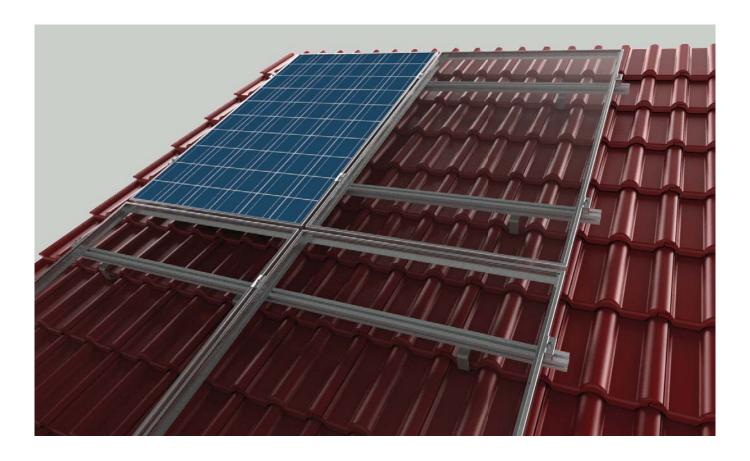


# **MODULE CLAMPING**

You must always follow the installation instructions of the module manufacturers.



The ALTEC mid- and end clamps must be used with all ALTEC mounting systems for module clipping; they are compatible with all ALTEC profiles.

The clamps can be used for module frame heights from 30 to 46 mm.

If the required tightening torque is applied, you can complete installation without further slip protection (optional: slip protection with a screw in the module frame).

**Tightening torque:** 

M6 = 9 Nm

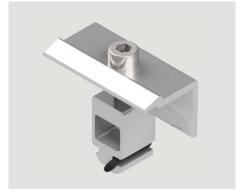
M8 = 15 Nm



## **OVERVIEW OF INDIVIDUAL PARTS**



Universal mid-clamp with cylinder head screw M8 (module spacing: 20 mm)



Universal end-clamp with cylinder head screw M8



Clamping plate with hexagon screw M6 (module spacing: 7 mm)



End-clamp with hexagon screw M6

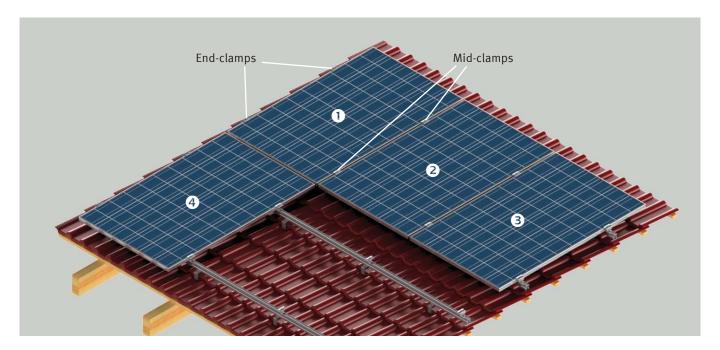


Slip protection cylinder head screw (optional)

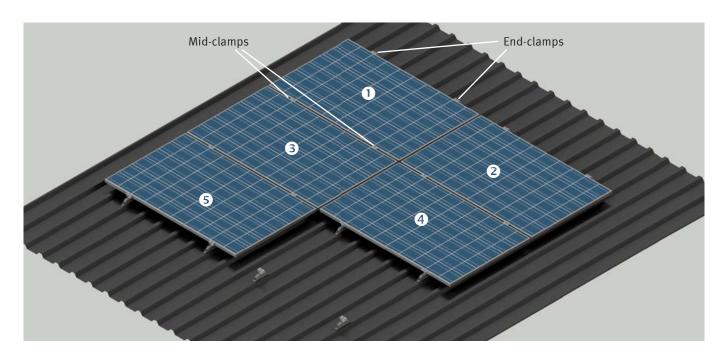


## GENERAL NOTES ON INSTALLATION

Install from top to bottom. Align the first module as accurately as possible. Inaccuracies can lead to significant variation at the end of the array.



Vertical module installation

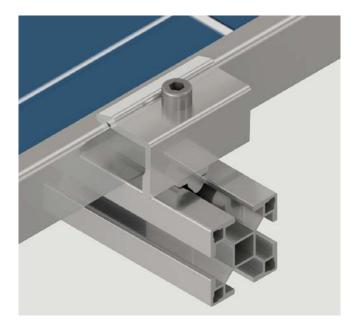


Horizontal module installation

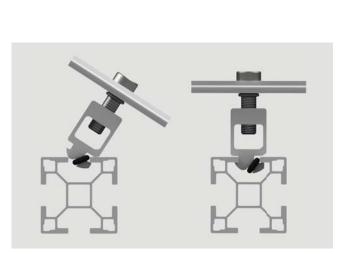


#### INSTALLATION OF UNIVERSAL MID- AND END-CLAMPS

The universal clamps can be clicked into place before the module is installed, because they stay in place on their own. The clamps are finally aligned and secured during module installation.



Universal end-clamp



Module Spacing:

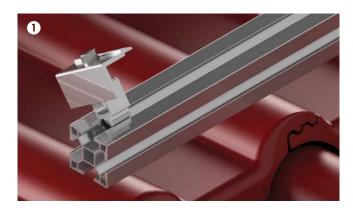
Universal mid-clamp

Place the clamp with rubber on the profile groove and screw it in until you hear a click. Make sure that the clamp fits into place exactly.

The rubber is only designed to aid installation (place-holder). After tightening, the rubber has no further function.



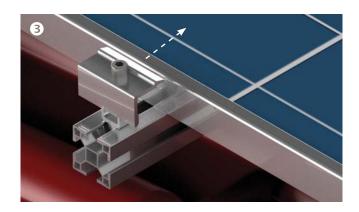
#### INSTALLATION OF UNIVERSAL MID- AND END-CLAMPS



Clicking in the end-clamp

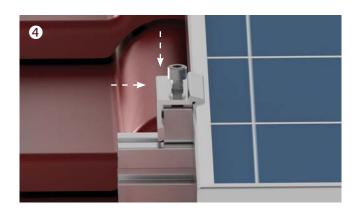


Clicking in the mid-clamp



Place the first module of the module row in place and adjust it to the correct position. Align the module exactly on the rail, then push the end-clamp up to the module.

Rail projects beyond the module by: 40-60 mm



Press the end-clamp against the module frame; there must be no gap between the slot nut and the end-clamp. Push the end-clamp down and tighten the screw slowly and in a controlled manner.

Make sure that the clamp does not twist and that the module does not slip.

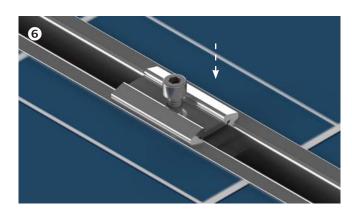
**Tightening torque: 15 Nm** 



## INSTALLATION OF UNIVERSAL MID- AND END-CLAMPS



Slide the mid-clamp onto the module, then put the next module in position on the rail and align.



For both modules, the distance to the mid-clamp must not be greater than 1 mm. Press the clamp down and tighten the screw slowly and in a controlled manner.

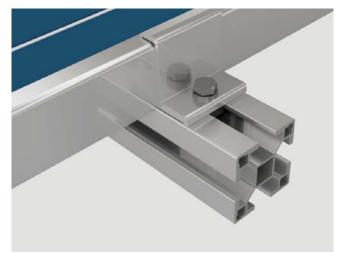
Place another end-clamp at the end of the module row.

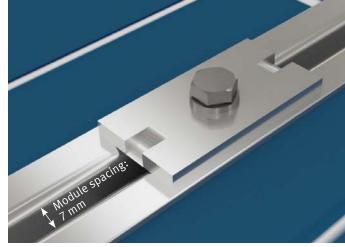
Tightening torque: 15 Nm



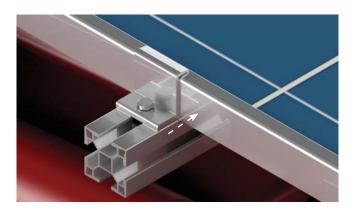
#### INSTALLATION OF CLAMPING PLATE AND END-CLAMP

The Clamps cannot be clicked into place before the module is installed, as they do not stay in place on their own.



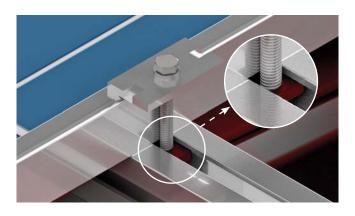


End-clamp



Clamping plate

Place the module on the rails and align. Hook in one end-clamp per rail and slide it onto the module. The gap between module and clamp must not be greater than 1 mm. Tighten the screw slightly and make sure that the threaded plate turns 90°. The threaded plate is stuck to the screw with screwlock; when screwing, the threaded plate comes loose.



Then put the next module in position and align it; then mount the clamping plate and make sure that the threaded plate is properly seated here as well.

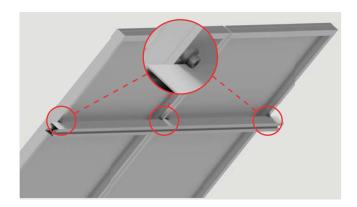
Tightening torque: 9 Nm



## SLIP PROTECTION (OPTIONAL FOR THE BOTTOM ROW OF MODULES)



For the bottom row of modules, screw a cylinder head screw into the installation holes of the modules on the back of the module.



Hook in the module above the rail with the cylinder head screw so that the module can no longer slip off.

