/m² K (4,47 kcal/h m² °C), colour clear or opal, thermosealing of panel's heads; dimensions: modul width 1120 mm, lenght on request (possibility of overlapping on pitch also with metal corrugated sheet), height of greca 28 mm; 10 year warranty.

1 GENERIC TECHNICAL CHARACTERISTICS

1.1 UV protection

ROOF SYSTEM panels are protected with a layer of UV adsorber co-extruded on external side that avoids early ageing and guarantees sheets in time.

The protected side, that must be installed on external side, is identified by hot marking with "UV side" and with a printed foil indicating "UV protected side".

1.2 Warranty

ROOF SYSTEM panels have a 10 years warranty against ageing.

Warranty include loss of light transmission, yellowing and resistance against hailstone.

Check with our commercial office complete terms of warranty.

1.3 Light transmission

ROOF SYSTEM panels assure a good light transmission; the complete range of colours allow a correct control of light.

	Light transmission	
	Clear	Opal
EASYROOF	52%	35%
BENDED EASYROOF	50%	31%
SKL30	50%	31%
GRECATEC	66%	49%
GRECATEC 28	80%	43%

1.4 Temperature range (continuous use)

Polycarbonate is a material that maintains its features unchanged in a wide range of temperatures (mechanical properties, impact resistance, etc.). POLITEC panels can be used in a range of temperatures as follows:

Min. Temperature	- 40°
Max. Temperature	+ 130°

1.5 Thermal expansion

The polycarbonate has got a high thermal expansion coefficient compared to the usual materials used in the building industry.

$$\alpha = 0,065 \text{ mm/m } ^\circ\text{C}$$

For a correct planning with the ROOF SYSTEM panels it is necessary to take into consideration the maximum expansion possible and take the technical steps required in order to avoid any high stress due to direct fastening to sheet.

The expected expansion in the length can be worked out through the formula below:

$$\Delta L = \alpha \times L \times \Delta T^\circ$$

that means:

ΔL = difference of the expected length (mm)

α = linear thermal expansion coefficient (0,065 mm/m $^\circ\text{C}$)

L = length of the panel in the direction the expansion is calculated

ΔT° = difference of estimated temperature in degrees Celsius

IMPORTANT:

In order to avoid any breakage due to the thermal expansion compression please consider the correct margin for expansion.

1.6 Flat solution

ROOF SYSTEM panels have to be installed on continuous purlins and perpendicular to panels' length.

These purlins have to be smooth and without any object that could damage the panels such as nails, wires, etc.

1.7 Minimum slope

In roofing installations a minimum slope of 5% has to be considered in order to allow surface water to escape.

1.8 Maximum suggested lenght

Due to the high thermal expansion of polycarbonate we suggest to use ROOF SYSTEM panels with a lenght not exceed 6000 mm (except for SKL30 that don't required passing screws).

For long pitches GrecaTec and GrecaTec 28 can be easly overlapped while for EasyRoof panel a particular workmanship is required in order to allow overlapping of two panels. Nevertheless with a correct space for dilatation near screws covered with specific gaskets it is possible to use panels longer than 6,0 m.

1.9 Bended solution

Bended EasyRoof have to be installed together with sandwich panels with a radius of 6,0 m.

A metal profile is always required under wings (for joining two or more polycarbonate panels) or under the empty greca of sandwich panel.

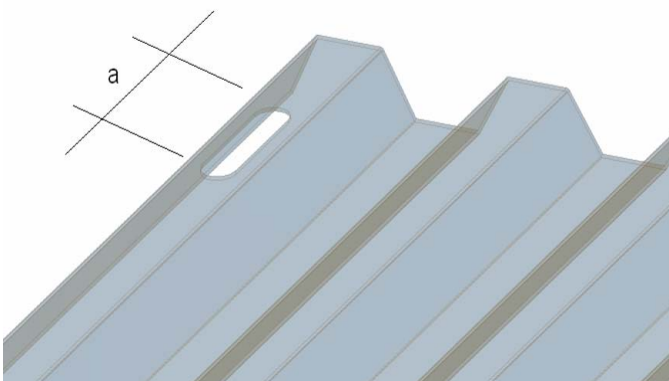
1.10 Allowed loads

Spans between purlins referred to breakage load for panels are shown in specific tables for each product.

Span between purlins depends also by the type of application required for the product.

For the number of fixings that must be realized on purlins, please look at specific information for each product.

1.11 Fixing



Fixings have to be a suitable gasket that prevent the hole from water infiltration considering that the screw requires space for thermal expansion of polycarbonate panel.

After you have calculated the maximum thermal expansion of the panel (see paragraph nr. 1.5) it is possible to identify the space required near the screw.

1.11.1 Fixing on purlins

ROOF SYSTEM panels have to be fixed stiffly on supporting structure with the correct number and type of screws (screws for wood, steel, ...).

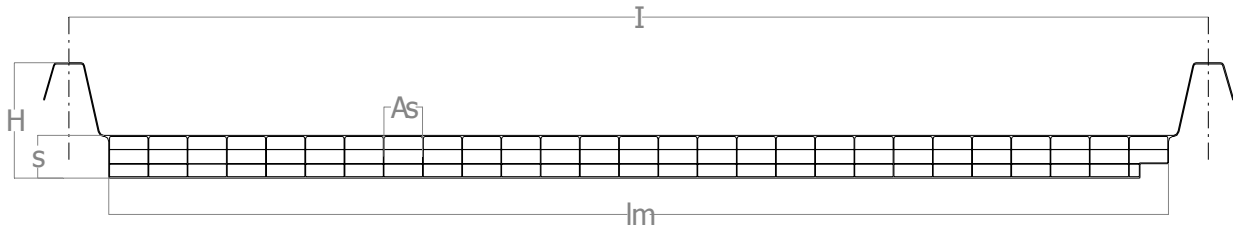
Panels require these fixings:

- for *EasyRoof* only on side wings (nr. 2 screws for purlin)
- for *GrecaTec* on each greca (nr. 5 screws for purlin)
- for *GrecaTec 28* at least nr. 4 screws for purlin

Force for tightening screws hasn't to damage panel but at the same time has to assure that the gasket works well.

2 EASYROOF PANEL

2.1 Standard dimensions



Dimension	Value
Thickness (s)	30 mm
Module width (lm)	930 mm
Fixings distance (I)	1000 mm
Standard length	12100 mm
Total height (H)	78 mm
Cell width (As)	34,7 mm
Weight (flat sheet)	3,6 kg/m ²
Weight (bended sheet)	3,9 kg/m ²
Radius	6000 mm

2.2 Technical characteristics

Thermal insulation	1,6 W/m ² K		
	1,4 Kcal/m ² h °C		
Colours		LT	G
	Clear	52% (50% **)	61% (61% **)
	Opal	35% (31% **)	44% (44% **)
UV protection	Co-extruded on outer side		
Warranty	10 years against hailstone, yellowing, loss of light transmission		
Temperature range (continuous use)	-30 °C +120 °C		
Fire certification	Available on request		

LT = light transmission

G = total solar energy transmitted

** = values for bended panel

2.3 Load tables

2.3.1 Flat Easyroof

Span between purlins	Pressure (N/ m ²)	Depression (N/ m ²)
2200 mm	950	Max. 1400
1900 mm	1250	
1800 mm	1600	
1600 mm	1900	

These value are referred to panel's breakage load and are the result of our best knowledge but they are non binding information and don't release Client to make own tests in order to check whether the products are suitable with the use they are planned for.

2.3.2 Bended Easyroof

Maximum chord	Pressure (N/ m ²)	Depression (N/ m ²)
3000 mm	1800	Max. 1400
4000 mm	1500	
5000 mm	1200	

These value are referred to panel's breakage load and are the result of our best knowledge but they are non binding information and don't release Client to make own tests in order to check whether the products are suitable with the use they are planned for.

3 SKL 30 PANEL

3.1 Standard dimensions



Dimensions	Values
Thickness (s)	30 mm
Module width (lm)	930 mm
Standard length	12100 mm
Cell width (As)	34,7 mm
Weight	3,6 kg/m ²

3.2 Technical characteristics

Thermal insulation	1,6 W/m ² K		
	1,4 Kcal/m ² h °C		
Colours		LT	G
	Clear	50%	61%
	Opal	31%	44%
UV protection	Co-extruded on outer side		
Warranty	10 years against hailstone, yellowing, loss of light transmission		
Temperature range (continuous use)	-30 °C +120 °C		

LT = light transmission

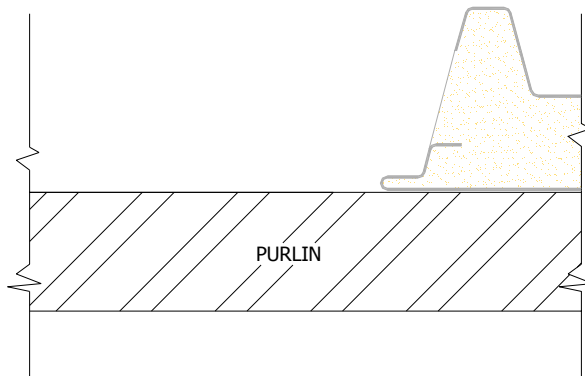
G = total solar energy transmitted

3.3 Load table

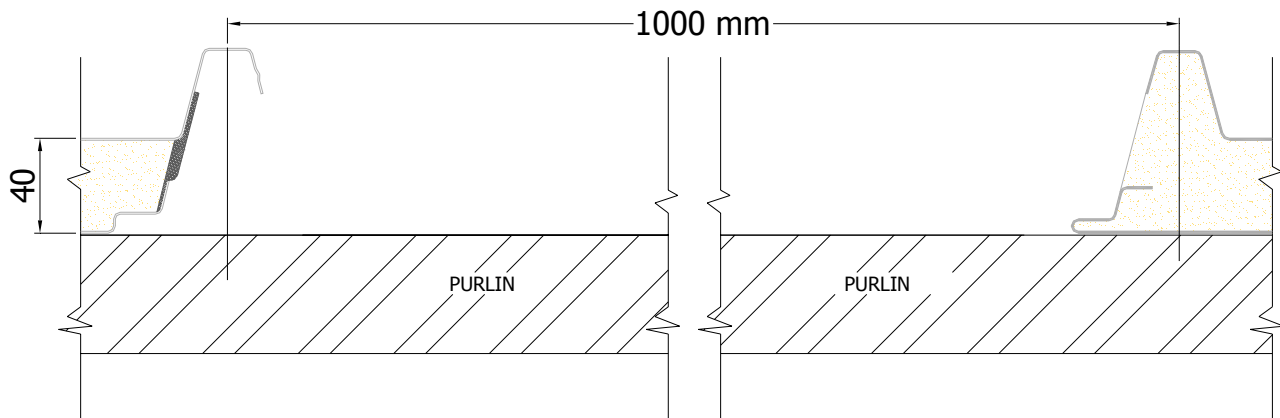
Load		Maximum distance between supports
Pressure (N/ m ²)	900	2200 mm
	1200	1900 mm
	1500	1800 mm
	2000	1600 mm
Depression (N/ m ²)	900	2000 mm
	1200	1700 mm
	1500	1600 mm

These values are referred to panel's breakage load and are the result of our best knowledge but they are non binding information and don't release Client to make own tests in order to check whether the products are suitable with the use they are planned for.

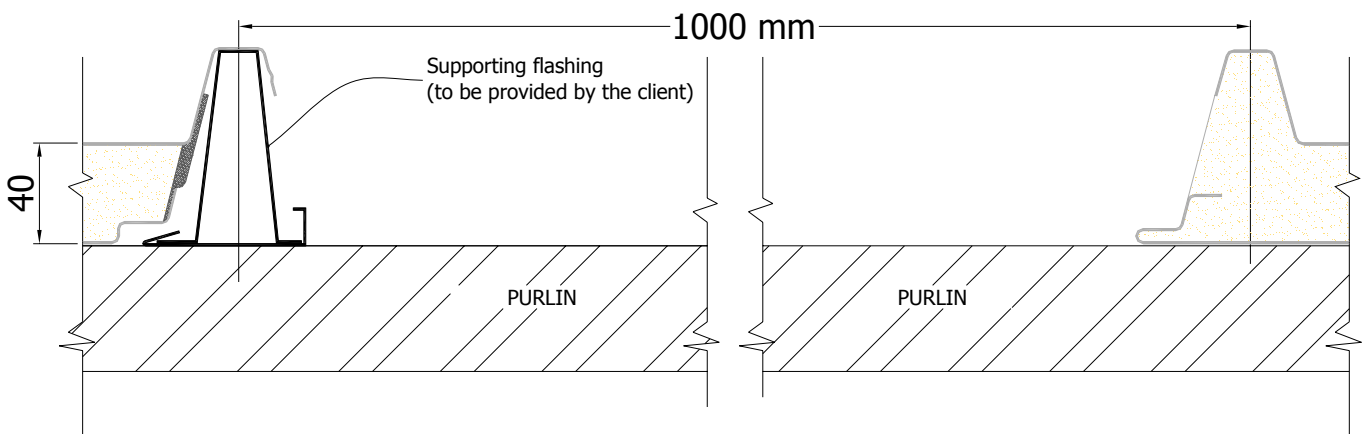
4 INSTALLATION INSTRUCTIONS FOR EASYROOF AND SKL30



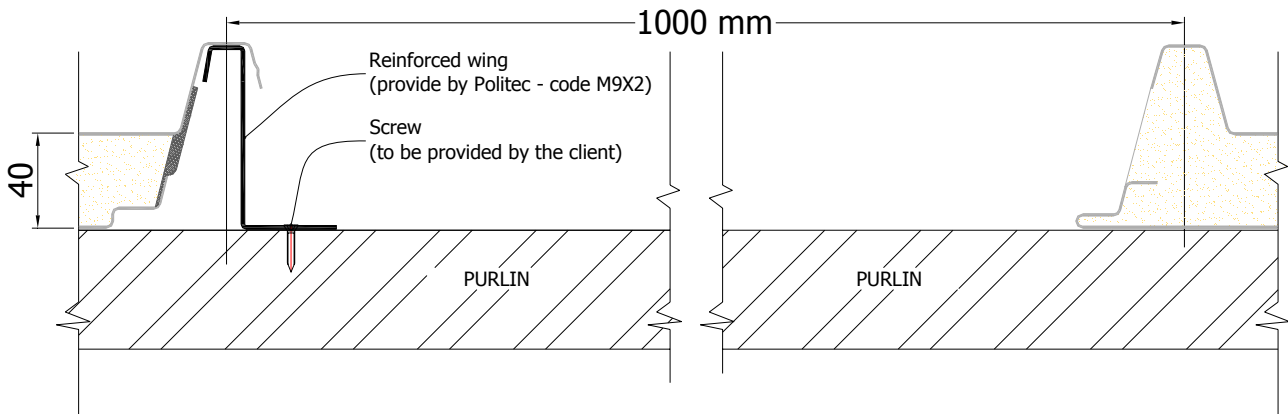
A – Install the last sandwich panel before installing polycarbonate panel in order to realize the skylight



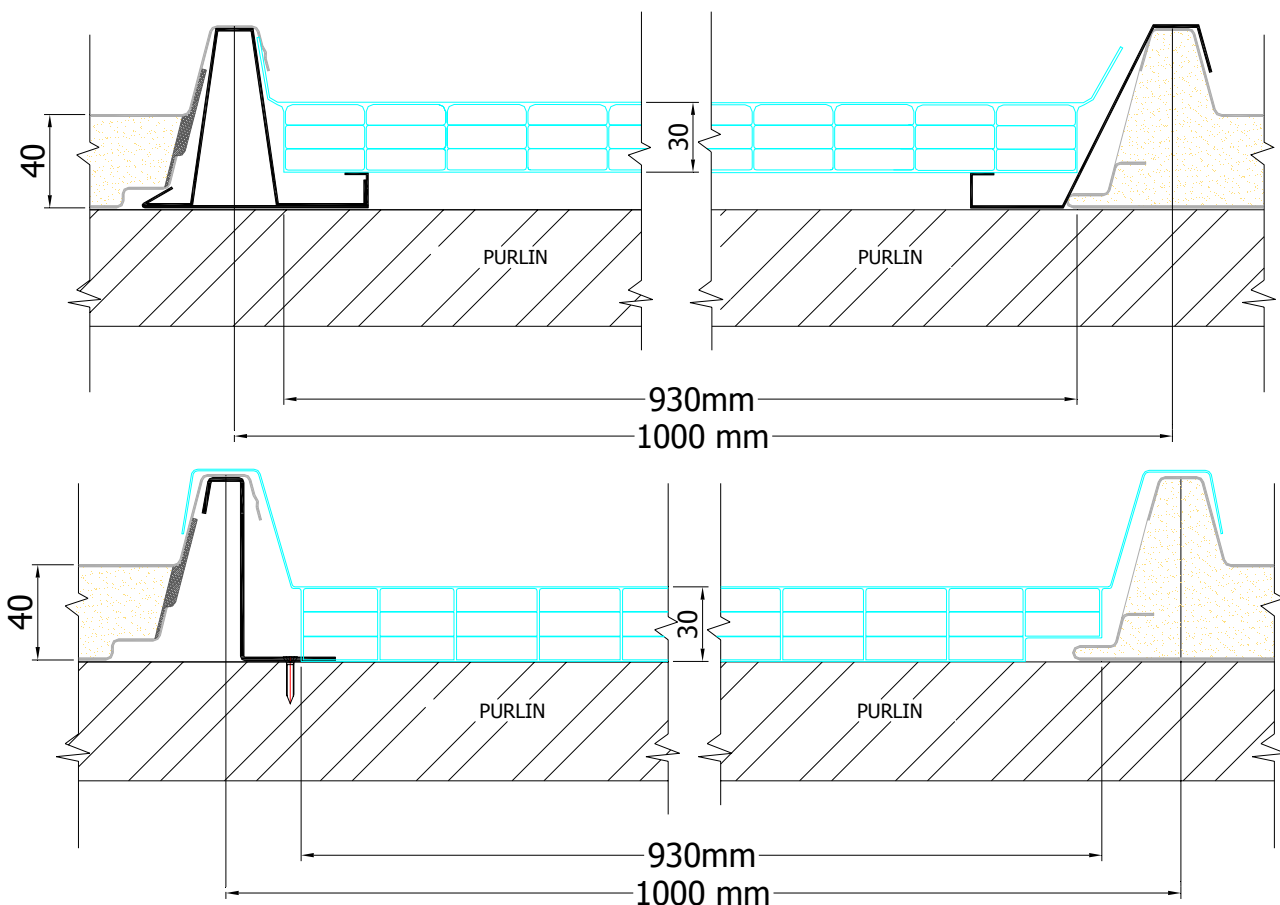
B – Install next sandwich panel with a span of 1000 mm between fixation points.



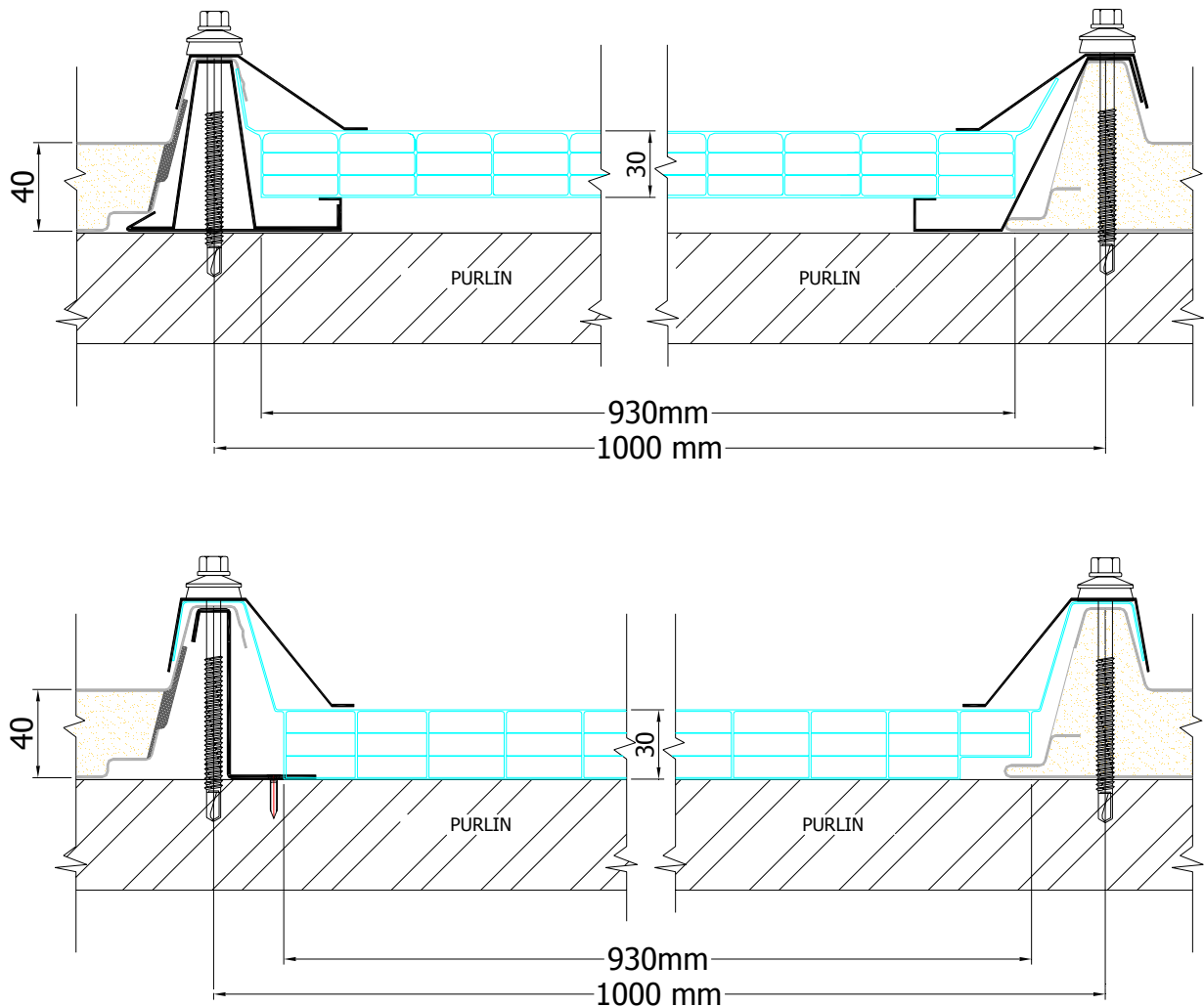
C.1 – Install, under the empty greca of sandwich panel, the supporting flashing (to be provided by the client) in order to support it.



C.2 – Instead of supporting flashing, Politec SA can furnish a reinforced wing for the empty greca of sandwich panel that must be fix on each purlin with a suitable screw (not included) – **PAY ATTENTION:** this reinforced wing can be used only with EasyRoof panel; with SKL30 panel a specific supporting flashing is required.



D – Now it is possible to install polycarbonate panel checking that, for EasyRoof panel, side wings fit properly with wings of sandwich panel. For SKL30 panel it is necessary to check the correct installation between sandwich panels.

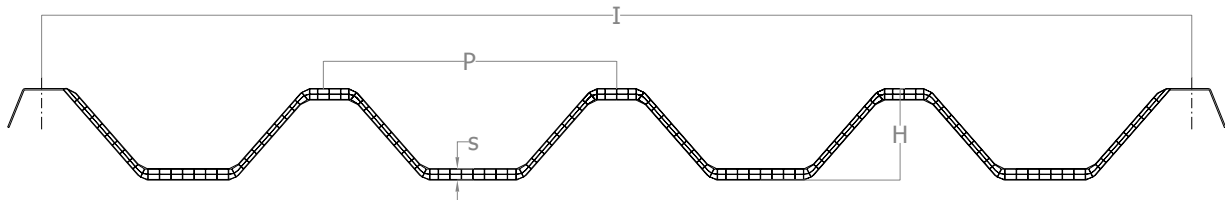


E – Now you can fix the polycarbonate panel with suitable screws (check the correct length and type of screw for wood, metal, ...). For a correct installation of SKL30 panel it is necessary to put the flashing caps on the wings while for EasyRoof panel you can avoid to use flashing caps if the client install screw with gasket that prevent the hole for screw from water infiltration.

Remember that for a correct installation holes for screws required space for thermal expansion of panel.

5 GRECATEC PANEL

5.1 Standard dimensions



Dimension	Values
Thickness (s)	10 mm
Fixings distance (I)	1000 mm
Standard length	4200 – 5200 – 6200 mm
Total height (H)	80 mm
Pitch (P)	250 mm
Weight	2,3 kg/m ²

5.2 Technical characteristics

Thermal insulation	2,8 W/m ² K		
	1,8 Kcal/m ² h °C		
Colours		LT	G
	Clear	66%	69%
	Opal	49%	57%
UV protection	Co-extruded on outer side		
Warranty	10 years against hailstone, yellowing, loss of light transmission		
Temperature range (continuous use)	-30 °C +120 °C		
Test 1200 Joule	Positive		
Fire certification	Available on request		

5.3 Load tables

In roofing installations a minimum slope of 5% has to be considered in order to allow surface water to escape.

Values indicate in the following tables are referred to panel's breakage load with distributed load and nr. 5 screws for each purlin.

5.3.1 Load table for full slope roofing and vertical glazing

In order to realize full slope roofing and vertical glazing with GrecaTec panels, it is necessary to insert a suitable support under the wings of panels.

Distance between supports (mm)	Pressure (N/ m ²)	Depression (N/ m ²)
1250	2250	1500
1500	1750	1200
1750	1500	900
2000	1250	800
2250	1000	600
2500	900	500

These value are referred to panel's breakage load and are the result of our best knowledge but they are non binding information and don't release Client to make own tests in order to check whether the products are suitable with the use they are planned for.

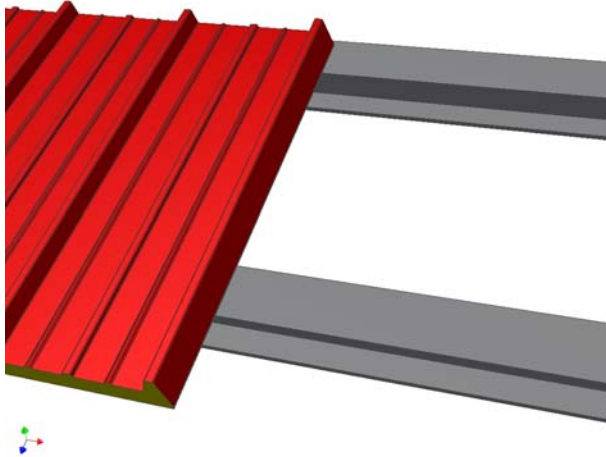
5.3.2 Load table for skylight coupled with insulating panels

It is possible to install a skylight coupling GrecaTec sideways with insulating panels from the ridge up to the eaves. In case of overlapping of GrecaTec panels, an overlap of at least 30 cm must be considered.

Distance between supports (mm)	Pressure (N/ m ²)	Depression (N/ m ²)
1250	4000	1600
1500	3000	1300
1750	2000	1000
2000	1500	900
2250	1000	800
2500	900	700

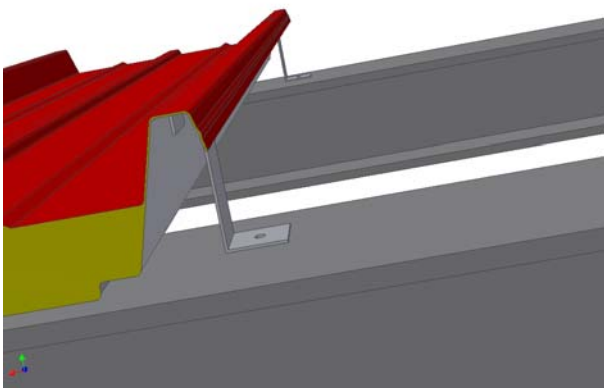
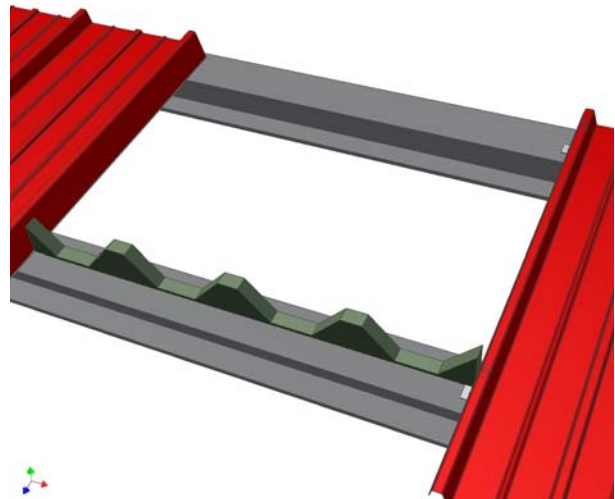
These value are referred to panel's breakage load and are the result of our best knowledge but they are non binding information and don't release Client to make own tests in order to check whether the products are suitable with the use they are planned for.

5.4 INSTALLATION INSTRUCTIONS FOR GRECATEC

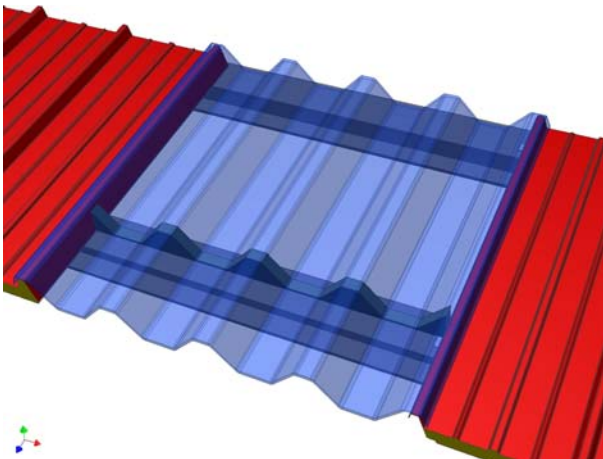


A – Install the last sandwich panel before installing polycarbonate panel in order to realize the skylight

Install the next sandwich panel with a distance of 1000 mm between fixing points and, before installing polycarbonate panel, fix on purlin towards eaves (with double-sided adhesive tape or silicone) the PE spacer.



Install, under the empty greca of sandwich panel on each purlin, our reinforced wing (code M9X2) (or flashing support to be provided by the client) fixing it on purlin with a suitable screw (for wood, metal, ...)

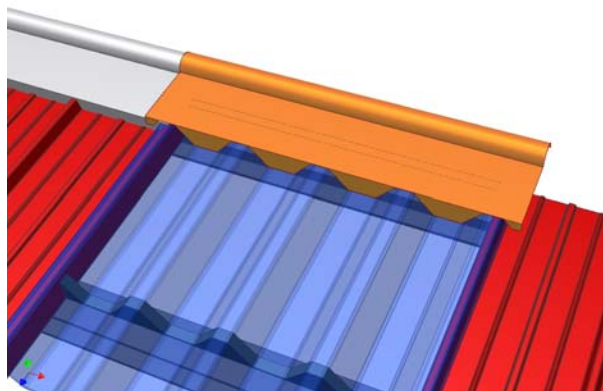
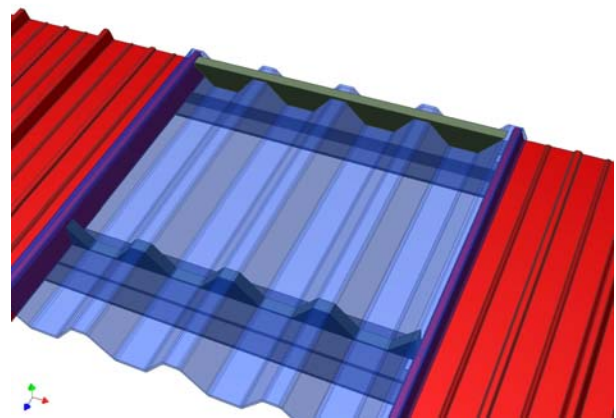


Install the polycarbonate panel checking that the side wings fit correctly on greccas of sandwich panel.

Go on fixing the polycarbonate panel on sandwich panels with suitable screws on purlins.

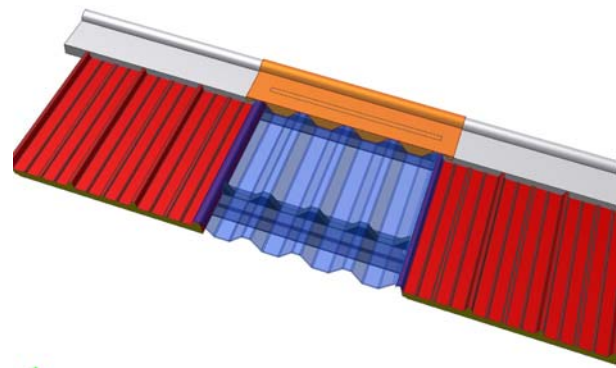
If you use our reinforced wings check that they are correctly placed under fixing screws.

Place the second half of PE spacer on the top, where will be installed the half ridge profile.



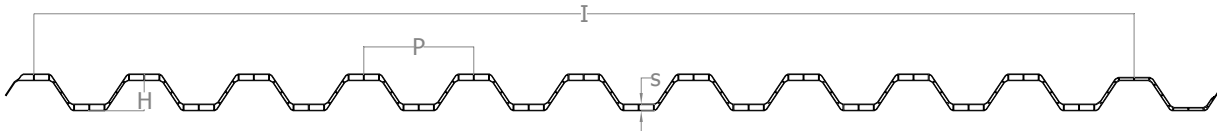
Install the half ridge profile checking that the PE spacer is correctly placed under it.

Go on with installation of half ridge for sandwich panels and repeat the installation process when another polycarbonate panel is required.



6 GRECATEC 28 PANEL

6.1 Standard dimensions



Dimension	Value
Thickness (s)	6 mm
Modul width (I)	1120 mm
Standard length	6000 mm
Total height (H)	28 mm
Pitch (P)	112 mm
Weight	2,1 kg/m ²

6.2 Technical characteristics

Thermal insulation	3,6 W/m ² K	
	3,1 Kcal/m ² h °C	
Colours		LT
	Clear	80%
	Opal	43%
UV protection	Co-extruded on outer side	
Warranty	10 years against hailstone, yellowing, loss of light transmission	
Temperature range (continuous use)	-30 °C +120 °C	

6.3 Load tables

Values indicate in the following tables are referred to:

1. load when panel reach a deflection of 1/50 respect the span between purlins
2. load when panel reach a deflection of 50 mm
3. breakage load of panel

In roofing installations a minimum slope of 5% has to be considered in order to allow surface water to escape.

Values indicate in the following tables are referred to a distributed load and nr. 4 screws for each purlin.

6.3.1 Load table with panel fixed on two supports

Since this panel fit perfectly with the same metal corrugate sheet, it is possible to realize skylights in the middle of the pitch.

Distance between purlins (mm)	Deflection 1/50 (N/ m ²)	Deflection 50 mm (N/ m ²)	Breakage (N/ m ²)
1000	1150	> 2000	> 2500
1200	600	1200	2400
1400	450	800	1650
1600	300	450	1300
1800	---	250	1000

These value are referred to panel's breakage load and are the result of our best knowledge but they are non binding information and don't release Client to make own tests in order to check whether the products are suitable with the use they are planned for.

6.3.2 Load table with panel fixed on several supports

Skylights from the ridge up to the eaves coupled with metal corrugated sheets

Distance between purlins (mm)	Deflection 1/50 (N/ m ²)	Deflection 50 mm (N/ m ²)	Breakage (N/ m ²)
1000	1500	2200	> 2500
1200	1200	1800	> 2500
1400	650	1050	1800
1600	400	650	1450
1800	---	350	1200

These value are referred to panel's breakage load and are the result of our best knowledge but they are non binding information and don't release Client to make own tests in order to check whether the products are suitable with the use they are planned for.

6.4 INSTALLATION INSTRUCTIONS FOR GRECA TEC 28

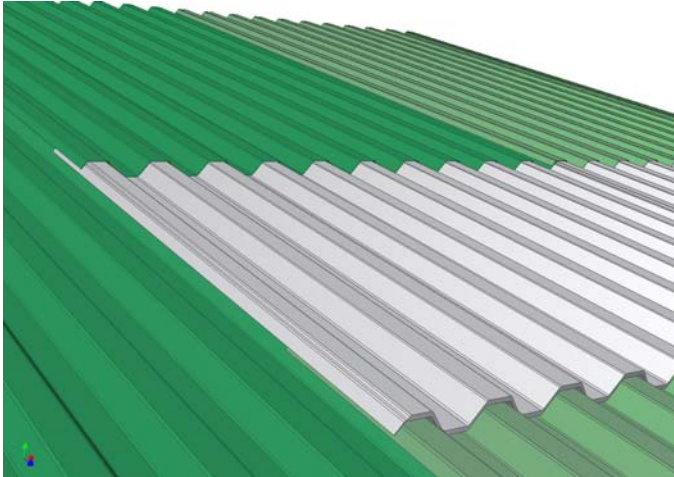
6.4.1 Continuous skylight from the ridge up to the eaves

In order to realize continuous skylights with GrecaTec 28 panels, you have simply to replace during installation polycarbonate panels instead of metal corrugated sheets, fixing them with the suitable screws on each purlin.

In case of long pitches with overlapping of panels, an overlap of at least 30 cm is required.

6.4.2 Skylight in the middle of pitch

In order to realize a skylight in the middle of pitch, installation has to be made in this way:

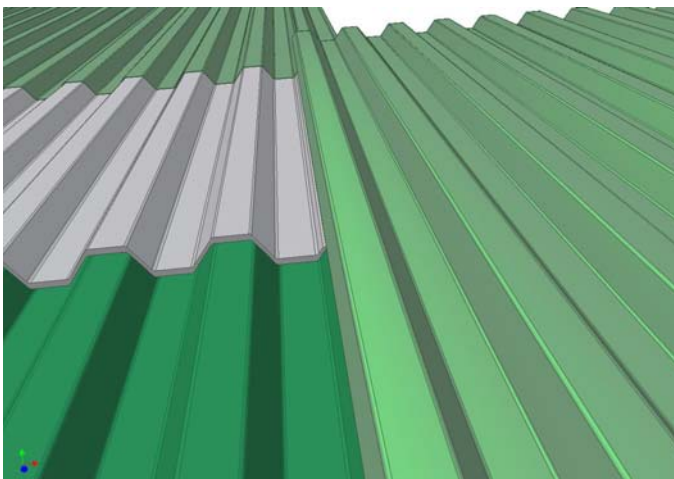
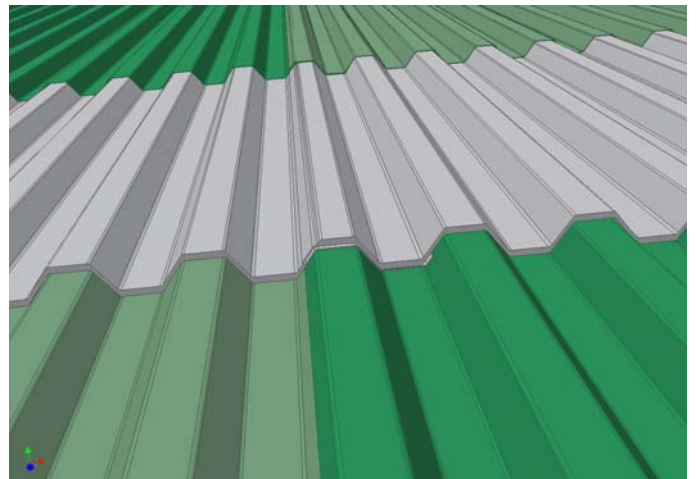


A – Place the last metal corrugate sheet (from the ridge up to the eaves) before installing the skylight

B – Place the metal corrugated sheet at the bottom of the pitch

C – Place the GrecaTec 28 panel so that it overlap the metal corrugated sheet both on side and on bottom part

D – If a coupling of more panels is required, they have to overlap in the same way of metal corrugated sheets.



E – On the top of the pitch place the metal corrugated sheet that overlap the polycarbonate panels.

F – After installing of skylight, go on placing a continuous metal corrugated sheet (that clearly must overlap polycarbonate panels).

7 PRE-INSTALLATION

7.1 Packaging and distribution

Standard sheets are supplied on wooden pallets and covered securely with heavy-duty polythene film.

Standard packaging takes into account nr. 30 panels for EasyRoof, nr 30 panels for SKL30, nr 70/80 panels for GrecaTec (depending from lenght).

Non standard, specially produced panels will be placed on pallets at POLITEC's discretion. For special requirements (personalized packs and packaging necessary for unloading and handling in the warehouse), please discuss with our sales staff at the time of order.

7.2 Trasportation

The transportation of POLITEC's panels must be carried out on suitable vehicles so that panels and pallets can be placed completely flat, with straps and blocks being used to prevent movement and possibility of damage.

7.3 Handling and storage

The handling and storage of panels is a delicate procedure in which damage can occur. It is therefore essential that the following instructions are carefully followed:

- Extreme care must be taken when using fork lift trucks. Under no circumstances must the forks lift the panels directly. Wooden pallets or other support must be placed in between;
- In case of using belts or equalizer for uplifting please use belts having a width of at least 200 mm in order to distribute correctly the strength. Put between the packs or pallets and the belts wooden plates having a bigger length than the width of the panels.
- The length (at least 2 lm) and the distance of the forks must be such as to correctly distribute the loads.
- No more than three pallets should be stacked on top of each other. Always place spacers or wooden strips between them to avoid possibility of damage to the contact surface (polystyrene, insulation).
- Store panel at a slight angle to allow eventual condensation and water to escape.
- Store packs inside. Where this is not possible, protect with tarpaulin which ensures correct ventilation and protection from sun.

WHEN EXPOSED TO HIGH TEMPERATURES (PALLET LEFT IN HOT SUN) THE PROTECTIVE FILM ON THE SURFACE OF THE PANEL TENDS TO BECOME STICKY AND DIFFICULT TO REMOVE.

8 CUTTING AND FABRICATION

8.1 Cutting operations

POLITEC's panels can be cut with standard cutting equipment such as vertical and horizontal reciprocating-type saws. Only a few simple instructions have to be followed. For example restrain the panel during cutting operations in order to avoid any vibration. In case no specific blade for plastic materials is available, fine toothed blade or any blade for iron can be used.

The cutting swarf can easily be removed with compressed air.

The PE protective film must be taken off only after the installation in order to make sure that the right UV protected side is exposed to the outer side.

The transparent tape on standard panels serves to keep the internal flutes clean from the dust normally present in warehouses and factories. This should be removed when cutting the panel and replaced if material is returned to stock.

IMPORTANT:

During cutting operations and fabrication, all necessary working procedures (glasses, screens, protections etc) have to be adopted for personnel safety.

8.2 Drilling

The holes on POLITEC's panels must be done with an appropriate drill.

Direct fixing without suitable holes allowing thermal expansion are not recommended. Check carefully that the flutes are clean and do not present any cutting swarf.

8.3 Sealing

Before installing POLITEC's panels the ends should be closed with adhesive aluminium tape (full, breather or micro porous) to keep the flutes clean. The panel is subsequently inserted into the appropriate closure (aluminium or polycarbonate) to prevent the tape from being washed away by the elements. The end closures must be provided with drainage holes.

The transparent tape on standard sheets does not keep the sheets clean with the time.

IMPORTANT:

for a correct installation it is necessary to seal properly the ends of the sheets.

9 CHEMICAL COMPATIBILITY

Countless chemicals can come into contact with POLITEC polycarbonate panels, both for environmental reasons and due to manufacturing reasons. The compatibility on a chemical level depends both on the element and on its environmental concentration.

Here is a list of some substances and their compatibility with polycarbonate, just as an example:

Chemicals		Propyl alcohol	•	Sodium chloride 10%	•	Methyl metacrylate	∅
Acetaldehyde	∅	Benzoic aldehyde	∇	Sulphoral chloride	∇	Methanol	∇
Acetylene	•	Alum	•	Zinc chloride	•	Methylamine	∇
Acetone	∅	Aluminium alum	•	Copper chloride	•	Methylketone	∇
Acetic acid 5%	•	Chrome alum	•	Cresol	∅	Methylisobutylketone	•
Acetic acid 30%	∇	Potassium alum	•	Decalin	•	Potassium Rhodanate	•
Acetic acid	∅	Amilacetate	∇	Diamlphthalate	∇	Naphtha	•
Arsenic acid 20%	•	Ammonia	∅	Dyburylphthalate	∇	Ammonium nitrate	•
Arsenous acid 20%	•	Sulphur dioxide	∅	Diethyl ether	∇	Calcium nitrate	•
Benzyl acid	∅	Aniline	∇	Dimethylformaldehyde	∇	Potassium nitrate	•
Benzoic acid	∅	Benzene	∅	Dionilphthalate	∅	Acrylic nitrile	∅
Boric acid	•	Industrial petrol	∅	Dioxane	∅	Nitrobenzene	∅
Butyric acid	∅	Benzole	∅	Sulphur dioxide	∇	Nitrobenzole	∇
Carbonic acid	•	Sodium bicarbonate	∅	Diocetyl adipate	∅	Aluminium oxalate	•
Citric acid 10%	•	Potassium dichromate	∅	Diocetyl phtalate	∅	Phosphotic Oxychloride	•
Hydrochloric acid 10%	•	Sodium bisulphate	•	Diphyl	∅	Carbon oxide	•
Hydrochloric acid 35%	∅	Sodium bisulphite	•	Heptane	•	Zinc oxide	•
Chromic acid 20%	•	Borax	•	Hexane	•	Oxygen	•
Phenic acid	∅	Bromine	∇	Methylic ester	∇	Ozone	•
Hydrofluoric acid	∇	Bromobenzene	∅	Ether	∇	Antimony pentachloride	•
Fluosilicic acid 30%	•	Bromobenzol	∇	Petroleum ether	∅	Pentane	•
Formic Acid 30%	∅	Potassium bromide	•	Ethyl ether	∅	Potassium perchlorate 10%	•
Phosphoric acid	•	Butane	•	Ethylamine	∅	Perchlorethylene	∇
Glycolic acid	•	Butanol	•	Ethyl bromide	∇	Potassium permanganate 10%	•
Lactic acid 5%	•	Butyl acetate	∅	Ethylamine	∅	Potassium persulphate	•
Nitric acid 10%	∅	Butylstearate	∅	Etilencloridrina	∇	Petroleum	∅
Oleic acid	•	Potassium carbonate	•	Ethilenchloride	∇	Pyridine	∅
Oxalic acid	•	Sodium carbonate	•	Ethilenglycol	•	Caustic potash 5%	∅
Perchloric acid	∅	Concrete	•	Phenol	∅	Propane	•
Perchloric acid 10%	•	Potassium cyanide	∅	Dimethyl Fluorinamide	∅	Synthetic saliva	•
Propionic acid	∅	Cyclohexane	∅	Ammonium fluoride	∅	Calcium soap	•
Hydrogen sulphide	•	Cyclohexaol	∅	Formalin	•	Soda	•
Sulphuric acid at 50 %	•	Cyclohexanon	∅	Chlorine gas	∅	Caustic soda 5%	∅
Sulphuric acid 70 %	∅	Cyclohexene	∅	Nitrous gases	∇	Aluminium sulphate	•
Sulphurous acid 10%	∇	Xylene	∅	Glycerine	∅	Ammonium sulphate	•
Tartaric acid	•	Sodium chlorate	•	Glycol	•	Iron sulphate	•
Thricloroacetic acid	∅	Ethyl chloridrine	∅	Butylenic glycol	•	Magnesium sulphate	•
Thrimetilic acid	∅	Chlorobenzol	∇	Ethylenic glycol	•	Manganese sulphate	•
Water	•	Chloroform	∅	Ammonium hydrate	∅	Nickel sulphate	•
Ammonia water	∅	Aluminium chloride	•	Calcium hydrate	•	Potassium sulphate	•
Acrylonitrile	∅	Ammonium chloride	•	Sodium hydrate 1%	•	Coppers sulphate	•
Allylic alcohol	∅	Chloride of lime	•	Sodium hydrate 10%	∇	Sodium sulphate	•
Benzyl alcohol	∅	Calcium chloride	•	Iodine	∇	Zinc sulphate	•
Butilic alcohol	•	Ethylene chloride	∅	Calcium hypo chloride	•	Iron sulphate	•
Ethyl alcohol 96%	•	Iron chloride	•	Sodium hypo chloride	•	Potassium sulphocyanide	∅
Pheniletilyc alcohol	∅	Phosphorus chloride	∅	Kerosene	•	Ammonium sulphide	∅
Isoamyl alcohol	∅	Magnesium chloride	•	Lime wash	∅	Carbon sulphide	∅
Isopropyl alcohol	∅	Mercury chloride	•	Ligroin	•	Sodium sulphide	∅
Methyl alcohol	∅	Methylene chloride	∇	Mercury	•	Styrol	∅
n-butyl alcohol	•	Potassium chloride	•	Potassium metabisulphite 4%	•		
Propargylic alcohol	•	Copper chloride	•				

Synthetic sweat	•	PHARMACEUTICALS		Salt	•	Oils and fats	
Tetrachlorethane	∅	Ambra solare	•	Raspberry syrup	•	Aral BG	•
Carbon tetrachloride	∅	Conditioner	•	Bovine tallow	•	Baysolin	•
Tetrahydrofuran	∇	Odol mouthwash	•	Mustard	•	BP Energol	•
Tetralin	∅	Hydroplex	•	Lard	∅	Brunofix	•
Tiophen	∅	Lanoline	•	Vegetable juices	•	Darina	•
Toluol	∅	Methanol 90%	∅	Orange juice	•	Esso Estic	•
Turpentine	•	Blood plasma	•	Fruit juice	•	Brake liquid	∇
Trichlorethylamine	∇	Periston	•	Apple juice	•	Mobil DTE	•
Trichloro-ethylene	∇	Nailpolish solvent	∇	Grapefruit juice	•	Molikote	•
Trichlorethylphosphate	∅	Vaseline	•	Tobacco	•	Combustible oil	∅
Ammonium trichloride	•	Wick-Vaporuf	•	Tea	•	Camphor oil	∇
Phosphor trichloride	∅	FOODS		Vanilla	•	Machine oil	•
Tri cresyl phosphate	∅	Vinegar	•	Wine	•	Paraffin oil	•
Triethanolamine	∅	Beet	•	Vodka	•	Silicone oil	•
Urea	∅	Beer	•	DETERGENTS		Turpentine oil	∅
Vinyl acetate	∅	Butter	•	Ajax	•	Diesel oil	∅
Xylene	∅	Coffee	•	Calgonit	∇	Drill oil	∇
Sulphur	∇	Cinnamon	•	Bleach	•	Polyran	•
DISINFECTANTS		Meat	•	Dor	•	Rhenocalor N	•
Carboxylic Acid	∇	Cucumbers	•	Fewa	•	Shell Spirax 90	•
Hydrogen peroxide 10%	∇	Clove	∇	Horoliht M	•	Shell Tellus 11-33	∅
Baktol	∇	Chocolate	•	Impact	∅	Skydrol	∇
Chloramine	•	Onions	•	Into-Fensterklar	•	Texano Regal	•
DDT	∇	Cognac	•	Natril	•	Oily paint	∅
Delegol	•	Gin	•	Omo	∅		
Dimamin	∅	Glucose	•	P3 Asepto	∇	• Resistant	
Lysoform 2%	•	Liquors	•	Parifex 2%	•	∇ Partially resistant	
Maktol	•	Maggi	•	Persil	∅	∅ NOT resistant	
Menfen	•	Margarine	•	Pril	•		
Oktozon 1%	•	Nutmeg	∇	Rapdosept	∅		
Perhydrol	•	Vegetable oils	•	Rei	•		
Resorcina 1%	•	Liver oil	•	Riseptin	•		
Sagrotan 5%	∅	Linseed oil	•	Laundry soap	•		
Pure alcohol	•	Olive oil	•	Sidolin	•		
Sublimate	•	Castor oil	•	Somat	∅		
TB-Lysoform	∇	Fish	•	Suwa	•		
Tincture of iodine	∅	Pimento	∇	Tiba	∅		
Trosilin G extra 1,5%	•	Tomato sauce	•	Trisilin F	•		
Zephirol	∅	Rum	•	WK 60	•		

The compatibility tests are carried out by immersing the polycarbonate sample piece for 180 days in the substance to be tested at a constant temperature of 20°C. The esthetical aspect (dulling, fissures) is then evaluated and the mechanical characteristics are compared with the original values of the polycarbonate.

The above list cannot be considered exhaustive. In doubt, or for any unlisted substance, please contact our office.

IMPORTANT:

As PVC-containing gaskets and acetic silicone are commonly used in the frame industry, we would like to stress that using them represents a danger.

For further information or suggestions please contact:

POLITEC S.A.

DIREZIONE TECNICA

Via Lische, 5 Z.I. 3

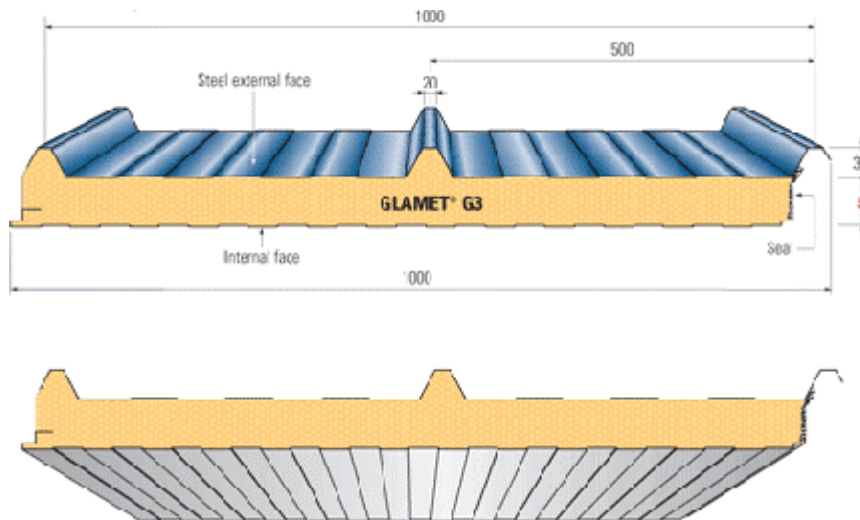
6855 STABIO (SVIZZERA)

e-mail: tech2@politecsa.com - tech3@politecsa.com

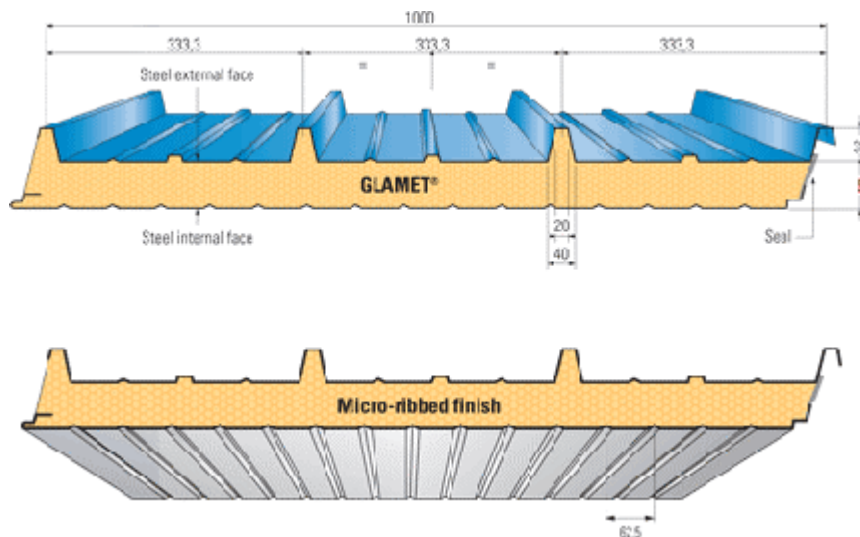
IMPORTANT: The information contained in this brochure is provided to assist customers in the project phase and during installation. Whilst all reasonable care has been taken in its compilation, the company reserves the right to amend without notice. It is the customer's responsibility to ensure that the product is fit for its intended purpose and that actual conditions of use are suitable. The customer must, in all cases of doubt or difficulty, consult POLITEC SA before proceeding.

ANNEX 1 SUITABILITY WITH METECNO PANELS

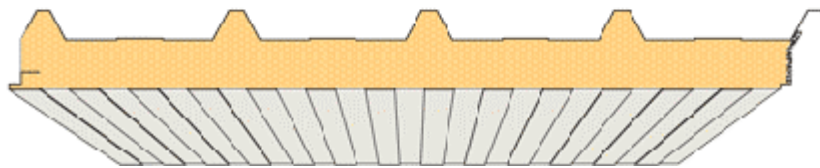
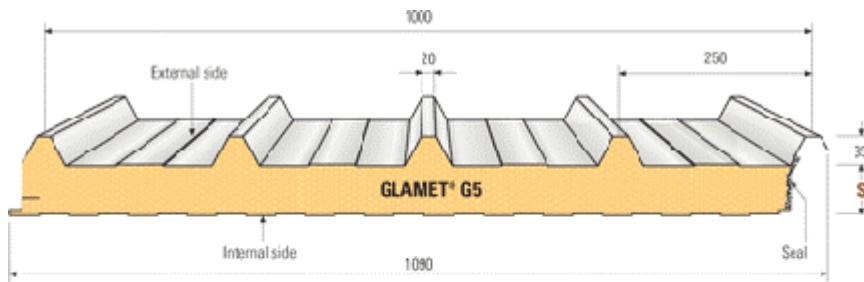
EasyRoof, SKL and GrecaTec suite with the following Metecno panels.
This list doesn't exclude the possibility that Politec panels fit with other Metecno panels:
please check dimensions with our technical office.



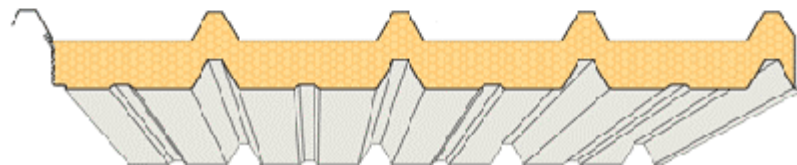
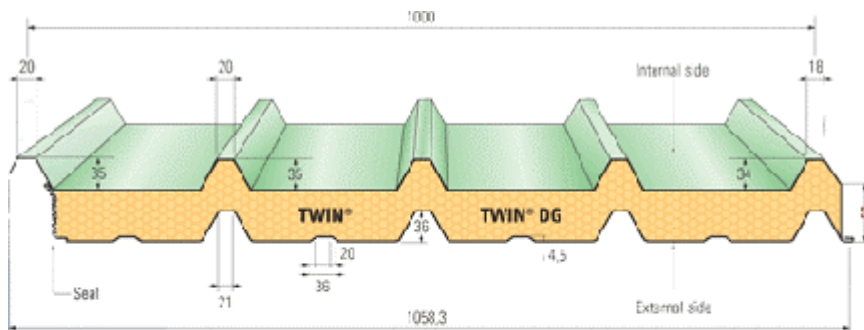
Metecno GLAMET G3



Metecno GLAMET G4

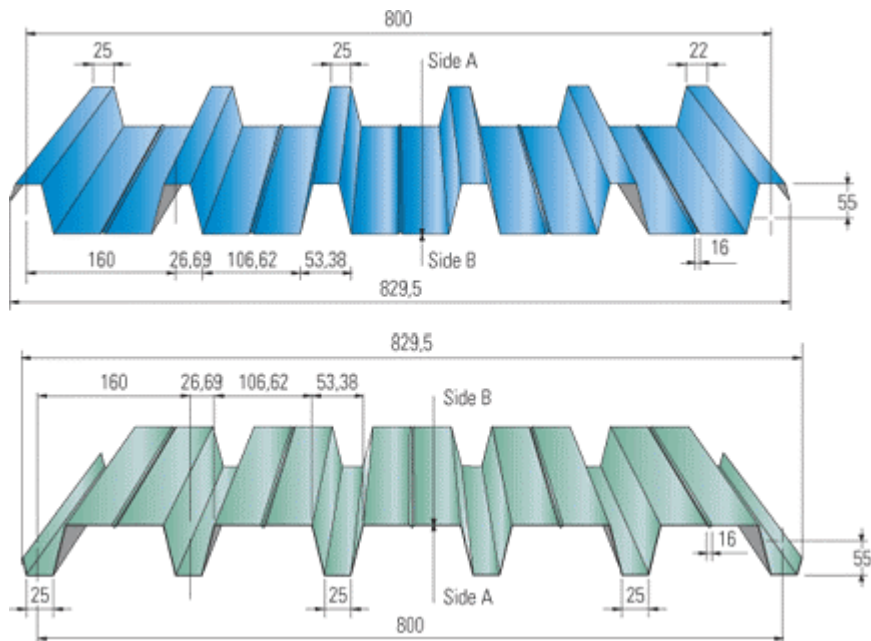


Metecno GLAMET G5

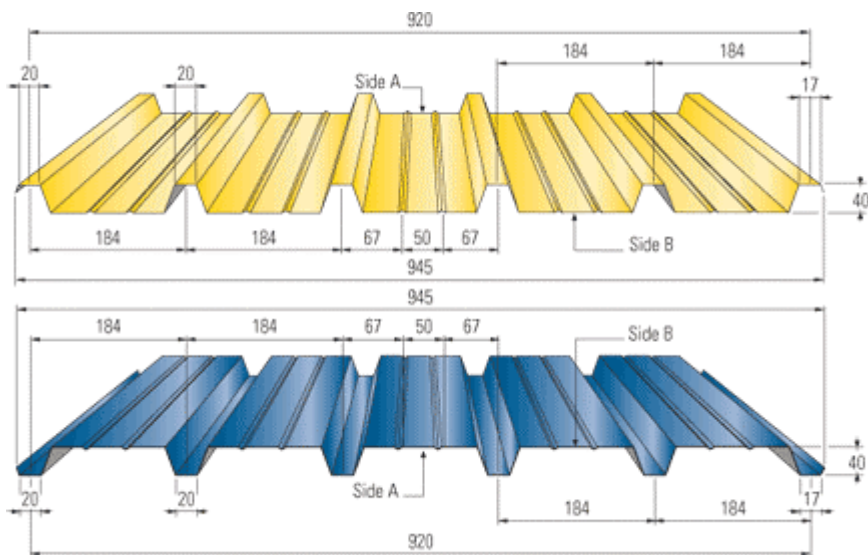


Metecno TWIN – TWIN DG

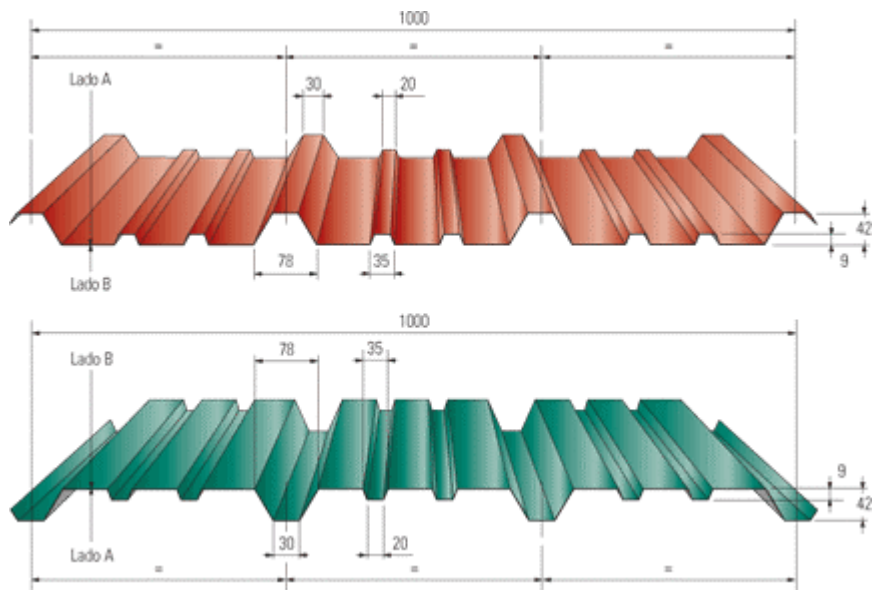
! ATTENTION: Politec EasyRoof and GrecaTec have a standard wheelbase of 1000 mm that could be different from wheelbase of some Metecno metal corrugated sheets.



Metecno A55-P800-G6

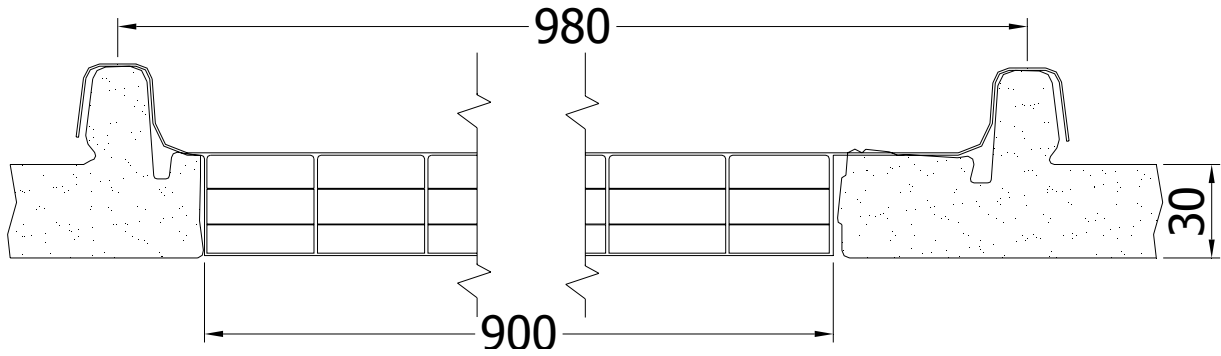


Metecno A40-P920-G6

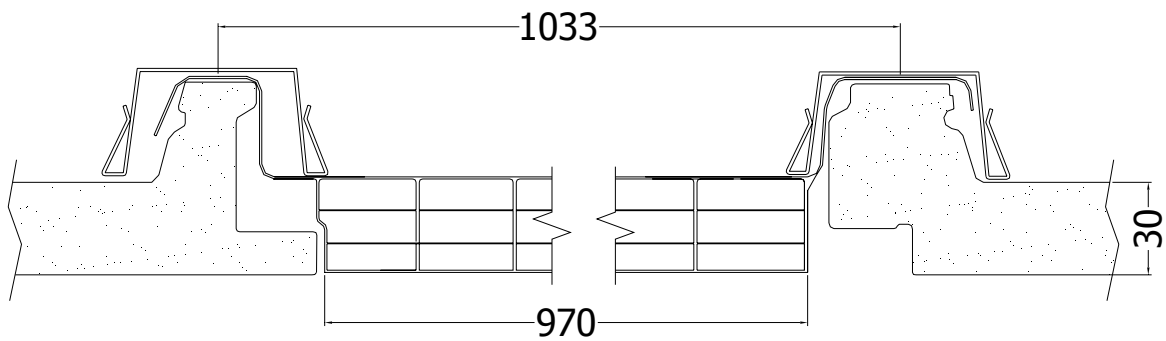


Metecno A42-P1000-G4

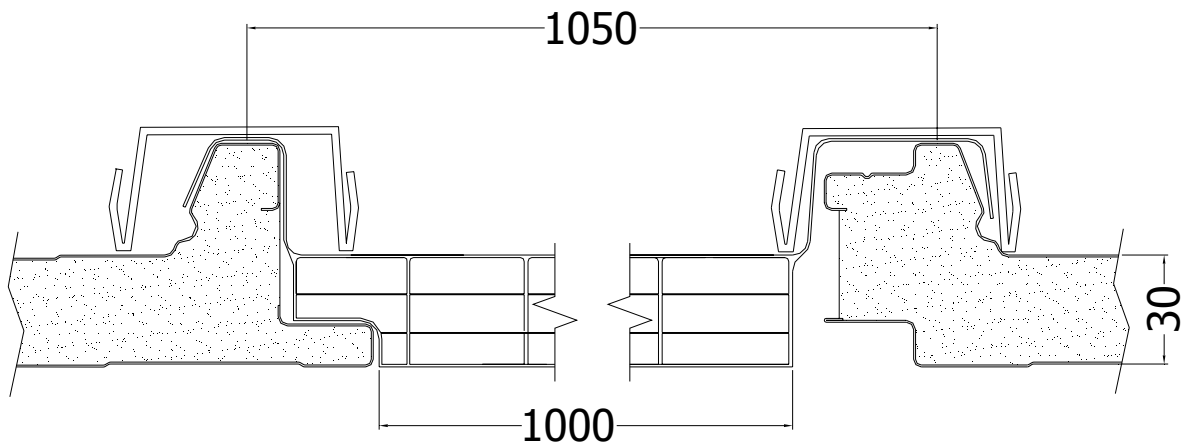
ANNEX 2
EASYROOF PANELS FOR SPECIAL SANDWICH PANELS



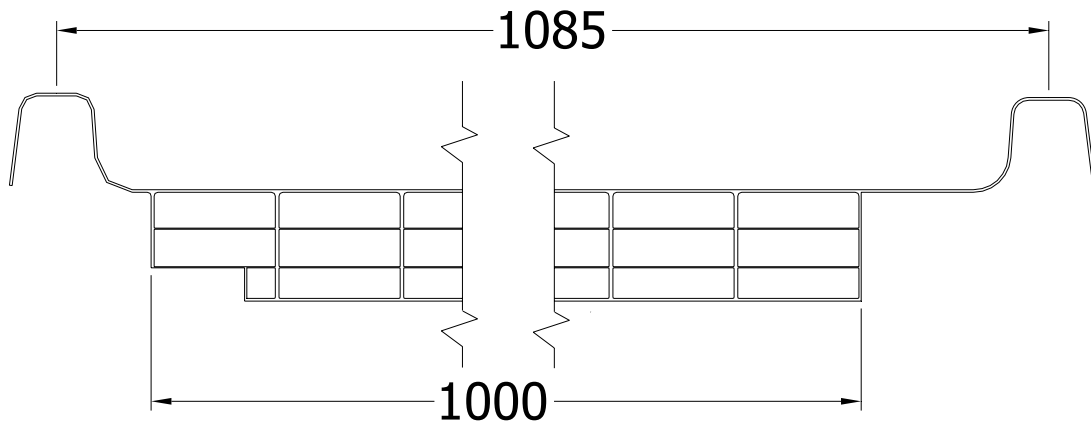
EasyRoof for Aceralia sandwich panels



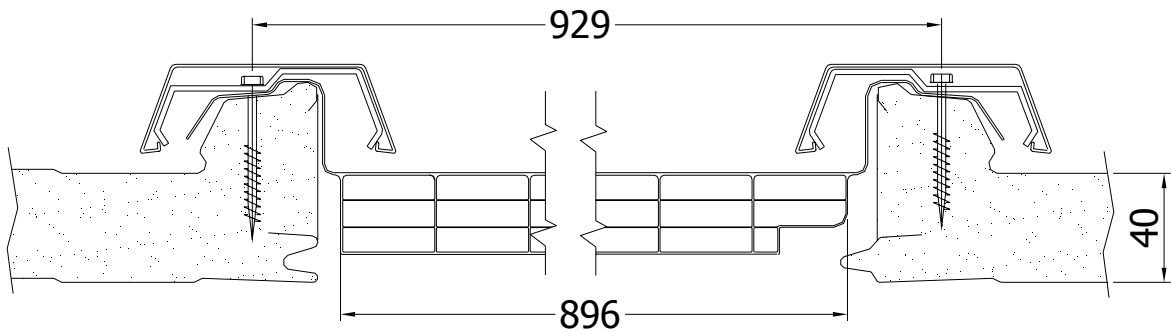
EasyRoof for Metal-Panel sandwich panels



EasyRoof for Ciensa sandwich panels



EasyRoof for Hiansa sandwich panels



EasyRoof for Assan sandwich panels