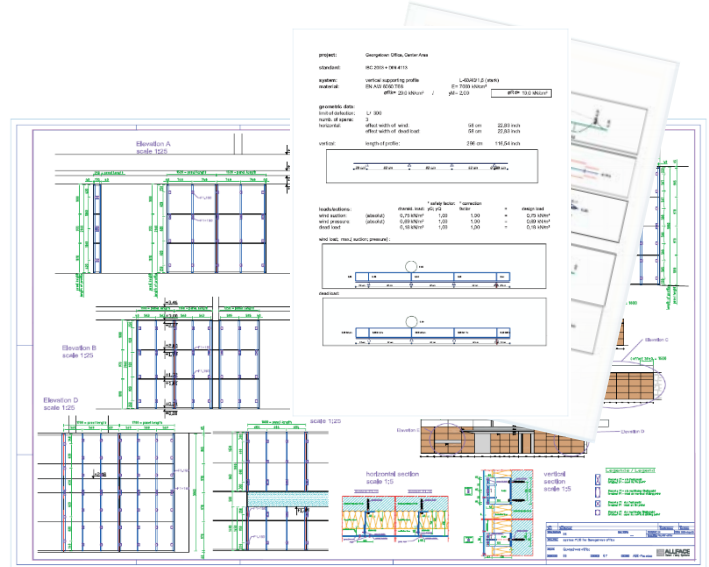


# Installation guide F1

To ensure correct bracket spacing, size and correct fixings, a Project-Info must be completed and send to Allface for calculations.



The project calculations based on the Project-Info you submit will determine the layout of the F1. and/or F1+ brackets. F1. & F1+ brackets achieve a 35 - 255mm standoff as standard, other sizes are possible and made bespoke. Other sizes can be ordered after consultation as F10 console.

The F1 bracket allows larger mounting distances due to its design. This has a positive effect on the price per m<sup>2</sup>.

F1 brackets reference	Potential standoff
F1./F1+035	51 <sup>*)</sup> - 80mm
F1./F1+050	57 <sup>*)</sup> - 95mm
F1./F1+080	87 - 125mm
F1./F1+100	107 - 145mm
F1./F1+115	122 - 160mm
F1./F1+135	142 - 180mm
F1./F1+150	157 - 195mm
F1./F1+170	177 - 215mm
F1./F1+185	192 - 230mm
F1./F1+200	207 - 245mm
F1./F1+220	227 - 265mm
F1./F1+255	262 - 300mm

**Other bespoke sizes also available**

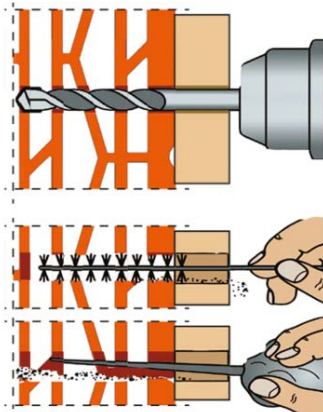
<sup>\*)</sup> These distances can only be obtained by using profiles with shorter flange length.

Based on the static calculation, the maximum mounting distances of the brackets are plotted in the assembly drawings, which are based on the information from the project info list previously obtained. If values are marked in red in the project info list or in the static calculation, these values have been adopted and must be checked by the installer / customer before installation. Failure to verify these values may affect your warranty to the builder.

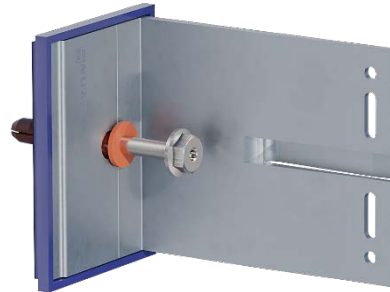
General rules of installation:

- Spans, vertical centres & cantilever must never be greater than those in the static calculations or on the assembly drawings.
- A cantilever must never be more than the static calculations specify or 50% of the span it is adjacent, whichever is smaller.
- Rails must always be installed vertically.
- All fixings must be stainless steel and as specified in the static calculations.

## When fixing on masonry or concrete substrates



When anchoring F1 brackets to masonry or concrete, a dowel extension test is recommended to check the load bearing capacity of the masonry. All holes must be thoroughly cleaned and free of dust / dirt before using the anchoring dowels.



When attaching F1 brackets in masonry or concrete, make sure that the anchoring of the anchor always takes place through all existing slots (F1+). Furthermore, make sure that the plastic frame of the anchoring plug is inserted through the bracket.

## When fixing to steel or timber substrates



When anchoring F1 consoles on steel or wooden surfaces, make sure that the number of anchoring screws equals the number of fixing holes per bracket. The anchoring must be done in all 6.5mm slots of the console.

When mounting in wood, always make sure that a pull-out test is performed to confirm the strength of the substrate.

Always ensure that the brackets are fastened through all cladding panels in a load-bearing steel or wooden post. It is not possible to attach consoles to cement boards, OSB or other thin boards. Thicker cladding panels such as 18 or 25 mm plywood panels are acceptable with suitable screws, provided they are considered viable and are calculated accordingly.

## Fixed or sliding point brackets?

Each individual support profile will usually have only one fixed point bracket and the rest will be sliding to allow an expansion of the support profile. Consult the static calculation or assembly drawings for the positions of the fixed and sliding points in each support profile length range.



### Fixed point bracket

The connecting screws for the support profile attachment are screwed into the round holes to carry the vertical weight of the rail and the facade cladding as well as the wind load.

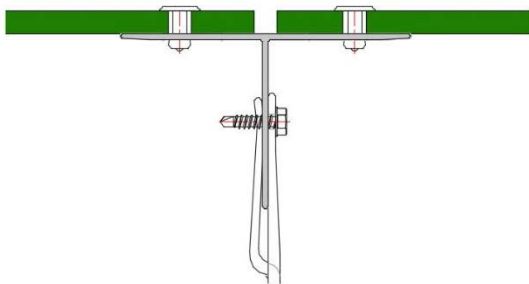


### Sliding point bracket

The connecting screws for the support profile attachment are screwed into the middle of the elongated holes, so that the support profiles can expand and contract. The consoles only absorb the wind load.

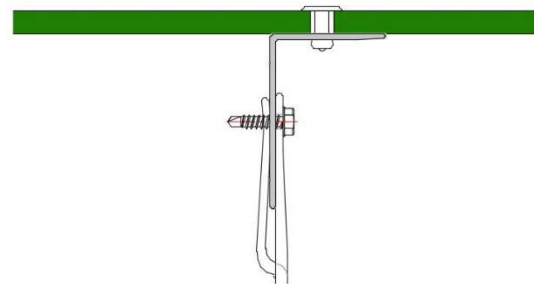
## T-profile & L-profile

PROFILES MUST ALWAYS BE MOUNTED VERTICALLY!



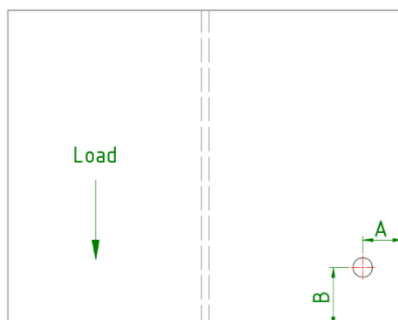
### T-profile

Where vertical joints occur within the cladding façade a T-profile should be inserted into the F1 bracket.



### L-profile

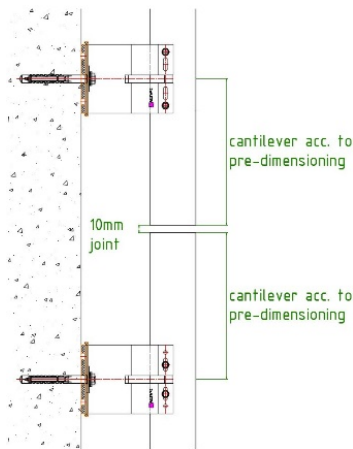
Where intermediate panel support is required, insert an L-profile into the F1 bracket.



### Fixing to profile face

When fixing to the support profile faces, always ensure that you have at least 2x the thickness of the fixing (or 10mm, whichever is greater) between the fixing centrepont and the leg or the edge of the profile (dim A). Furthermore, there must be at least 3x the thickness (or 15mm, whichever is greater) between the fixing centrepont and the bottom of the profile (dim B).

## Cantilever & profile joining



### Cantilever

When you receive the distances between the F1 brackets on the static calculation or assembly drawings, it dictates how much profile can sail past the bracket unsupported.

There **MUST ALWAYS** be a gap of at least 10mm between the profiles in a butt joint. The facade cladding **MUST NEVER** extend over a profile joint. Support profiles **SHOULD NEVER** span over the buildings movement joints unless specially engineered to do so.



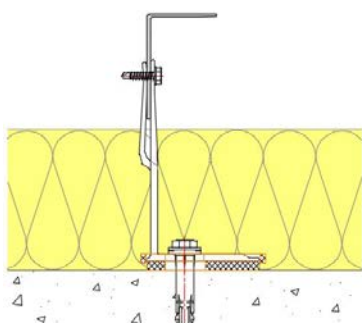
### Profile joining

If you wish to join profiles to use off cuts this is possible under the following conditions:

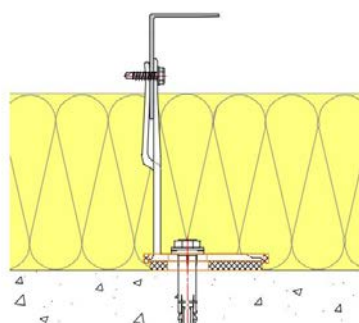
- Use a 200mm connector of the L-profile
- Use 8 connecting screws, 4 on each side
- All screws must be at least 15 mm from any profile edge
- There must be at least two brackets on each side of the profile joining
- Max. Length of the finished profile strand

## Insulation with framing systems

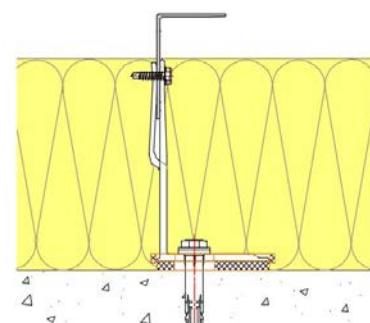
It is ideal if the airgap between the insulation and the face of the profiles is greater than 60 mm. This means that the profiles will not interfere with the insulation. If the airgap is smaller than 60 mm then the profiles have to be cut into the insulation. It is up to the installer to check if this affects to the u-value of the wall structure.



The insulation does not interfere with the profiles or brackets.



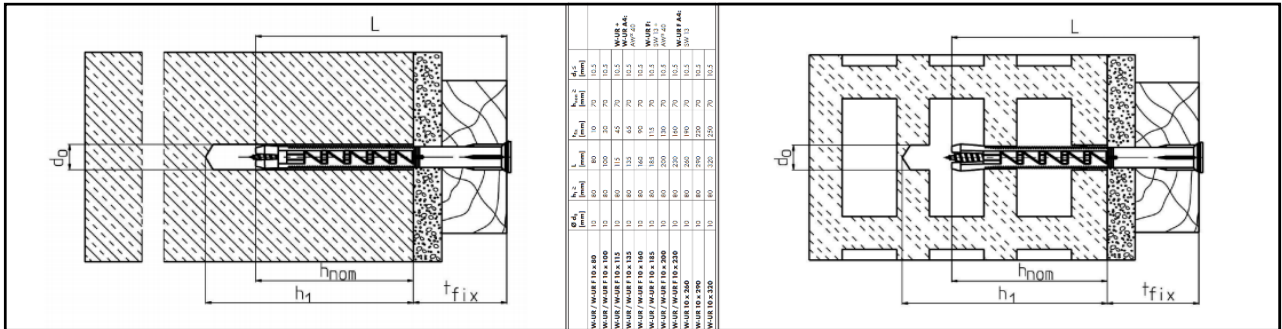
The insulation will have to be cut to allow the leg of the support profile be mounted in the bracket. But this will not affect the fixing of the profile to the bracket.



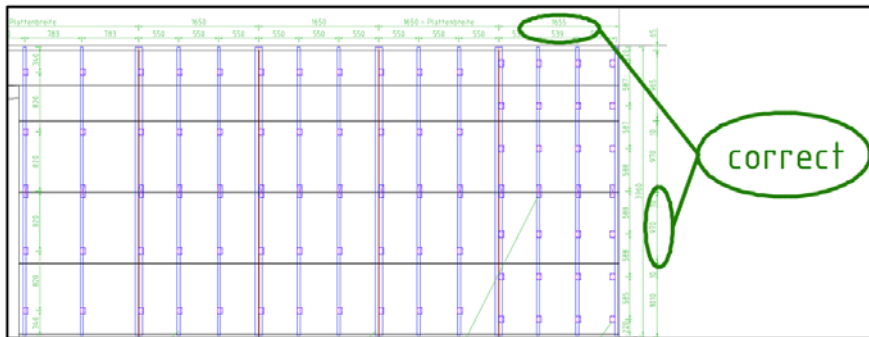
Because the fixing of the support profiles with the bracket lies in the insulation, this should be introduced only after installation of the substructure.

## Construction site log

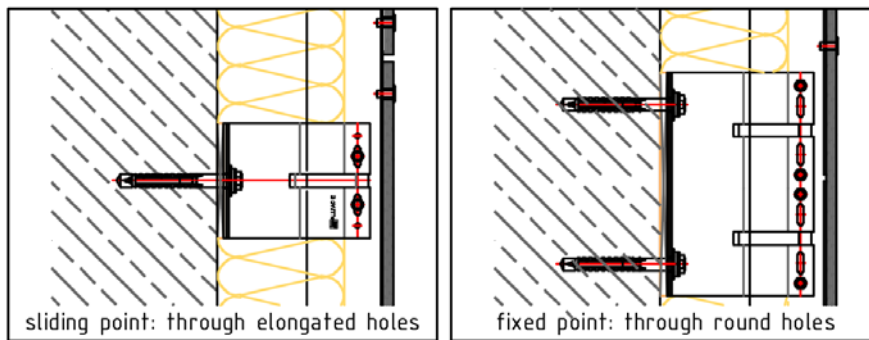
- mounting the bracket to the ground is done correctly



- bracket distance done correctly



- sliding point / fixed point done correctly



- profile joint done correctly

