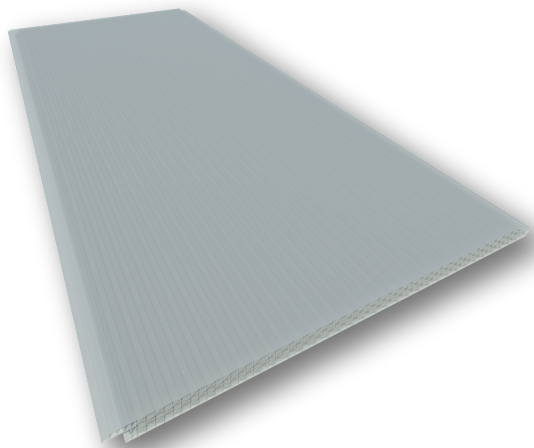


POLICLADD

LIGHTING PANEL WITHOUT FLASHING



COMPOSITION
Honeycomb polycarbonate

THICKNESSES mm (in.)

35
(1.38)

USEFUL WIDTH
1000 mm (39.37 in.)

USE
Façades



TECHNICAL SPECIFICATIONS

MAIN FEATURES POLIMER 30 ST

Characteristic	Value
Vertical cell pitch	15 mm
Horizontal walls	9
Useful sheet width	1000 mm (±5)
Heel	Yes
Standard length (l)	13,500 mm
Customized length (l)	customized (from 200m2)
Solar control (G-value)	Neutral: 66% - Opal: 62%
Light transfer	Neutral: 65% - Opal: 36%
Thermal insulation	1.05 w/m2.K
Acoustic insulation	21 dB
Expansion	0.065 mm/m °C
UV protection	coextrusion exterior face
Fire classification	B-s1-d0 (UNE-EN: 13501-1:2007)
Temperature for ordinary use	-30 +120 °C

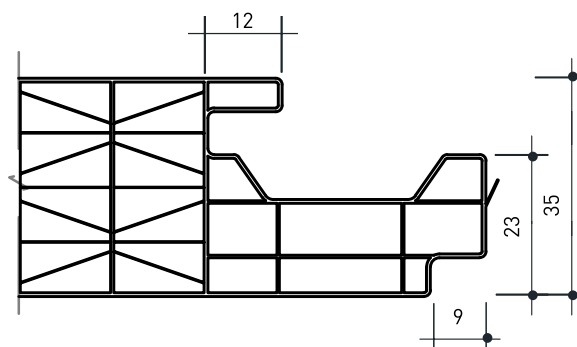
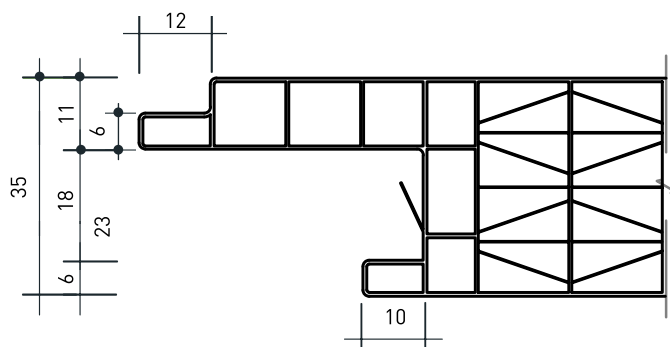
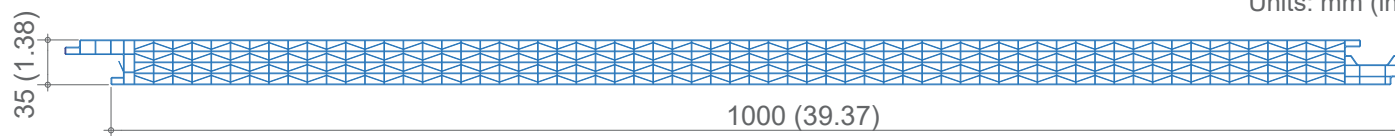
This is a honeycomb polycarbonate panel created to be installed on the façade. It can be mounted by means of the tongue-and-groove joint to our façade panel with hidden fixation or as a continuous skylight. It has a thickness of 35 mm and consists of a total of 9 walls of triangular cells (air chambers), providing the product with good thermal insulation and resistance to stress.

Due to its expansion characteristics, in order to secure the panels, holes need to be made in the securing area, with diameters of between 5 to 7 mm larger than the bolts used. In addition, a polyamide bushing system is used to avoid excessive pressure of the bolt on the polycarbonate.



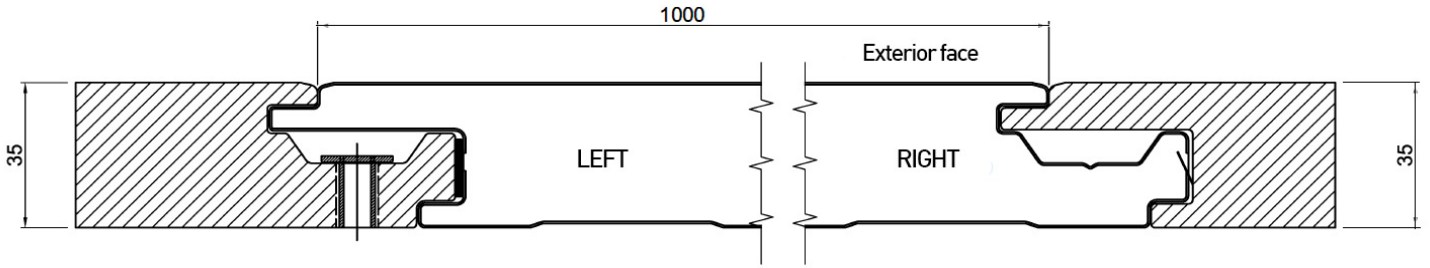
GEOMETRIC SPECIFICATIONS

Units: mm (in.)

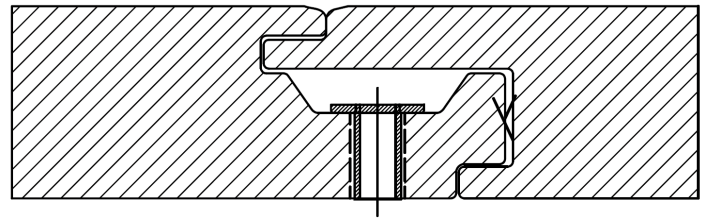
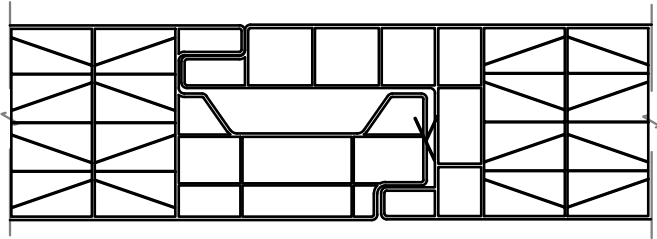


All the units of measurement indicated in this plan are for guidance and are subject to the logical production tolerances, both in length and weight.

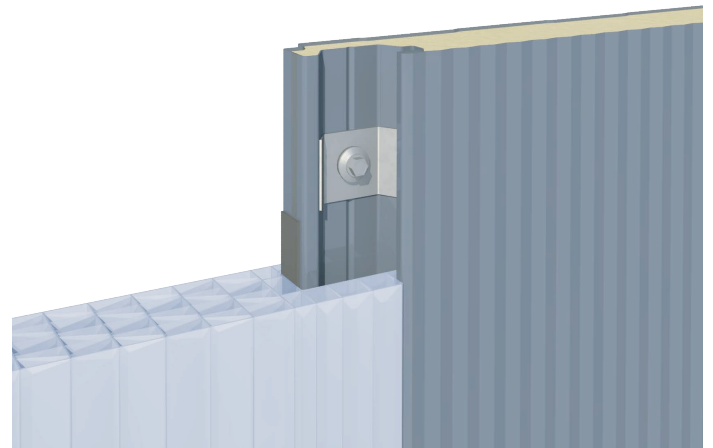
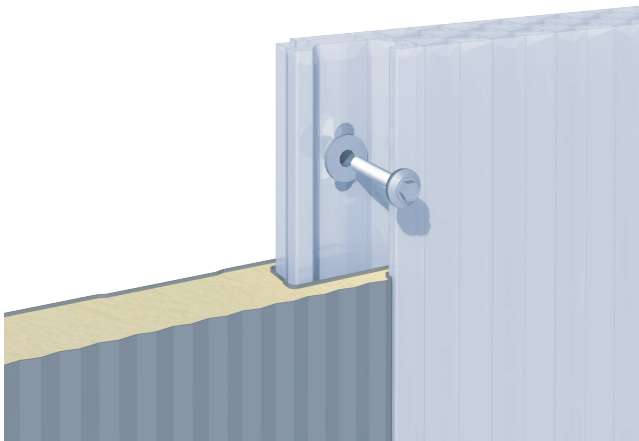
CONSTRUCTION DETAILS



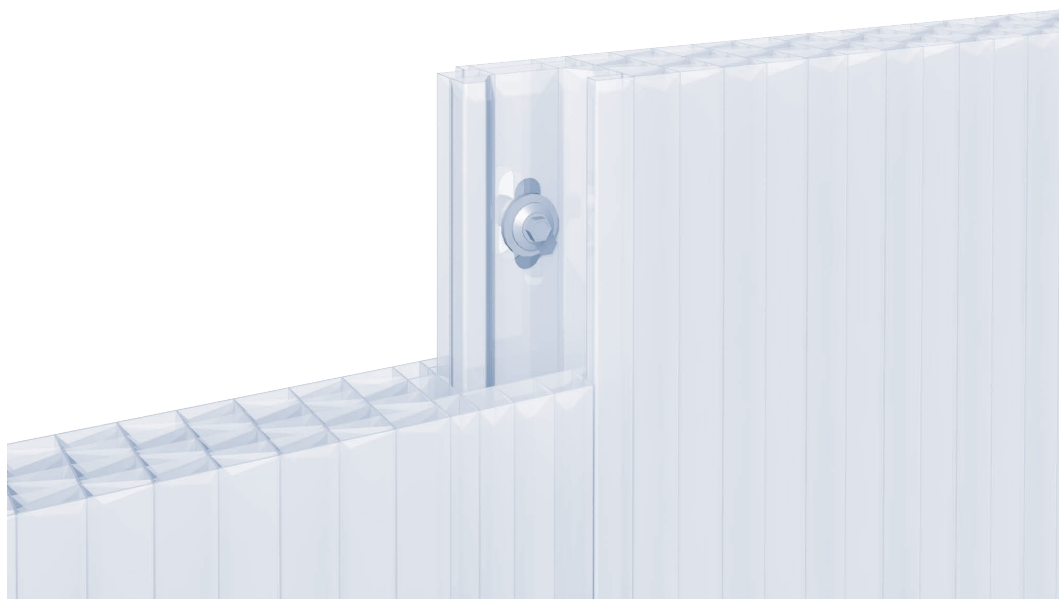
DETAIL PRESENTATION POLYCARBONATE - FAÇADE PANEL - HIDDEN FASTENING



DETAIL PRESENTATION BETWEEN POLYCARBONATE SHEETS - PA FASTENER BUSHING



DETAIL PRESENTATION BETWEEN POLYCARBONATE SHEETS - METAL PANEL



DETAIL PRESENTATION BETWEEN CONTINUOUS POLYCARBONATE SHEETS

LOAD TABLES

Table of loads (Kg/m ²) - 2 openings or more							
Span of the opening (m)	1.00	1.25	1.50	1.75	2.00	2.25	2.50
Pressure loads	877	459	270	172	117	104	93
Suction loads	89	86	82	80	78	76	75

The tables have been obtained based on the experimental results determined by an external laboratory of the Structures Group of the Continuum Mechanics Department of the University of Seville.

Maximum load values, evenly distributed in Kg/m², with a limitation of the Serviceability Limit State for deformations of L/150 for pressure loads and load-to-break values of the system for suction loads.

The designer must verify the effective loads that will act on the system, as well as the safety coefficients that must be applied taking into account the characteristics of the place and the structure in which the polycarbonate panel will be placed.

RECOMMENDATIONS FOR ASSEMBLY AND MAINTENANCE

Cellular polycarbonate panel for façade, designed for vertical mounting.

A maximum separation of 2.00 m between purlins is advised for its mounting. In any case, the maximum load values indicated in the previous point must never be exceeded.

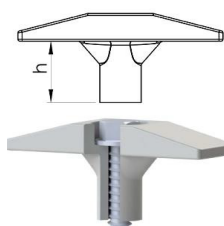
It is essential to cover the cells to prevent dust from entering the inside of the sheet. It is recommended to place aluminum tape at the ends, being closed at the top that will be covered by crowning trim, and porous at the bottom being hidden by the panel foot.

During handling for assembly, care must be taken not to drag the panel on other surfaces, not to hoist with chains or slings that may deform the overlapping tabs at the ends of the panel, and not to hit the panel to adjust the tongue and groove. All this could cause defects in the final finish of the façade. The panel can be easily cut with circular saws (with small tooth blades), mechanical or metal saws (in these cases, the sheet must be held in place to avoid vibrations).

Remnants of chips lodged in the honeycomb cells of the sheet should be properly removed.

For attaching the polycarbonate panel, a slotted hole must be made beforehand in the area where the polycarbonate panel will be attached so that when placing the PA (polyamide) bushing, it allows the free expansion of the polycarbonate panel.

The dimensions of the drill will be 10 mm wide and its length will be given by the length of the panel to be installed (see Table A).

Table A		PA bushing (polyamide)
Panel length (mm)	Slotted hole length (mm)	
←2000	10	
→ 2000; ← 4000	12	
→ 4000; ← 6000	4	
→6000	14 + 2.6 mm/m	

Once the panel has been drilled, the bushing will be placed, whose function will be to prevent the deformation of the polycarbonate panel during the tightening of the bolt, allow its displacement during expansion and act as a washer; finally, the tightening of the bolt will be carried out, which must be 5.5 mm in diameter or less.

For proper maintenance it is advisable to clean the panel regularly, applying warm water on the surface to remove dust and dirt residues. The surface should then be lathered with mild soap and hot water. It is recommended to use neutral soap that contains neither abrasives nor solvents. A sponge or cloth should be used and light pressure should be exerted, since damage can be caused to the surface of the sheet if other elements are used and heavy pressure is applied. Finally, it should be rinsed and dried with a soft cloth avoiding leaving water stains on the surface of the sheet. In case of having oil stains on the surface, they can be removed with alcohol or gasoline followed by abundant rinses with warm water and soap. The panel must be stored and protected indoors, safe from weather conditions, such as sun and rain. The sheets should be stacked horizontally. If they have different lengths, the longest ones must be placed at the bottom. The panel stacked sheet on top of sheet must be supported on polystyrene cork blocks or wooden posts.