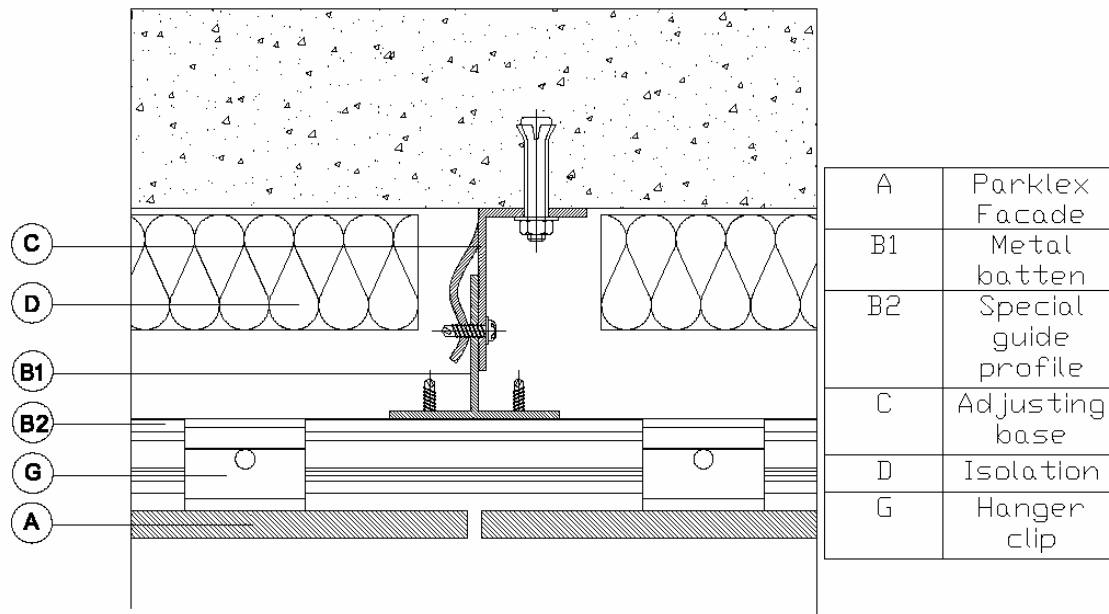


## HIDDEN FASTENING SYSTEM WITH HANGER SYSTEM

The panels may be installed in such a way that no fasteners are seen on the visible face.



### BASIC PRINCIPLES OF INSTALLATION.

#### 1. Ventilated chamber.

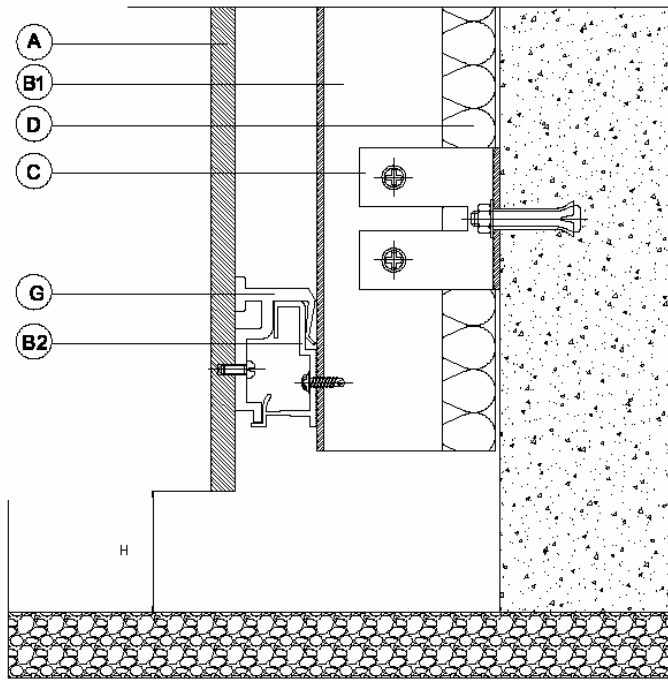
Parklex Facade panels must be installed as a ventilated façade, and therefore they must be separated from the wall face by battens, which are installed vertically, forming a chamber of at least 30 mm.

In the event that some type of insulation will be installed, a double batten structure or a single batten structure with adjustable support bases must be installed, ensuring that the chamber is maintained.

To permit air circulation in the ventilated chamber, the air intake and output must be adequately proportioned.

##### 1.1. Base ventilation

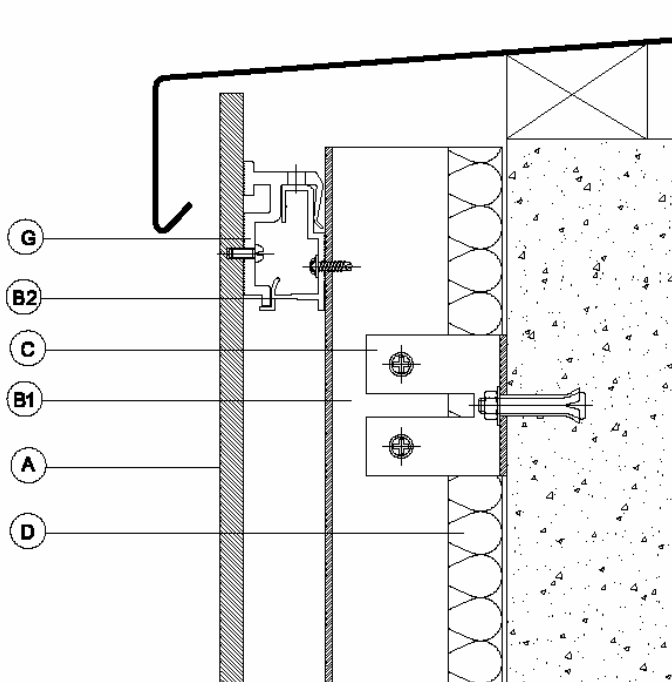
The ventilation at the base must be  $\geq 20\text{mm}$ . This ventilation space must be left whenever there is a new base, in other words, if the Facade panels are interrupted by windows or other elements.



A	Parklex Facade
B1	Metal batten
B2	Special guide profile
C	Adjusting base
D	Isolation
G	Hanger clip

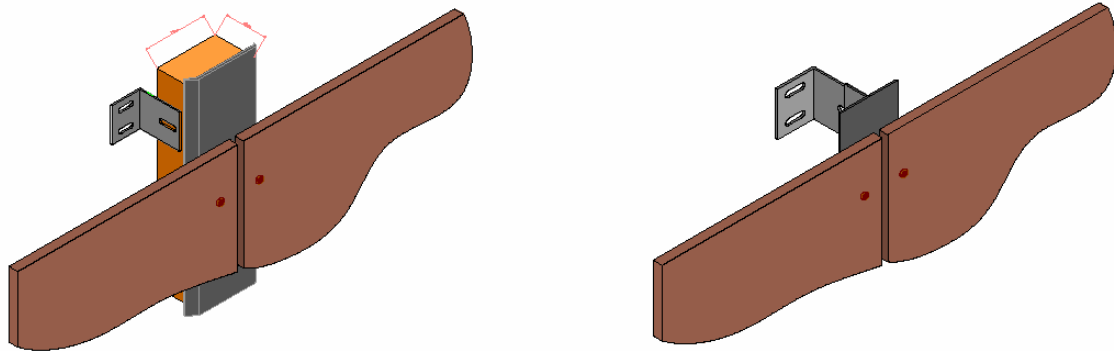
### 1.2. Crown ventilation

The ventilation at the crown must be  $\geq 20\text{mm}$ . As with the base, this ventilation space must be left whenever there is an interruption in the Facade panel face.



A	Parklex Facade
B1	Metal batten
B2	Special guide profile
C	Adjusting base
D	Isolation
G	Hanger clip





It is recommended not to seal the joints with sealant, since this may lead to an accumulation of dirt around the edges of the panels.

### **3. Panel movement**

Parklex Facade panels are made from natural wood.

Wood is a living material that undergoes dimensional changes due to changes in humidity and temperature.

Therefore, it is important for the fasteners to allow panel movement, permitting their free expansion and contraction.

### **4. Choosing panel thickness**

The panel thickness is selected according to the face being covered (walls, false ceilings and outdoor awnings).

The thickness of a panel influences the distance between the support battens; the greater the thickness, the greater the distance between the battens, although this may vary, depending on the type of installation.

The ideal thickness for external claddings is 8 or 10mm.

Thicknesses of 3 or 6mm are not recommended, except in special cases. If you wish to use these thicknesses, consult the technical department at Composites Gurea.

### **5. Substructure: wood or metal**

To facilitate air circulation behind the panels, a substructure of vertical battens must be installed.

This substructure must be proportioned according to the normal wind load for the area and in such a way that meets all stationary requirements. Likewise, keep in mind the vertical alignment of the façade, the fastening system chosen, the thickness and the dimensions of the Parklex Facade panel being installed. In addition, it must be well protected against corrosion and rotting, regardless of the material or system used.

### 5.1 Type of batten

- Wood substructure:

If the substructure is built with wood battens, they must be treated. It is recommended to install PVC joints or closed-cell polyethylene foam over the panel support surfaces, as these protect, improve and extend their service life. This type of substructure may be used in dry areas without frequent rains.

- Metal substructure:

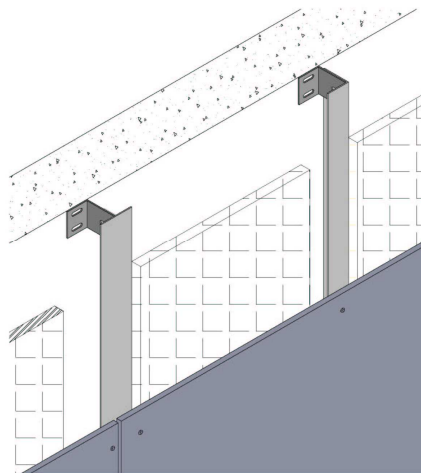
If located in rainy or humid areas, we can use metal battens made from galvanized steel or aluminium.

- Metal substructures in areas near the sea:

- In areas that suffer obvious effects from the sea, stainless steel profiles must be used, or those made from appropriate anodized aluminium.

### 5.2 Vertical alignment

Façades frequently have significant slopes. In these cases, the use of profiles with bases that allow for the adjustment of the vertical alignment is recommended.



## 6. Three support points

Parklex Facade panels must be supported by at least three points of support.

The distances between support points depend on the type of fasteners and the thickness of the material. The instructions regarding distances that come with the various fastener systems may be followed, as long as there are at least three points of support in each direction.

## 7. Installation using a tongue-and-groove system

Panel installation using a tongue-and-groove system is not allowed, as this type of system uses screws with counter-sunk heads. These screws do not allow free panel movement, which is why they are not appropriate for installing Parklex Facade panels.

## FASTENERS

### Distance between vertical battens:

In this type of installation, there is a primary substructure of vertical battens that create the necessary air chamber.

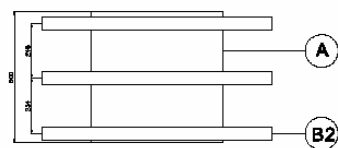
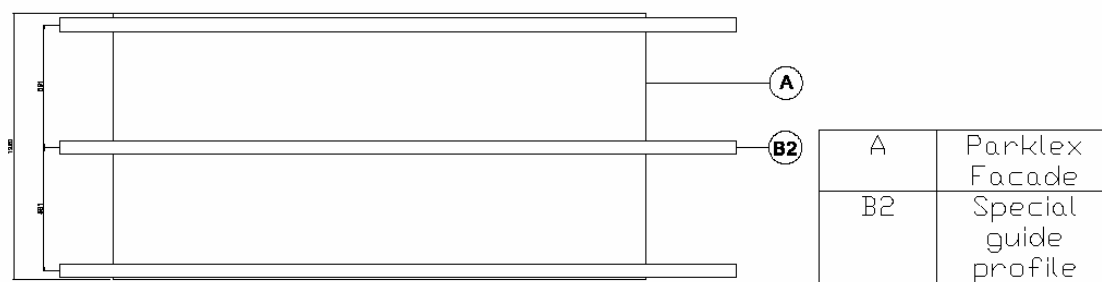
The distances between the vertical battens may be increased over those used with screw fastening systems.

Thickness	Distance
10 mm.	800 mm.
12 mm.	1000 mm.

### Distances between horizontal guide battens:

Over the vertical battens, special guide profiles are installed horizontally, screwed using proper screws.

The distance between these horizontal battens must be  $\leq 600$ mm, and there must always be at least three horizontal battens for each panel.



### Fastening with hanger clips:

Hanger clips are screwed onto the back of the panel using stainless steel milling screws ( $\varnothing 6$  and 11.5mm in length). These clips have an M8 metric hole machined into them, which is used to adjust the height (using a bolt) or to lock them in place.

To fasten the milling screws to the panel, first drill a hole with a 5mm diameter, which is a bit smaller than the diameter of the screw. This way, as it is screwed in, the edges of the screw

carve the thread. In addition, the previously-drilled hole must be deeper than the length of the screw in order to allow for the accumulation of the shavings created when it is inserted.

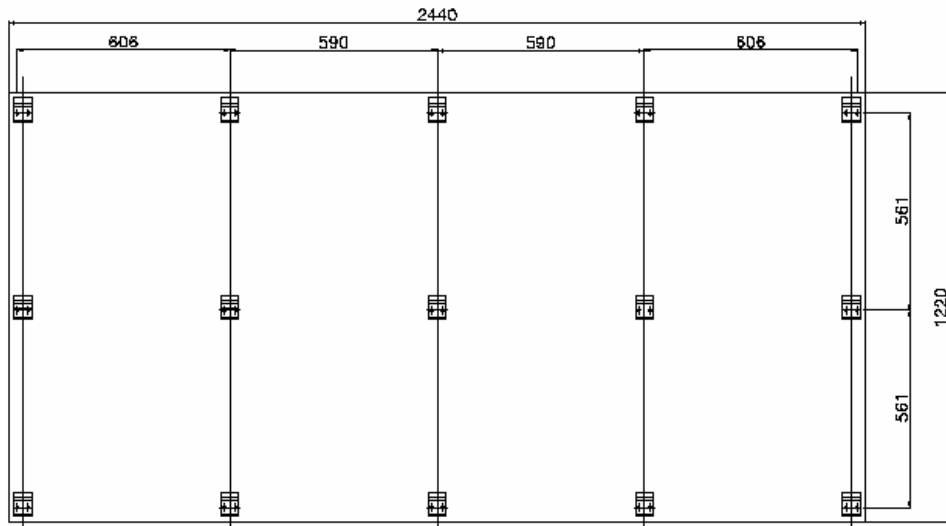
The distances between the clip fastening points are:

For thicknesses of 10mm  $\leq 600\text{mm}$

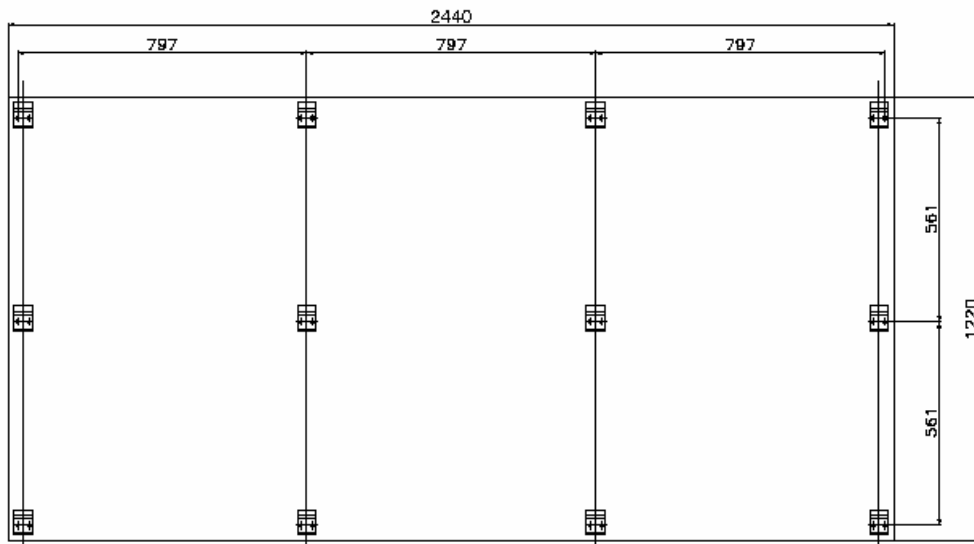
For thicknesses of 12mm  $\leq 800\text{mm}$

**\*There must always be at least 3 clips in each direction.**

## PARKLEX FACADE 10mm

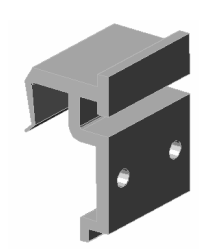


## PARKLEX FACADE 12mm

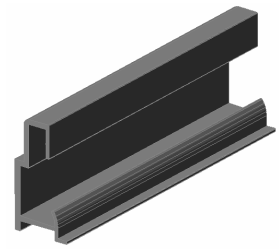


Keep in mind the importance of a good layout.

Parklex sells the special hanger profiles, as well as the clips, the milling screws and the height adjustment screws.



Hanger clip



Horizontal hanging guide