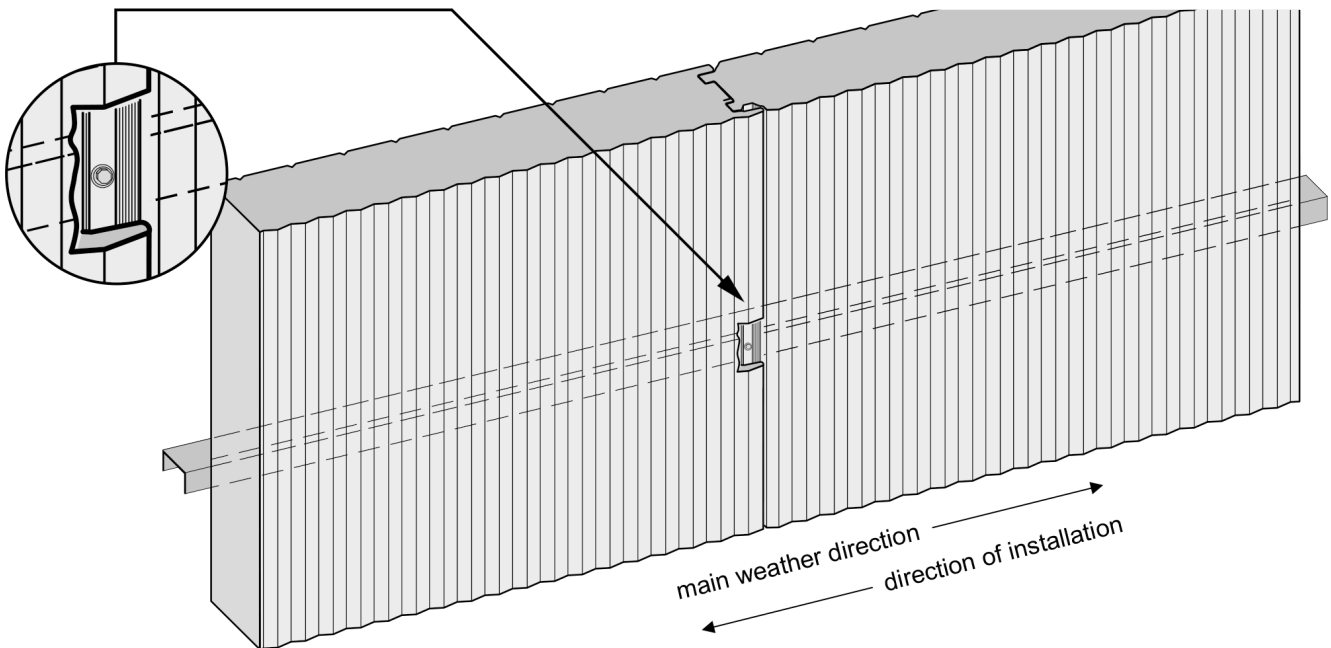
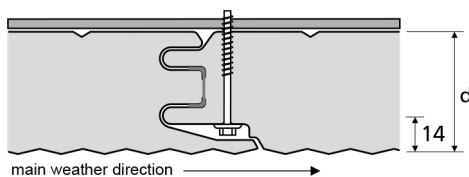


Wall panel type Superwall ML

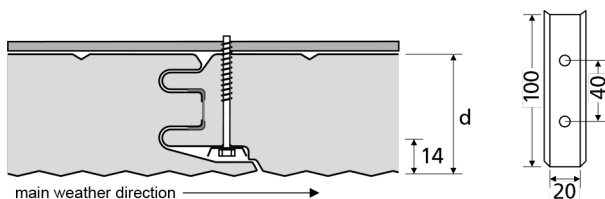
Vertical installation/fixing



1 hidden fixing



1a hidden fixing with ML-saddle cap



Installation

Superwall ML must be installed against the main weather direction. Each follow-up panel is slid in the longitudinal joint of the previous panel. The panels must be pressed on.

Fixing

Fixing can be performed visibly or hidden through the available groove in the longitudinal joint. The number of fasteners necessary is determined by the statics, the approval Z-14.4-407 for fasteners and the guidelines of DIN 1055, wind suction load. A static engineer must determine how many screws are needed for the surface, the corners and edge areas. If installed with hidden fixing, the support construction is to be aligned according to the necessary wind suction embedment. At the edges additional support construction may be necessary against higher wind suction.

Fasteners

Only approved stainless steel screws (material 1.4301) with EPDM-washers are to be used for the fixing. Here, you can choose between thread-forming and self-drilling screws. The following table shows the measurements for thread-forming screws for different panel thicknesses.

Hidden fixing

Panel thickness d (mm)	Panel thickness in joint area (mm)	Steel support Ø 6,3 mm	Wooden support Ø 6,5 mm
60	46	≥ 60	≥ 105
80	66	≥ 80	≥ 125
100	86	≥ 100	≥ 145

Visible fixing

Panel thickness d (mm)	Steel support Ø 6,3 mm	Wooden support Ø 6,5 mm
60	≥ 80	≥ 120
80	≥ 100	≥ 140
100	≥ 120	≥ 160

The necessary lengths of screws differ between suppliers.

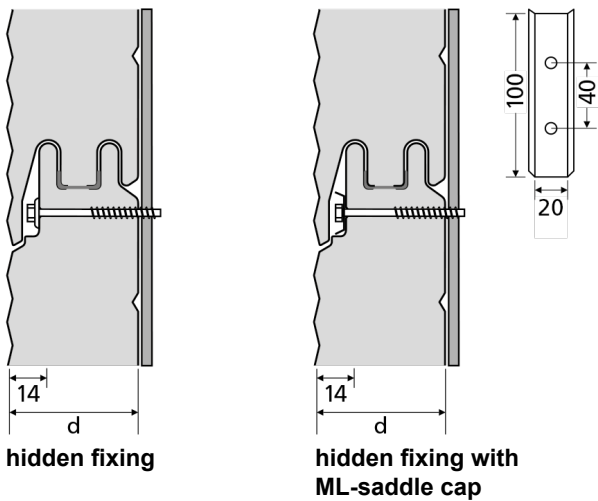
*) According to DIN 1052, when having a wooden subconstruction, pilot drilling is mandatory. Hole diameter = 0,7 x screw diameter.

The thickness of the steel subconstruction must at least be $t \geq 1,5$ mm while the hole depth in coniferous wood must be at least 50 mm. For further information and minimal steel thicknesses for certain screw types, have a look at the approval for screws Z-14.4-407 of the IFBS and at the details given by the screw suppliers.

Wall Panel Type Superwall ML

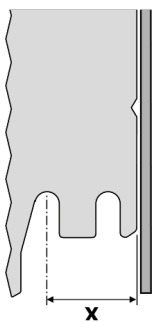
Horizontal installation

Fixing



hidden fixing

hidden fixing with
ML-saddle cap



Due to tolerances of the panel thicknesses, the fitting of the bottom profile (support profile) is to be checked on site to prevent possible tensile effects.

$$x = d - 16 \text{ mm} \pm 2 \text{ mm}$$

Installation

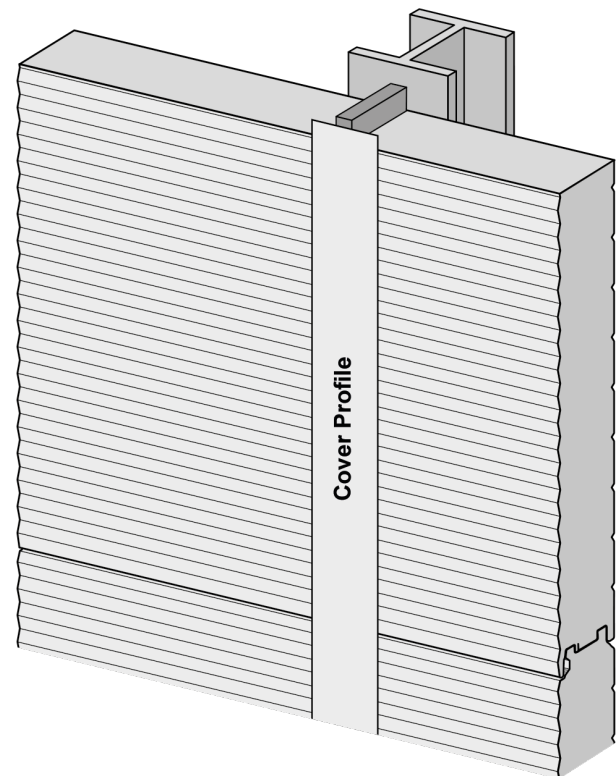
In order to achieve a clean and even flight of profiling when installing horizontally, we recommend doing it row per row and to perform control measurements from time to time.

Between the supports all longitudinal sides of the upper wall edges as well as window strips, etc...are to be fixed with screws to prevent possible deflection due to thermal or wind-suction forces.

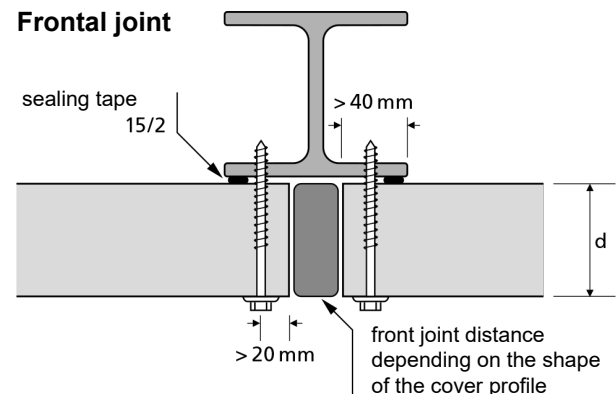
All connections are to be assembled rain- and windproof with the appropriate sealing material (see drawings). There are various creative possibilities for the vertical joints using pilaster strips.

If the wall panels project over the roof area (flat roof), the support construction needs to be applied up to the upper edge of the attica. A thermal bridge can only be prevented if insulation is applied to the backside of the support construction of this attica. This may also serve as connecting joint for the whole roof insulation.

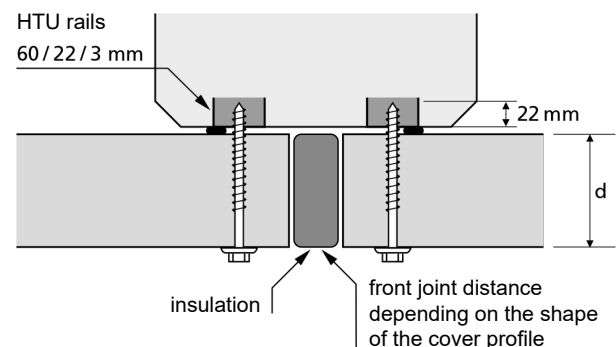
Please always check if additional support construction may be necessary due to higher wind loads in the attica area.



Frontal joint



If the panels shall be fixed onto concrete pillars with plane-inserted HTU-rails the length of the screws must be checked thoroughly.



For more details on fixing and possible fasteners please stick to our installation manual page 6.1.1 (vertical installation).

Wall panel type Superwall ML

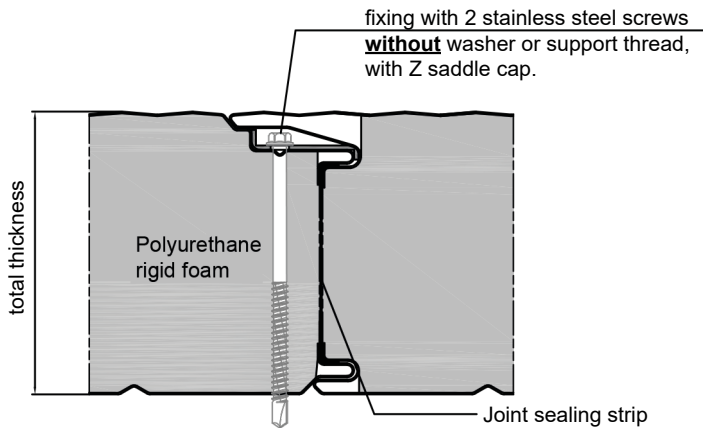
Hidden fixing

The number and type of the necessary screws depends on the statics. According to approval Z-10.49-516, there are different fixing systems with different tensile forces for hidden fixtures. Only use stainless steel screws according to approval Z-10.4-407*. We recommend using pressing tool for the installation.

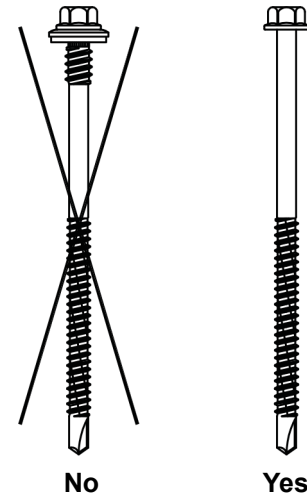
Please note the following directions:

Fastening Systems:

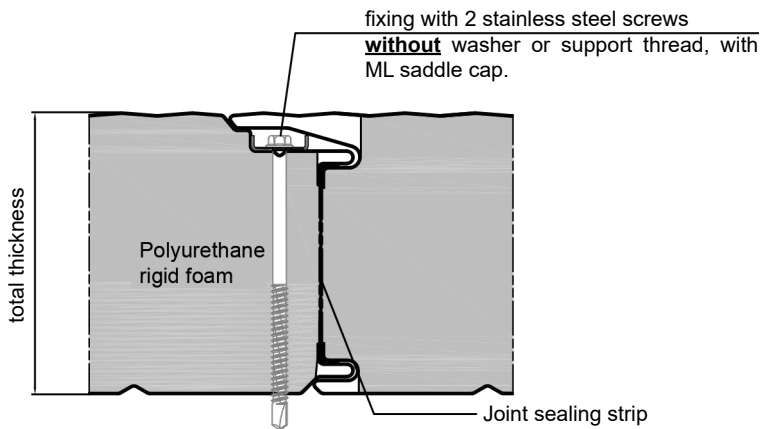
A: Details longitudinal joint with Z saddle cap (L=180 mm)



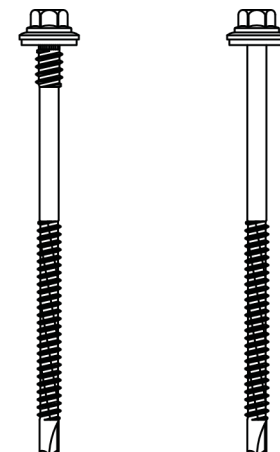
When using a saddle cap, **do not use** a sealing washer or a support thread.



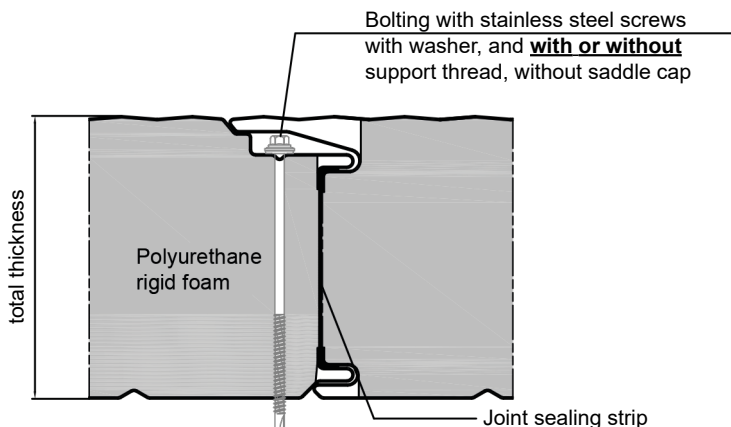
B: Details longitudinal joint with ML saddle cap (L=100 mm)



When not using a saddle cap **with** sealing washer



C: Details longitudinal joint without saddle cap



*) You can choose between thread-forming and self-drilling screws.