

Mounting instructions

Magic PV Field PV mounting systems

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1 About these instructions

1.1 Target group



These instructions are intended for specialists and/or instructed technical personnel (e.g. roofers, solar panel installers, engineers, architects, construction managers, mounting engineers, installation engineers), who have been trained in the mounting of photovoltaic systems and have been charged with the mounting of PV mounting systems.

Only have electrical work, such as the connection and earthing of the systems, carried out by specialist personnel with electrical training.

1.2 Relevance of these instructions

These instructions are based on the standards valid at the time of compilation (January 2025).

Please read the instructions carefully before commencing mounting. We will not accept any warranty claims for damage and liability caused through non-observance of these instructions.

Any images are intended merely as examples. Mounting results may look different.

In these instructions, cables and lines are referred to simply as cables.

1.3 Types of warning information



Type of risk!

Shows a risky situation. If the warning information is not observed, then serious or fatal injuries may occur.



Type of risk!

Shows a risky situation. If the safety instruction is not observed, then damage to the product or the surroundings may occur.

Note!

Indicates important information or assistance.

1.4 Basic standards and regulations

- EN 62305 (VDE 0185-305)
- DIN VDE 0100-712
- EN 61643-32

1.5 Applicable documents

- The declarations of conformity are linked to the products at www.obo-bettermann.com.

2 Intended use

The photovoltaic mounting systems Magic PV Field for free-standing applications are used for the mounting of photovoltaic modules with a height of 30–50 mm in outdoor areas/terrains with a solid substrate such as concrete or earth. The terrain slope must not exceed 4° lengthwise and 3° crosswise. Lengthwise slopes exceeding 3° can be compensated for with a terraced terrain structure. The systems are suitable for accepting modules with widths of 990–1,160, 1,090–1,140 and 1,300–1,310 mm and lengths of 1,600–2,400 mm. The modules can be mounted in an east-west configuration with an angle of inclination of 10° or in a southerly direction with an angle of inclination of 25° or 30°. The PV mounting systems are mounted in “strings” with specified dimensions, depending on the module size. Module widths of 990 to 1,070 mm are mounted in a string with 2x 11 PV modules. Larger module widths are mounted in a string with 2x 9 PV modules. There must be a minimum spacing of 100 mm between two strings. The mounting systems are not designed to be mounted on rocky substrates, in bodies of water or on roofs.

The mounting systems are not designed for any purpose other than the one described here. If the photovoltaic mounting systems are used for another purpose, any liability, warranty or damage claims shall be rendered null and void.

3 Safety

3.1 General safety information

Observe the following general safety information:

- Before commencing mounting, ensure that the soil conditions are suitable for accepting pile profiles or for pouring concrete foundations (pile driving test and/or geotechnical survey).
- Mounting must be carried out by at least two people.
- Contact with electrical current can lead to an electric shock. Electrical work may only be performed by qualified specialists.
- Personal protective equipment must be worn.

3.2 Personal protective equipment

List of personal protective equipment to be used:



Use hand protection



Wear safety shoes



Wear eye protection



Wear hearing protection

4 Necessary tools

List of tools to be used:

- Impact ram (motorised)/pile driver (for pile profiles)
- Hammer drill (for concrete foundation stands)
- Folding ruler
- Spirit level
- Battery-operated screwdriver (Inbus size 6)
- Torque spanner (WAF 6, 17, 18, 19, Inbus size 6)
- Screwdriver (Inbus size 6)
- Aid or device for aligning and placing the stands/pile profiles (e.g. plumb line, laser)

5 System overview

The Magic PV Field photovoltaic mounting systems (PV mounting systems) consist of pre-mounted supports that are mounted on stands or pile profiles and stabilised with perforated strips. Truss profiles are fastened to the supports with cross connectors. End and intermediate clamps are used to fasten the PV modules on the truss profiles.

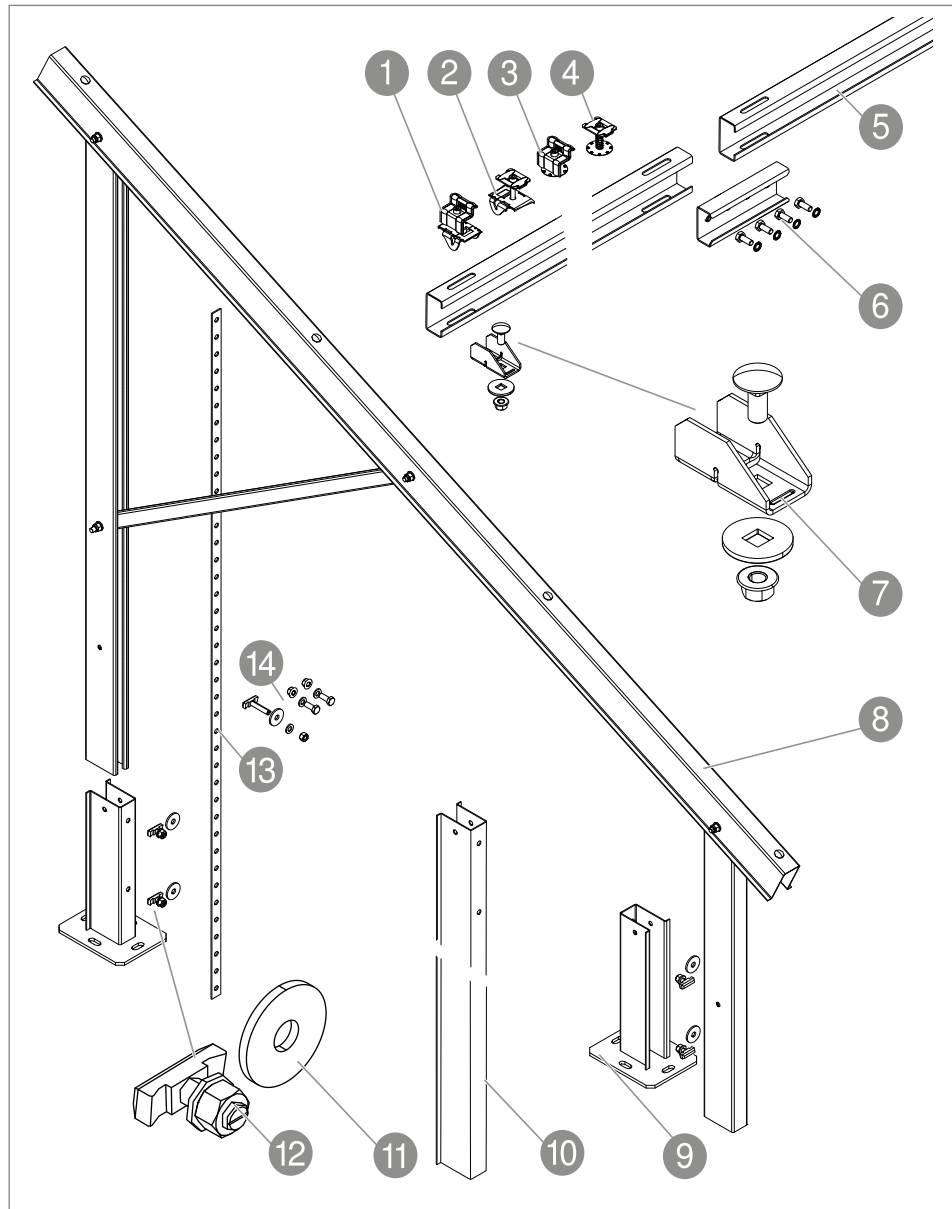


Fig. 1: System overview

	Designation	Type	Function
①	End clamp	KLE 20/25/30/ 35/40/45/50 A2	Fastening of PV modules on truss profiles
②	Intermediate clamp	KLZ 2030 A2	Fastening of PV modules on truss profiles
		KLZ 3040 A2	
		KLZ 5060 A2	
③	End clamp with spring	KLE F 25 A2 KLE F 30 A2 KLE F 35 A2 KLE F 40 A2	Fastening of PV modules on truss profiles, suitable for high-load zones
④	Intermediate clamp with spring	KLZ F 25 A2 KLZ F 30 A2 KLZ F 35 A2 KLZ F 40 A2	Fastening of PV modules on truss profiles, suitable for high-load zones
⑤	Truss profile	TP 1000–1310 FT	Support and mounting rail for PV modules
⑥	Straight connector with fastening material	LV FT	Straight connection of truss profiles
⑦	Cross connector with fastening material	KV FT	Fastening of truss profile to pre-mounted support for fastening truss profile to pre-mounted support
⑧	Pre-mounted support	VT 10/25/30 S FT	Subconstruction for PV system, support for truss profiles
		VT 10/25/30 M FT	
		VT 10/25/30 L FT	
⑨	Stand for concrete foundation	SF 400 FT	For mounting on concrete foundation, to accept pre-mounted support
⑩	Pile profile	RP 1800 FT	For driving into the substrate, to accept pre-mounted support
		PR 2300 FT	
⑪	Large washer	DIN440 14 F	Complements hook-head screw MS50HB to fasten pre-mounted support to stand or pile profile
⑫	Hook-head screw with washer and nut	MS50HB M12x30 A4	To fasten pre-mounted support to stand or pile profile
		MS50HB M12x60 A4	
⑬	Perforated strip	LB FT	Stabilising cross-connection of the rear supports of the pre-mounted support
⑭	Screw set for perforated strip	SVLB	To fasten the perforated strip

Tab. 1: System components

Accessories

Designation	Type	Function
Zinc repair spray	ZSF	For re-treating and touching up unprotected and damaged spots on hot-dip galvanised components, for corrosion protection

Tab. 2: Accessories

5.1 Overview of pre-mounted supports

The size and number of pre-mounted supports depends on the planned PV system.

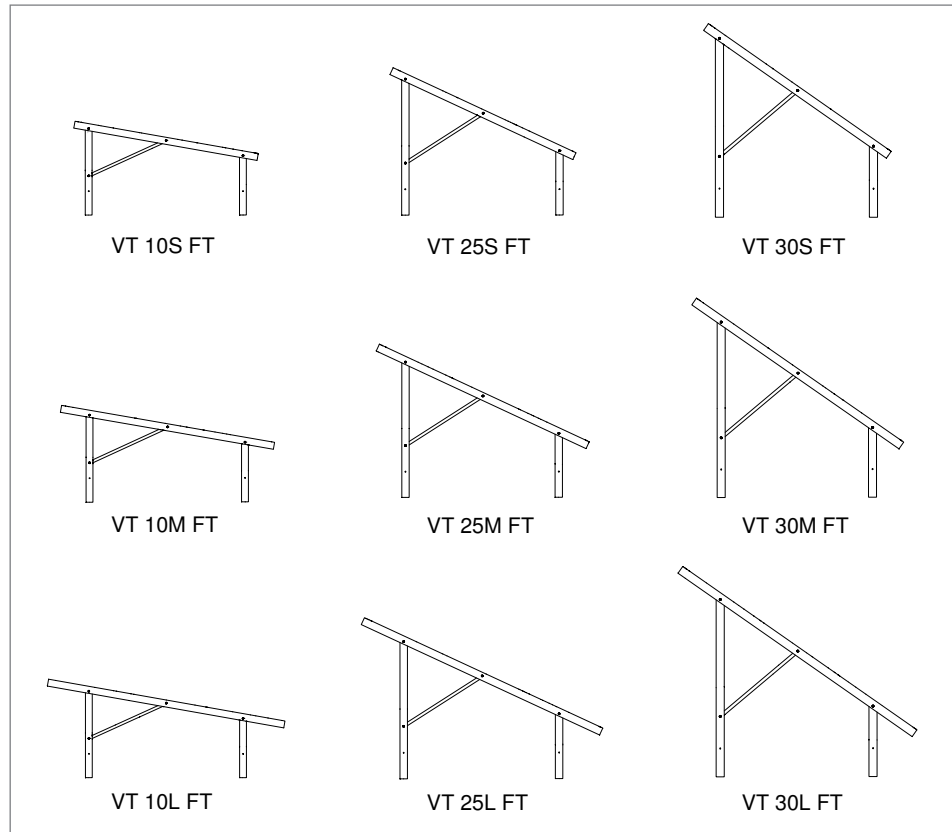


Fig. 2: System overview

Type/item no.	Angle of inclination	Alignment
VT 10 S FT	10°	East-west
VT 10 M FT	10°	East-west
VT 10 L FT	10°	East-west
VT 25 S FT	25°	South
VT 25 M FT	25°	South
VT 25 L FT	25°	South
VT 30 S FT	30°	South
VT 30 M FT	30°	South
VT 30 L FT	30°	South

Tab. 3: Application of pre-mounted supports

6 Mount the system

Refer to the planning of the PV system for the number and size of the individual system components and the PV modules to be mounted.

ATTENTION

Danger of breakage and function loss!

If the PV modules are mounted too close together at the highest point of the slope in an east-west direction, modules can be lifted from below due to the effect of wind. There is the danger of breakage and function loss. Maintain the spacings between the modules, as intended in the planning.

ATTENTION

Risk of shading!

If, with a southerly alignment, the PV modules are mounted too close to one another, there is the risk of mutual shading and thus reduced power yields. Maintain the spacings between the modules, as intended in the planning.

Maximum slope

The terrain may have a maximum slope of 3° crosswise and 4° lengthwise.

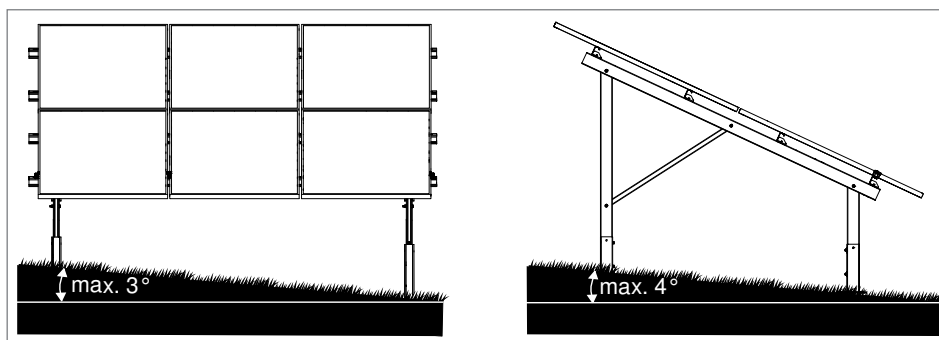


Fig. 3: Maximum slope crosswise and lengthwise

6.1 Drive pile profiles

The pile profiles must be driven in at the planned positions. The required pile profile length depends on the soil conditions and must be determined by means of a prior pile-driving test.

Tolerances driving the pile profiles

For the spacing between the pile profiles, tolerances of ± 50 mm in length and ± 25 mm in depth are possible (measured from centre to centre of the pile profile). The pile profiles must be aligned, positioned in a 90° angle to each other.

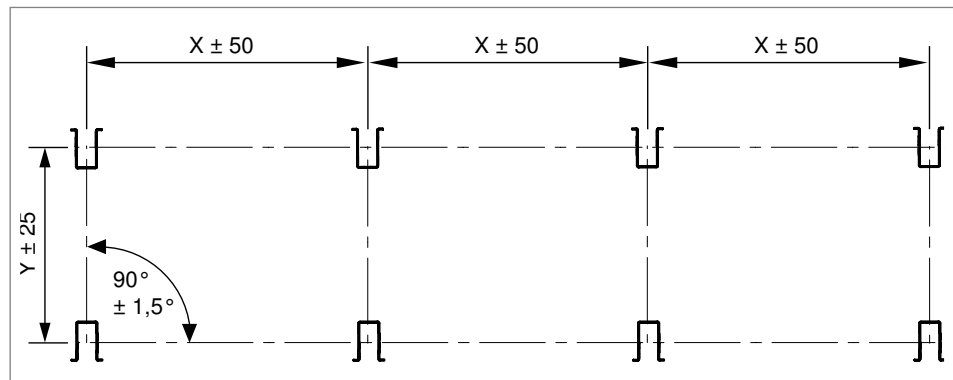


Fig. 4: Tolerances for pile profile spacing

Pile profiles may have an inclination tolerance of $\pm 2^\circ$. The difference in height between two pile profiles must not exceed ± 50 mm.

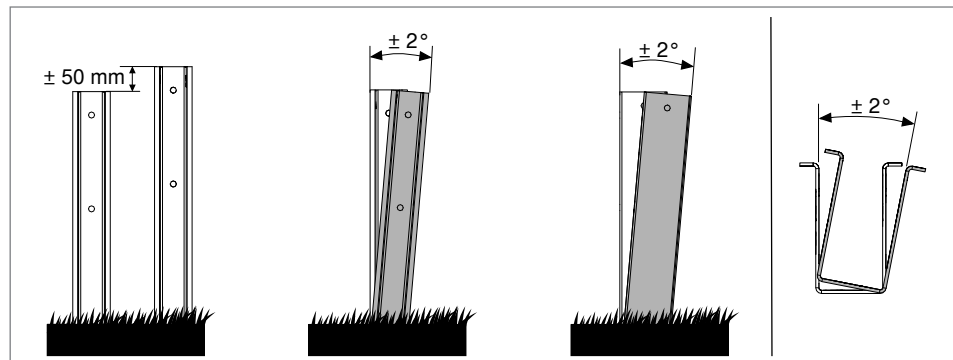


Fig. 5: Tolerances for pile profile height and angle of inclination

**WARNING****Risk of injury via heavy device!**

If devices for driving in the pile profiles are operated improperly or danger areas are not observed, this may result in serious injuries such as crushing or breaks.

- Only people trained in handling the device may operate the device.
- Never stand in the danger area when the device is in operation.
- Wear personal protective equipment.

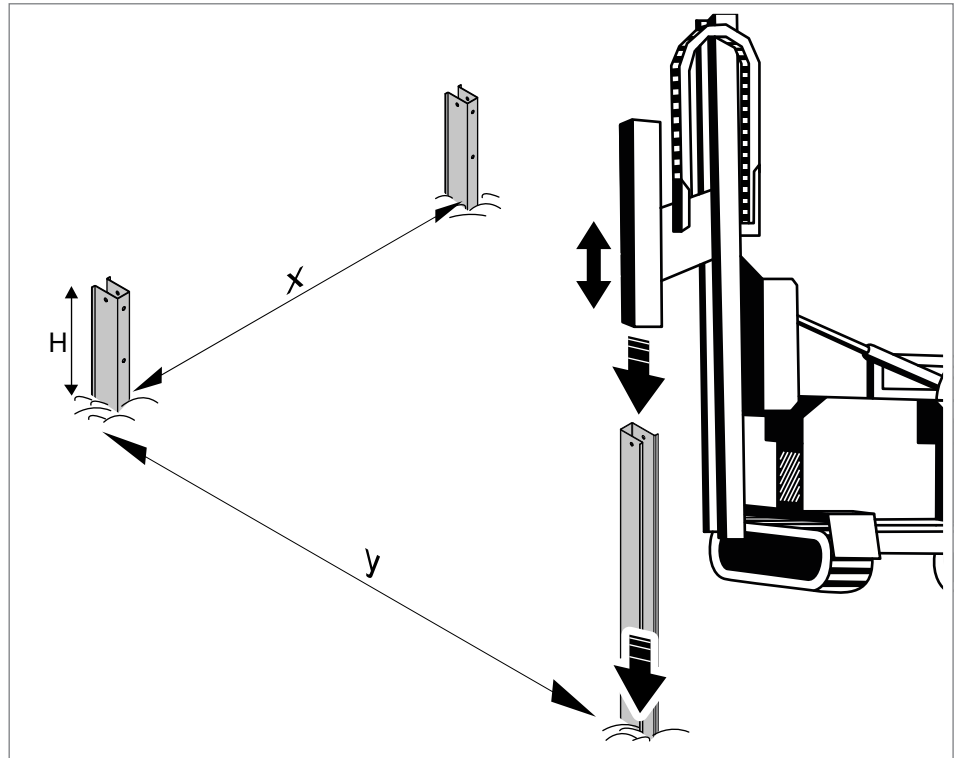


Fig. 6: Drive in pile profile with pile driver

1. Mark the positions and spacing x/y of the pile profiles according to the planning.
2. Position the pile profiles and drive them in up to a height of H 450 mm with an impact ram/pile driver.

6.2 Mount the stands on concrete foundations

The concrete foundations for the stands must be poured and the positions and spacing x/y correspond to the PV free-standing system planning.

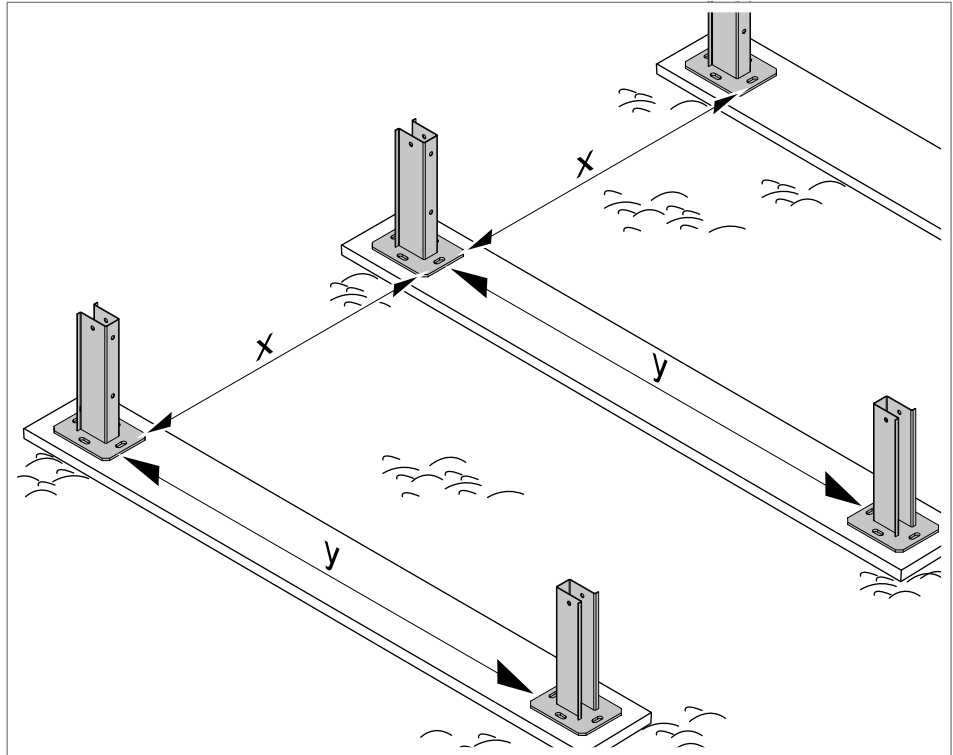


Fig. 7: Align stands

1. Align the stands on the concrete foundations.

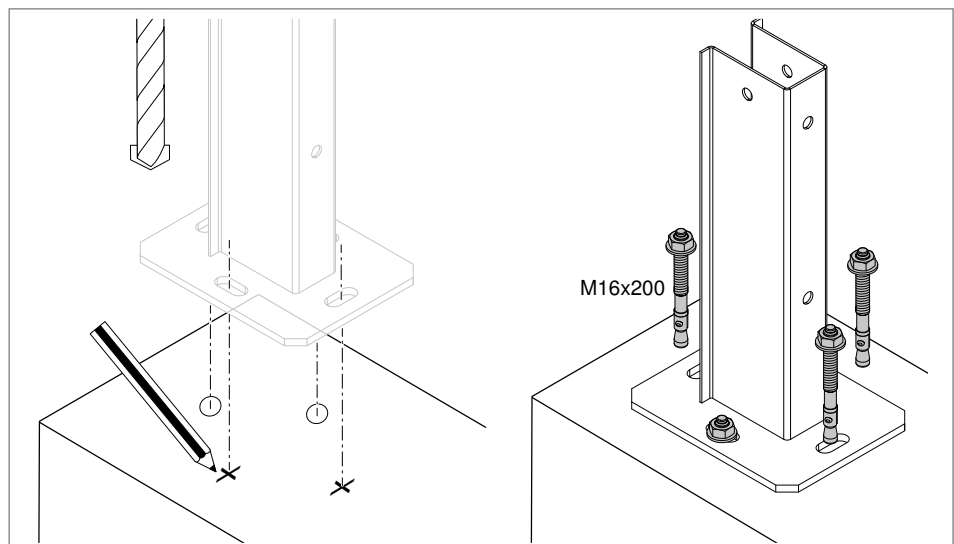


Fig. 8: Screwing on stands

2. Mark the drill holes (4 wedge anchors M16x200 per stand).
3. Drill the holes for the wedge anchors.
4. Fasten the stands with wedge anchors.

6.3 Repair damaged areas

If the surface of components is damaged due to mechanical influences, it must be repaired with zinc repair spray to prevent subsequent corrosion.

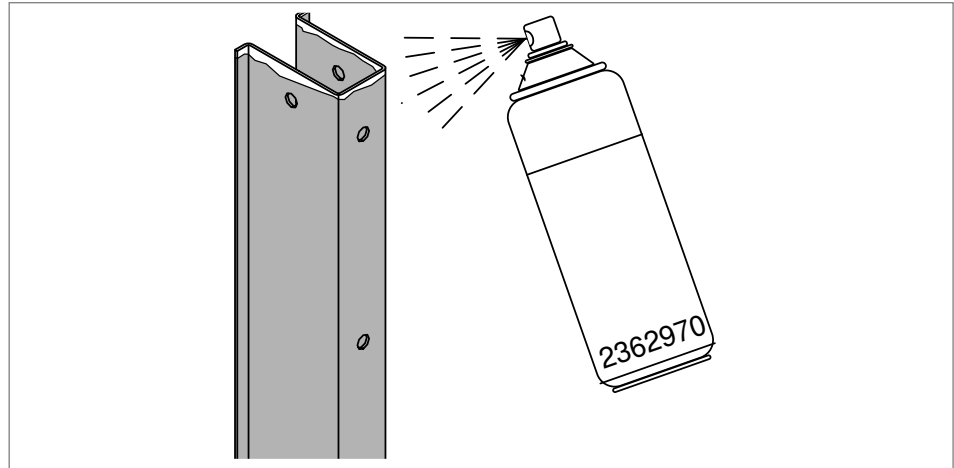


Fig. 9: Repair damaged areas

1. Apply the zinc repair spray as described on the can.

6.4 Pre-mount supports

The supports are supplied folded up. They consist of two legs, one truss profile and one transverse strut. The screws are pre-mounted loose, meaning the parts can be moved.

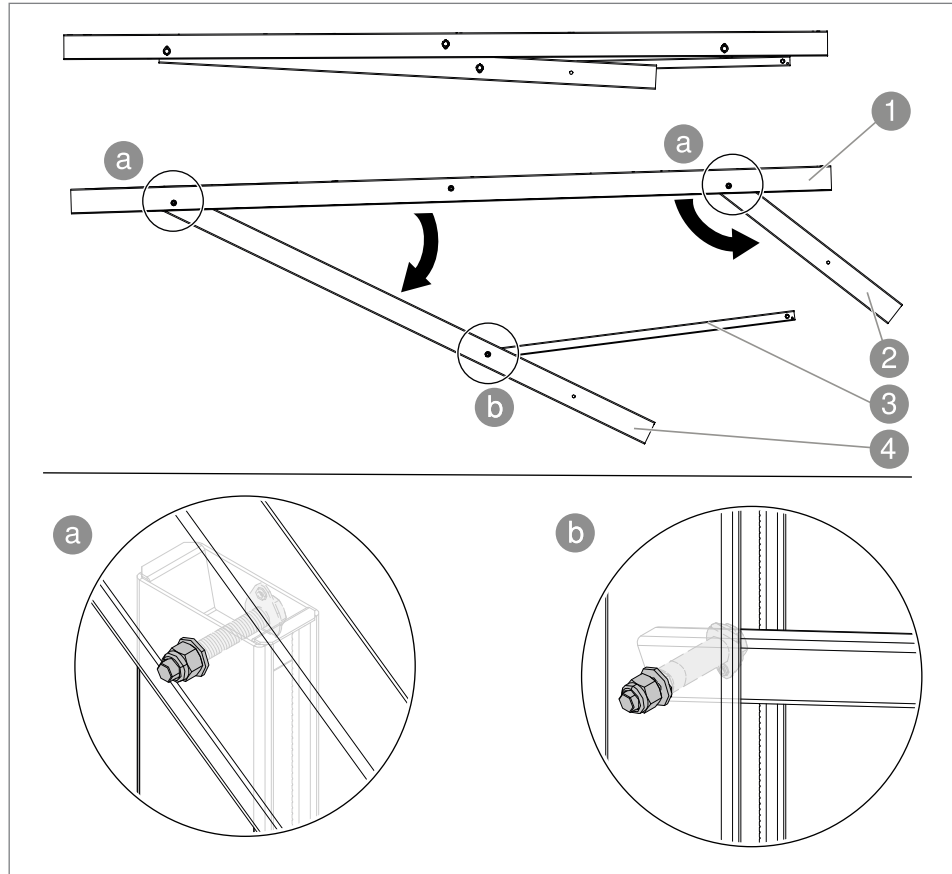


Fig. 10: Pre-mounted support parts

- ① Truss profile
- ② Front leg
- ③ Transverse strut
- ④ Rear leg
- ②③ Hexagonal screw (WAF 19) with nut, washer and locknut for connecting legs with truss profile
- ③⑧ Hexagonal screw (WAF 19) with nut, washer and locknut for connecting transverse struts with truss profile

Note!

To be able to compensate for any tolerances, the screws of the pre-mounted supports are not tightened until after the supports have been mounted on the pile profiles/stands and the perforated strips are screwed on.

1. Fold out the legs and align them at a 90° angle to the substrate.

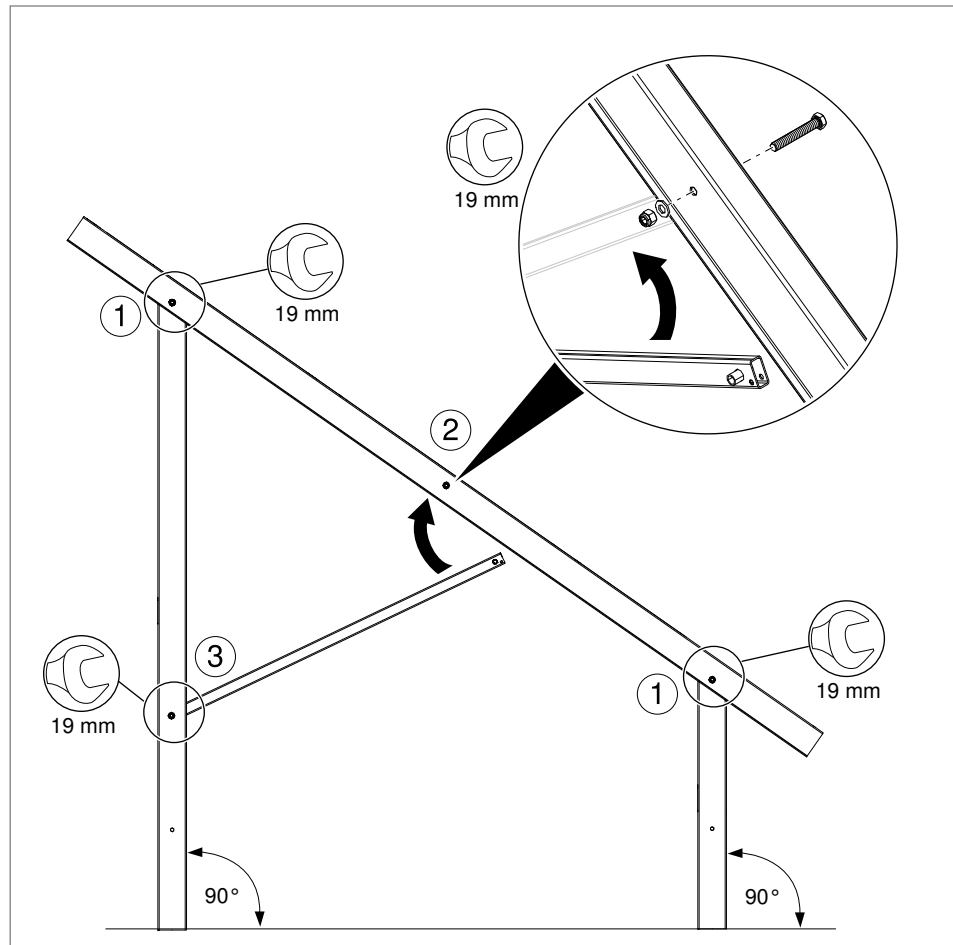


Fig. 11: Tighten screws on the support

2. Tighten the screws for the legs on the truss profile lightly (①).
3. Loosen the screw for the transverse strut on the truss profile (②).
4. Position the transverse strut in the truss profile (②).
5. Insert the screw through the spacer sleeve of the transverse strut and tighten lightly with washer and nut.
6. Lightly tighten the screw for the transverse strut on the rear leg (③).

6.5 Fasten pre-mounted supports to stands/pile profiles

The pre-mounted supports are fastened to the stands or pile profiles with hook-head screws (WAF 19), large washers, washers and nuts. The height of the supports can be adjusted infinitely up to 100 mm (50 mm down or up).

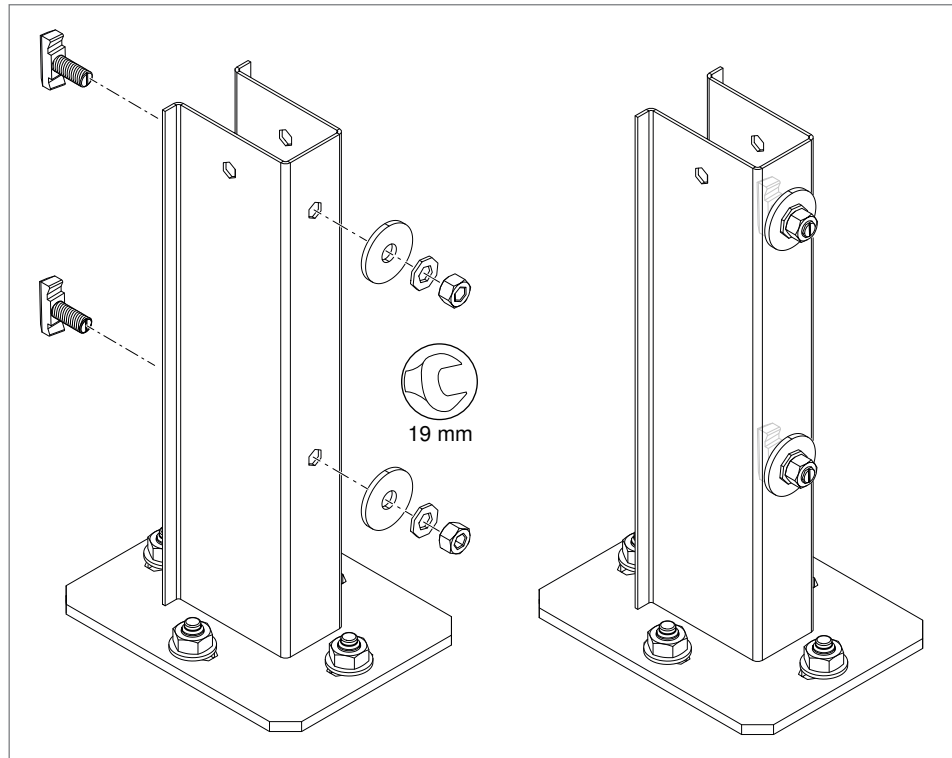


Fig. 12: Insert hook-head screws

1. Insert the hook-head screws in the holes on the stands/pile profiles and tighten them lightly with nuts, large washers and washers.

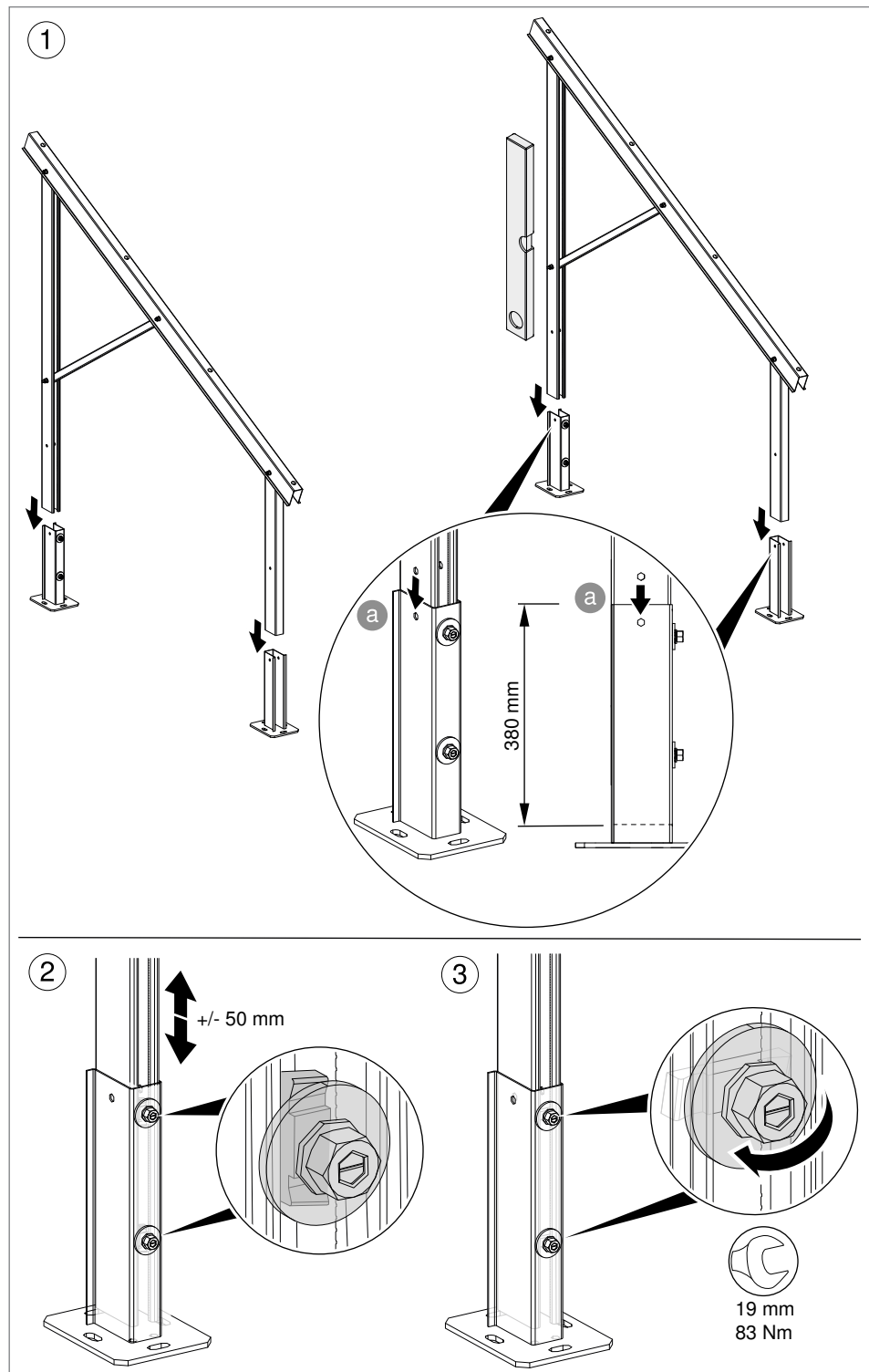


Fig. 13: Fasten pre-mounted supports

2. Insert the pre-mounted supports in the stands/pile profiles so that the holes (a) are on top of each other (1).
3. Lightly tighten the hook-head screws and, if necessary, infinitely adjust the height (± 50 mm) of the pre-mounted supports (2).
4. Tighten the hook-head screws with 83 Nm so that the hook head seizes in the profile of the support (3).

6.6 Fasten truss profiles

The truss profiles are fastened to the holes of the pre-mounted supports with type KV FT cross connectors. The cross connectors are pre-mounted loose and the truss profiles are then slid under the cross connectors and clamped. Four truss profiles must be mounted per support pair.

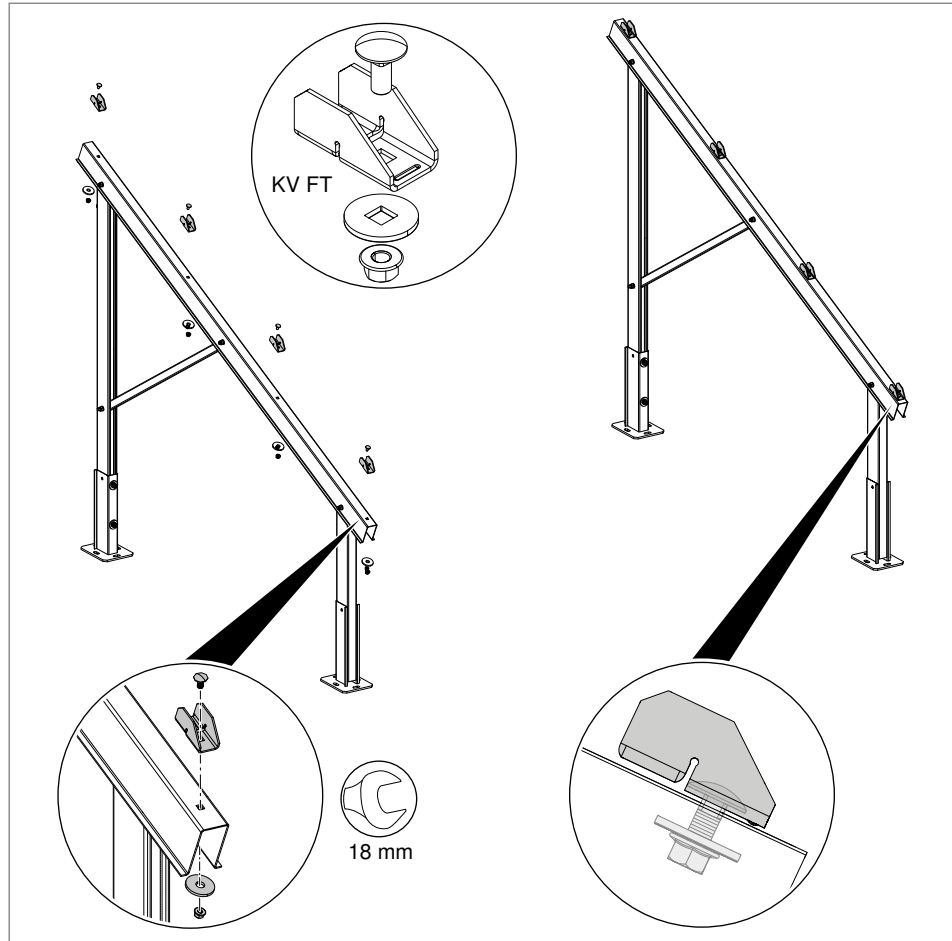


Fig. 14: Pre-mount cross connectors

1. Place the cross connectors on the holes in the truss profile and fasten them loosely to the pre-mounted support with screw, large washer and nut.

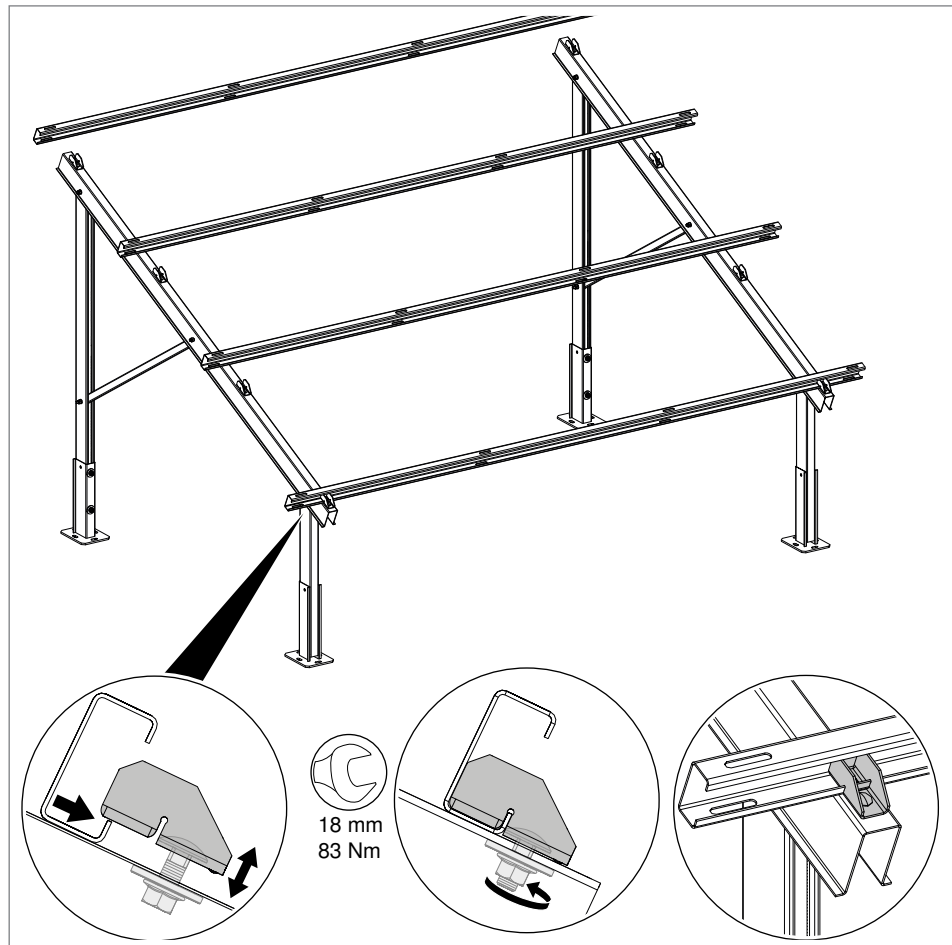


Fig. 15: Mount truss profiles with cross connectors

2. Place truss profiles.
3. Lift the cross connectors and clamp the truss profiles in place.
4. Tighten the cross connector screws with 83 Nm.

6.7 Connect truss profiles in a lengthwise manner

Truss profiles can be connected lengthwise using type LV FT straight connectors. For the straight connection, observe the maximum number of strings that may be placed next to one another. The truss profiles for the PV modules can be connected up to a maximum length of 14.1 m, in order to guarantee thermal separation.

ATTENTION

Risk of damage due to thermal expansion!

If too many truss profiles are connected lengthwise, this may result in excessive thermal expansion of the profiles. This may result in system instability.

- Only connect truss profiles up to a maximum length of 14.1 m.
- Maintain a minimum distance of 50 mm between 2 truss profiles that are not connected lengthwise.

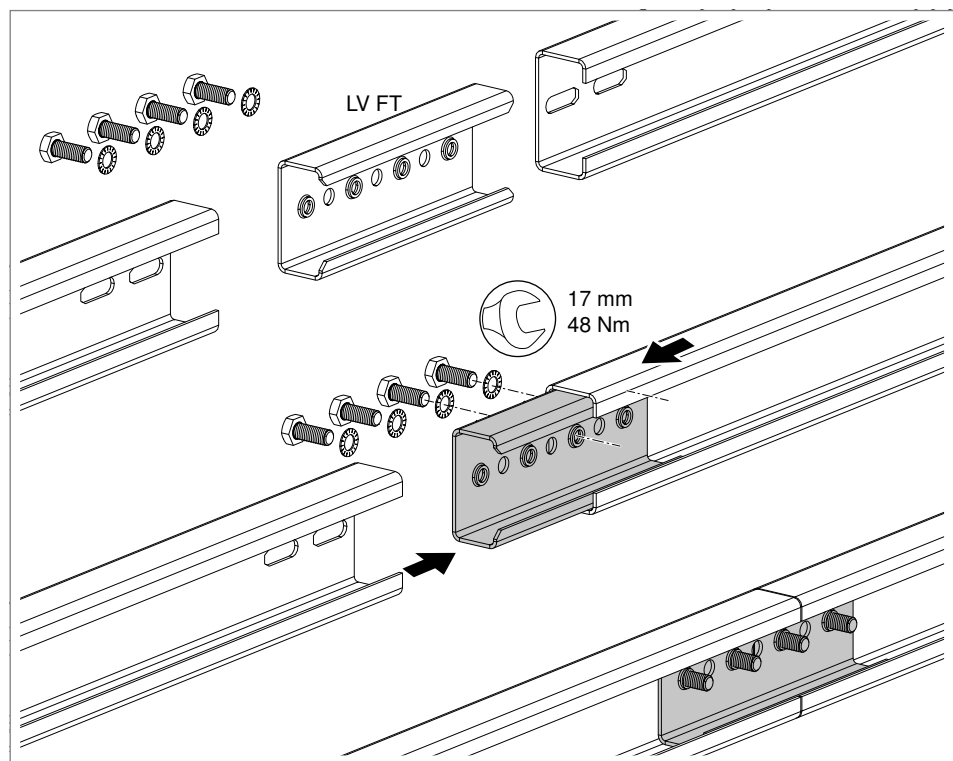


Fig. 16: Mount straight connector

1. Push the truss profiles onto the straight connector so that they touch at the centre of the connector.
2. Insert the enclosed hexagonal screws M10x25 and washers and tighten with 48 Nm.

6.8 Stabilise support system

6.8.1 Mount perforated strips

To reinforce the support system, the rear legs of the pre-mounted supports are connected transversely using diagonal type LB FT perforated strips. The perforated strips overlap at the centre, achieving different lengths that may be required. The perforated strips are connected using the SVLB screw set and fastened to a stand/pile profile as well as to a vertical strut.

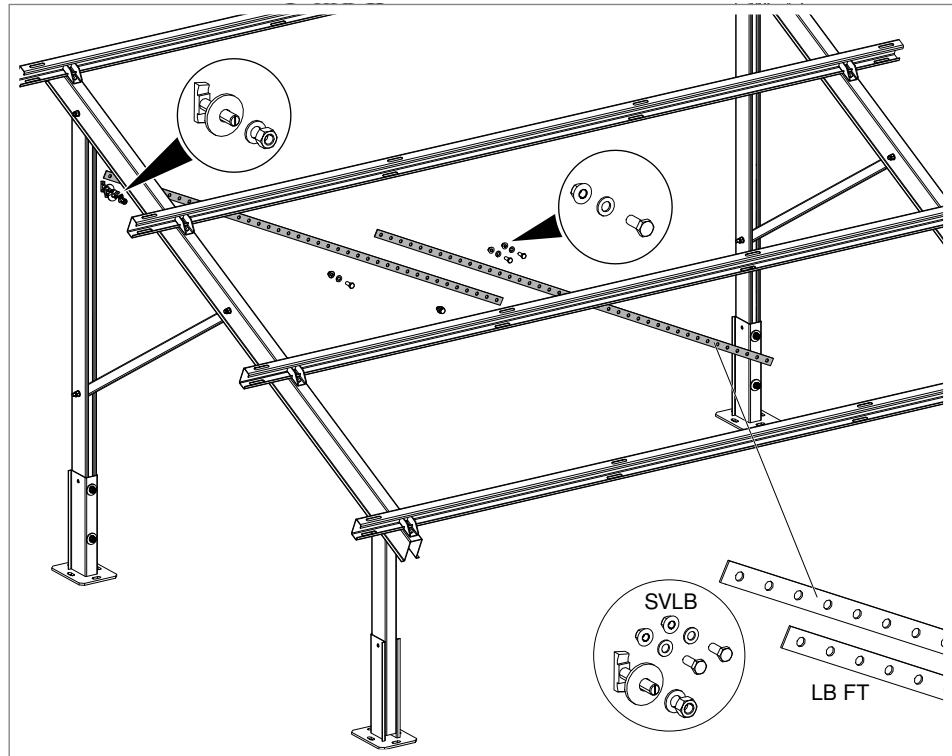


Fig. 17: Perforated strips with screw set

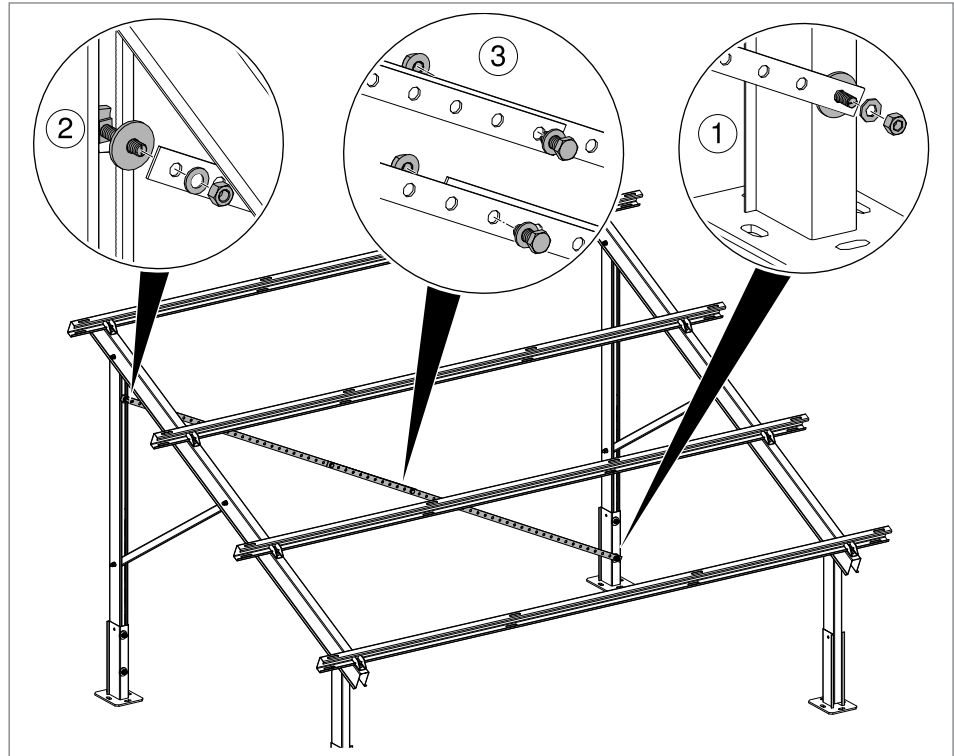


Fig. 18: Mount perforated strips

1. Loosen the screw on the stand/pile profile, insert the perforated strip and loosely tighten the screw (①).
2. Loosely fasten the perforated strip on the rear leg with hammer-head screw, large washer, washer and nut (②).
3. Place the perforated strips on top of each other and align them in length so that the holes match up.
4. Connect the perforated strips at the overlaps using screws and nuts (83 Nm) (③).
5. Tighten the screws on the stand/pile profile and rear leg with 83 Nm.

6.8.2 Tighten the screws on pre-mounted supports

Before mounting the PV modules, all screws of the support system must be tightened completely.

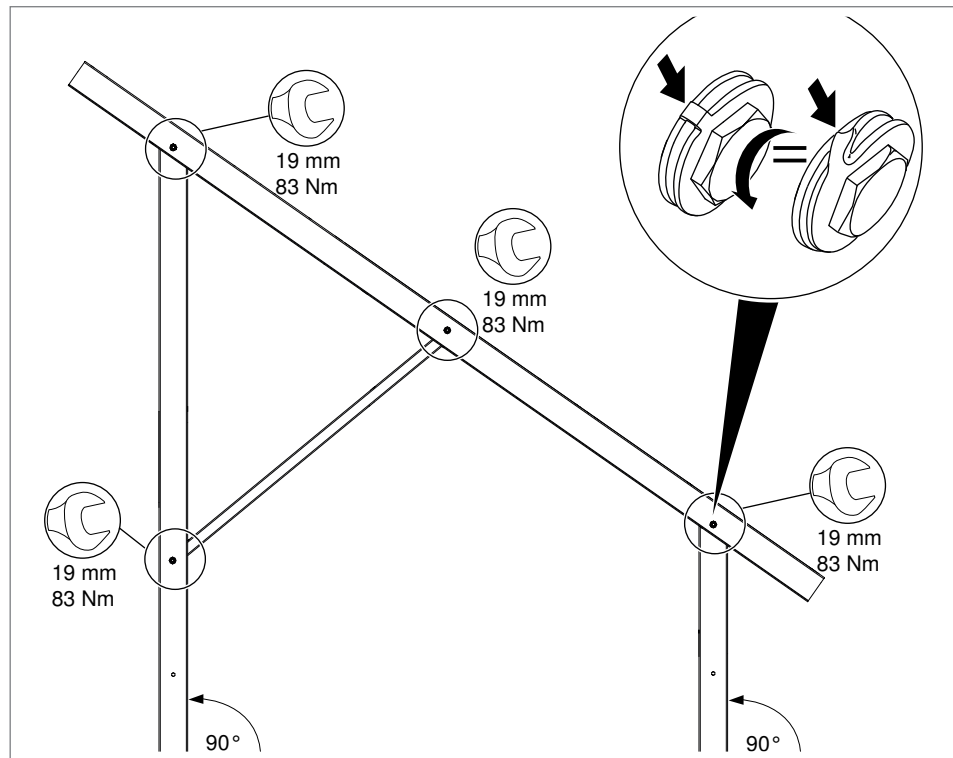


Fig. 19: Tighten the screws completely

1. If necessary, align the legs at a 90° angle again.
2. Tighten the screws on the supports completely with 83 Nm until the adjacent washers have rotated against each other.

6.9 Mount the PV modules with end and intermediate clamps

The PV modules are mounted on the truss profiles with end clamps and intermediate clamps. The size of the end and intermediate clamps depends on the module height and can be found in the PV mounting system planning. The clamps are clamped on the truss profiles and fastened by tightening the screws on the PV module.

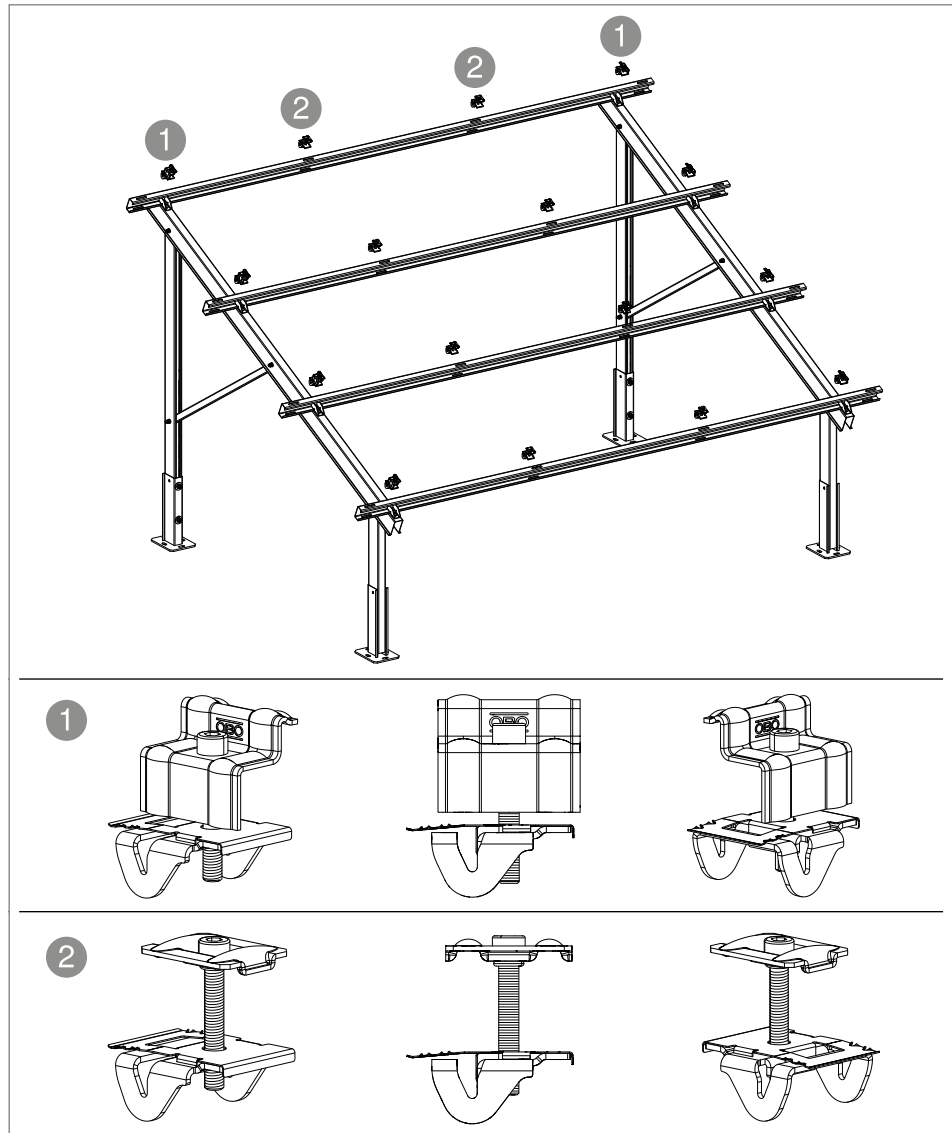


Fig. 20: End and intermediate clamps

① End clamp

② Intermediate clamp

6.9.1 Fasten the end clamp to the truss profile

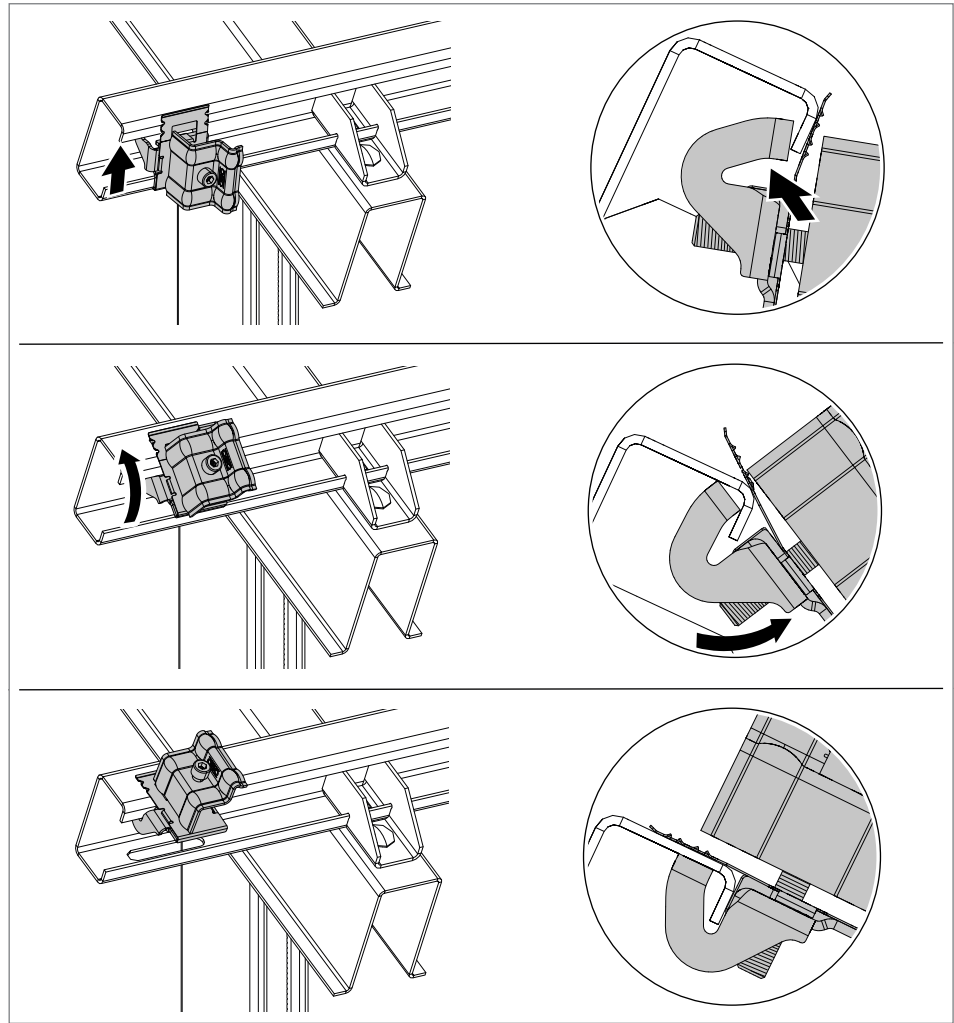


Fig. 21: Clamp the end clamp to truss profile

1. Insert the end clamp in the truss profile. The clamping plate must be on the outer slot side of the profile.
2. Rotate the end clamp on the top profile edge until it is horizontal and clamped.

Note!

The end clamp can be moved infinitely to the left and right as long as the screw hasn't already been tightened.

6.9.2 Fasten intermediate clamp to truss profile

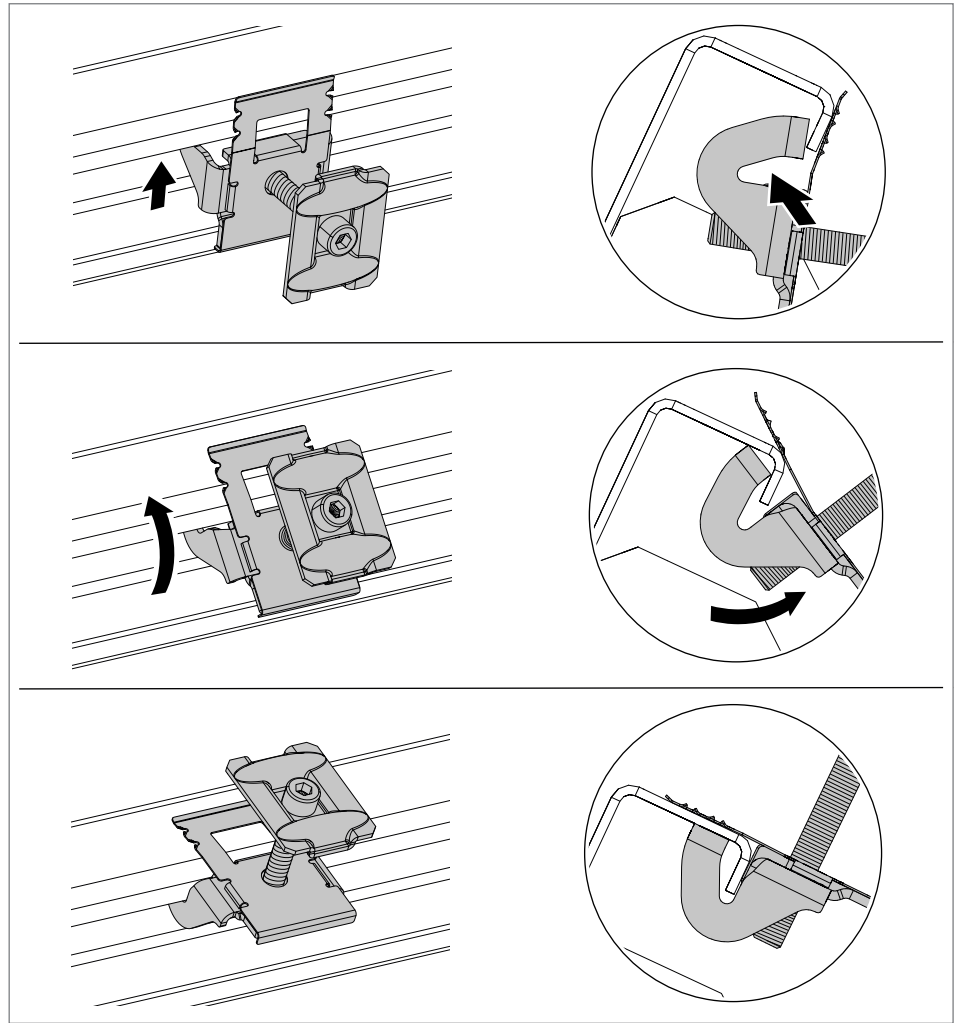


Fig. 22: Clamping intermediate clamp to truss profile

1. Insert the intermediate clamp in the truss profile. The clamping plate must be on the outer slot side of the profile.
2. Rotate the intermediate clamp on the top profile edge until it is horizontal and clamped.

Note!

The intermediate clamp can be moved infinitely to the left and right as long as the screw hasn't already been tightened.

6.9.3 Clamp PV modules

The PV modules are clamped to the truss profiles with end and intermediate clamps. Each module must be clamped in at least four places (see also the module manufacturer specifications).

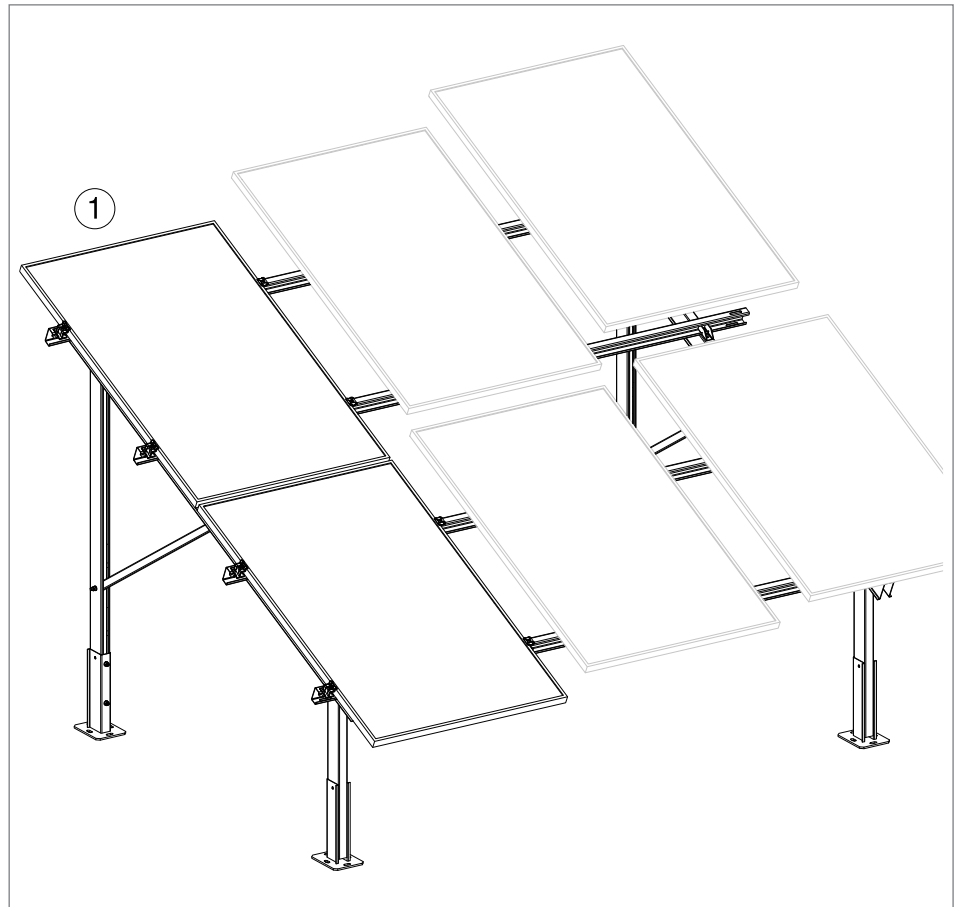


Fig. 23: Position the external PV modules

1. Position the external PV modules and slide them up to the end clamps (①).

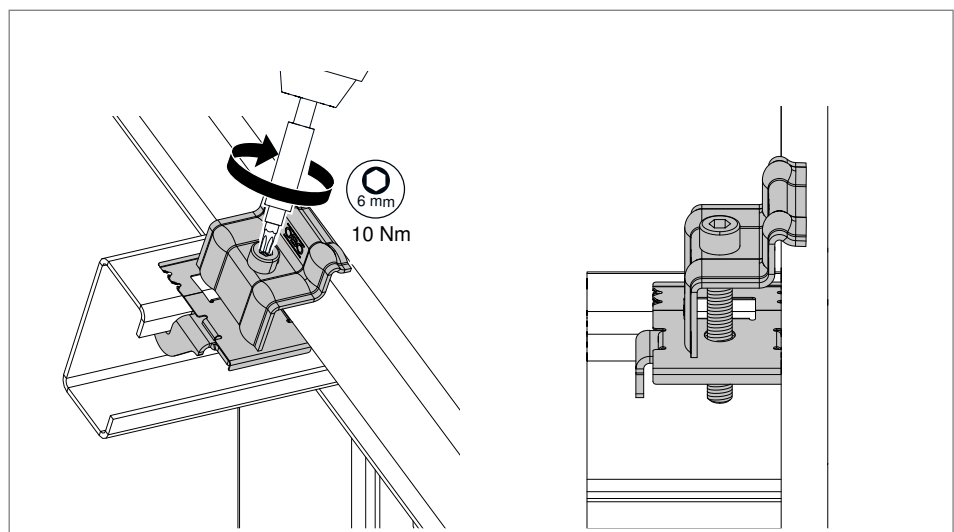


Fig. 24: Screw on end clamp

2. Tighten the end clamp screws with 10 Nm.

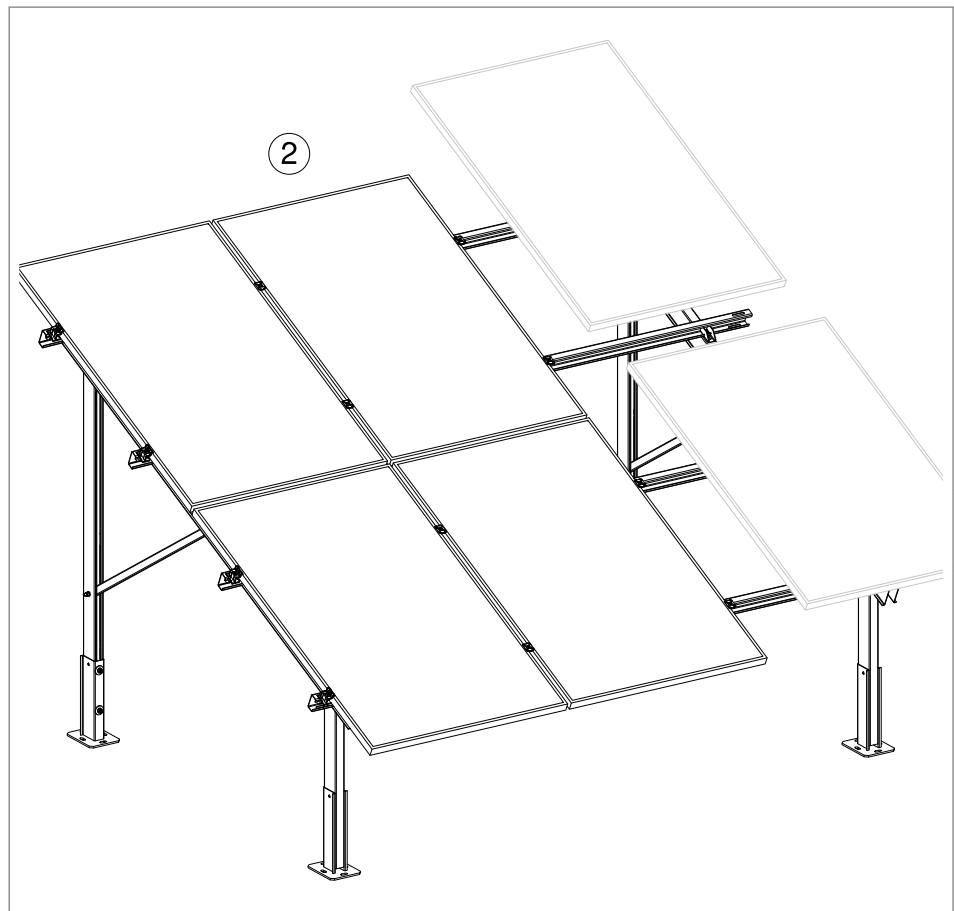


Fig. 25: Position the centre PV modules

3. Slide the intermediate clamps up to the external PV modules.
4. Place the centre PV modules and slide them up to the intermediate clamps (2).

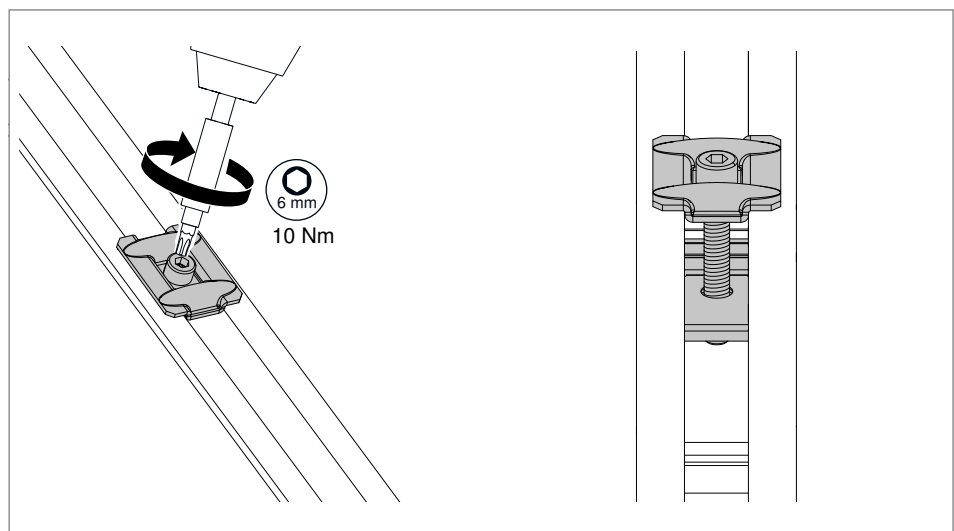


Fig. 26: Screw on the intermediate clamp

5. Tighten the intermediate clamp screws with 10 Nm.

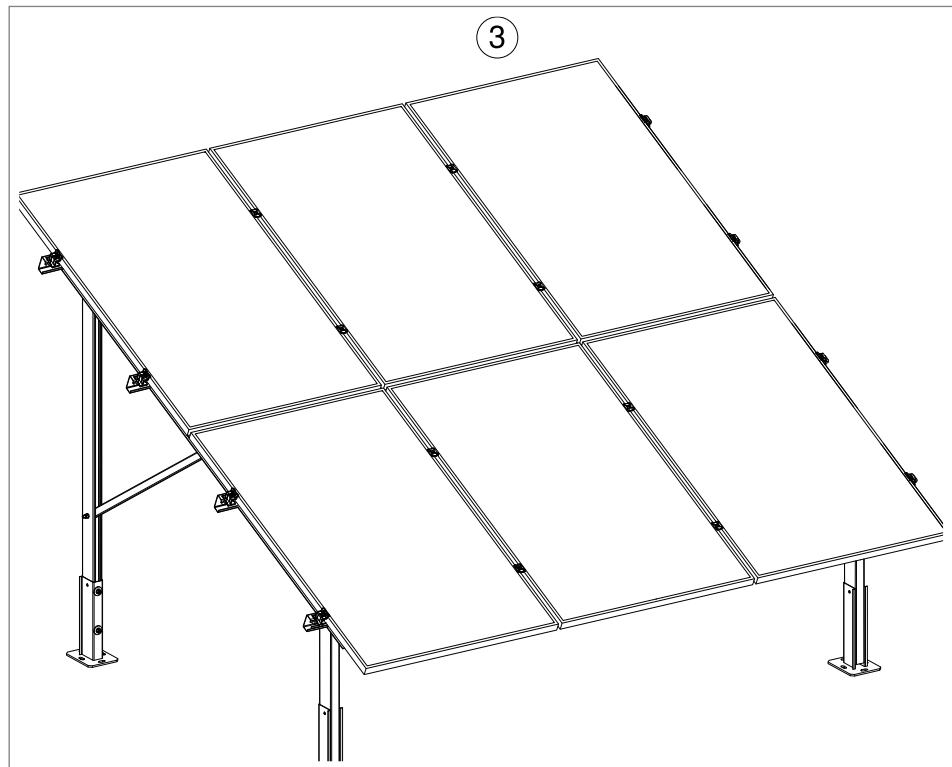


Fig. 27: Position the external PV modules

6. Position the external PV modules and slide them up to the intermediate clamps (③).

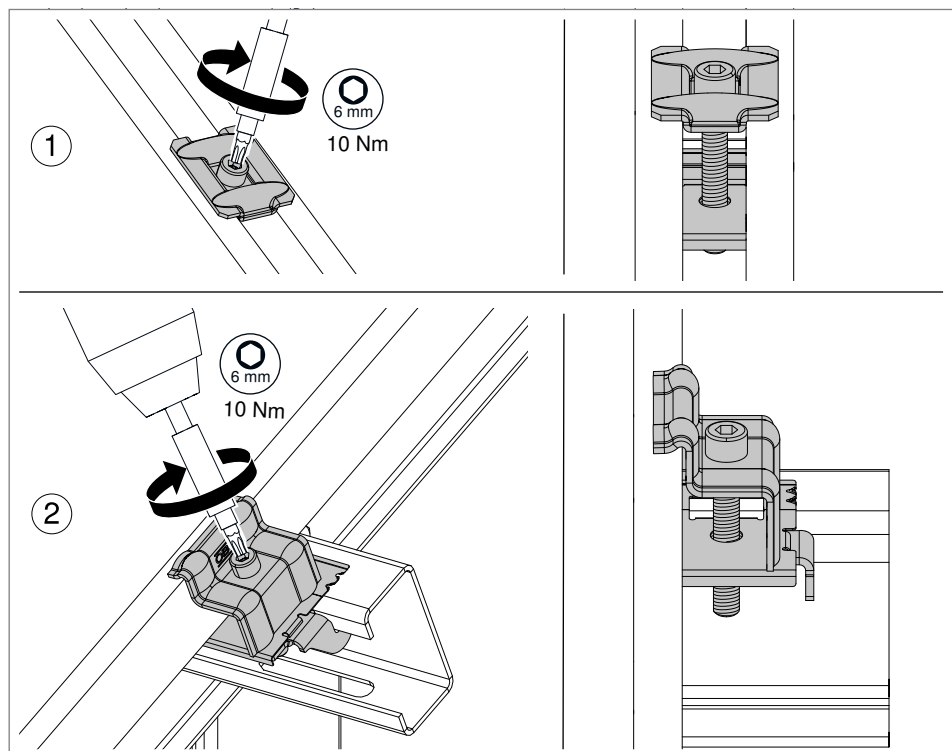


Fig. 28: Screwing on connection and end clamp

7. Tighten the intermediate clamp screws with 10 Nm (①).
8. Slide the end clamps up to the PV modules and tighten the screws with 10 Nm (②).

6.10 Mount PV modules with end and intermediate clamps with springs

The end clamps and intermediate clamps with springs offer a higher pressure surface and are used for higher snow and wind loads. The finished teeth on the connection plate press into the aluminium frame of the PV module, offering additional support. The size of the end and intermediate clamps depends on the module height and can be found in the PV mounting system planning. The clamps are inserted in the slots on the truss profiles.

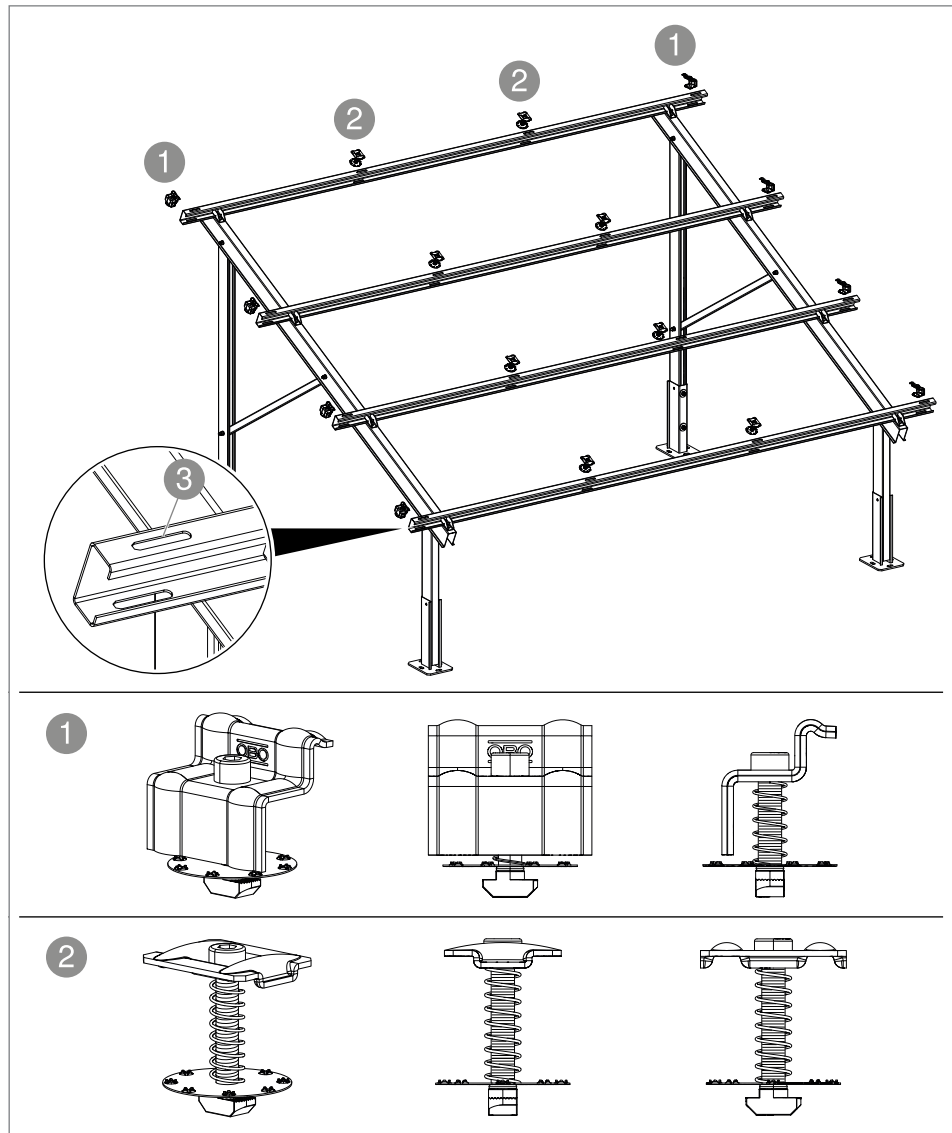


Fig. 29: End and intermediate clamps with springs

- ① End clamp with spring
- ② Intermediate clamp with spring
- ③ Long slot

6.10.1 Fasten end and intermediate clamps with springs to truss profile

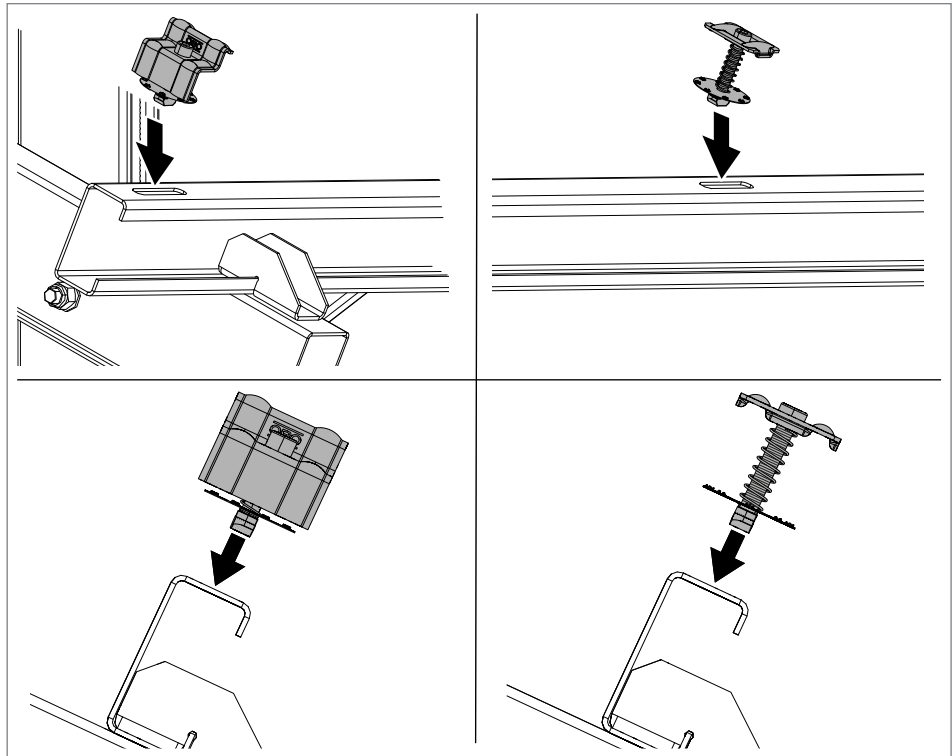


Fig. 30: Insert clamps in slots

1. Insert slide nuts of the end and intermediate clamps in the slots of the truss profiles.

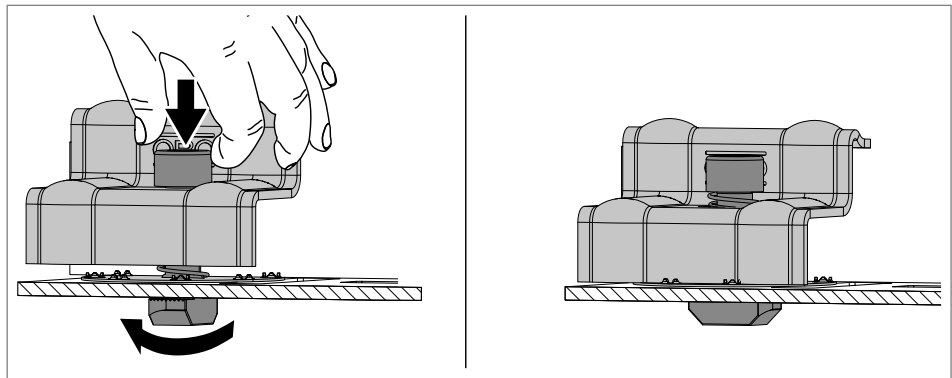


Fig. 31: Engage the slide nut (example shown: end clamp)

2. Press down lightly on the screw with spring and turn until the slide nut engages.
3. Repeat this operation for all clamps.

Note!

The end and intermediate clamps can be slid into the slot as long as the screw hasn't already been tightened.

6.10.2 Clamp PV modules with clamps with springs

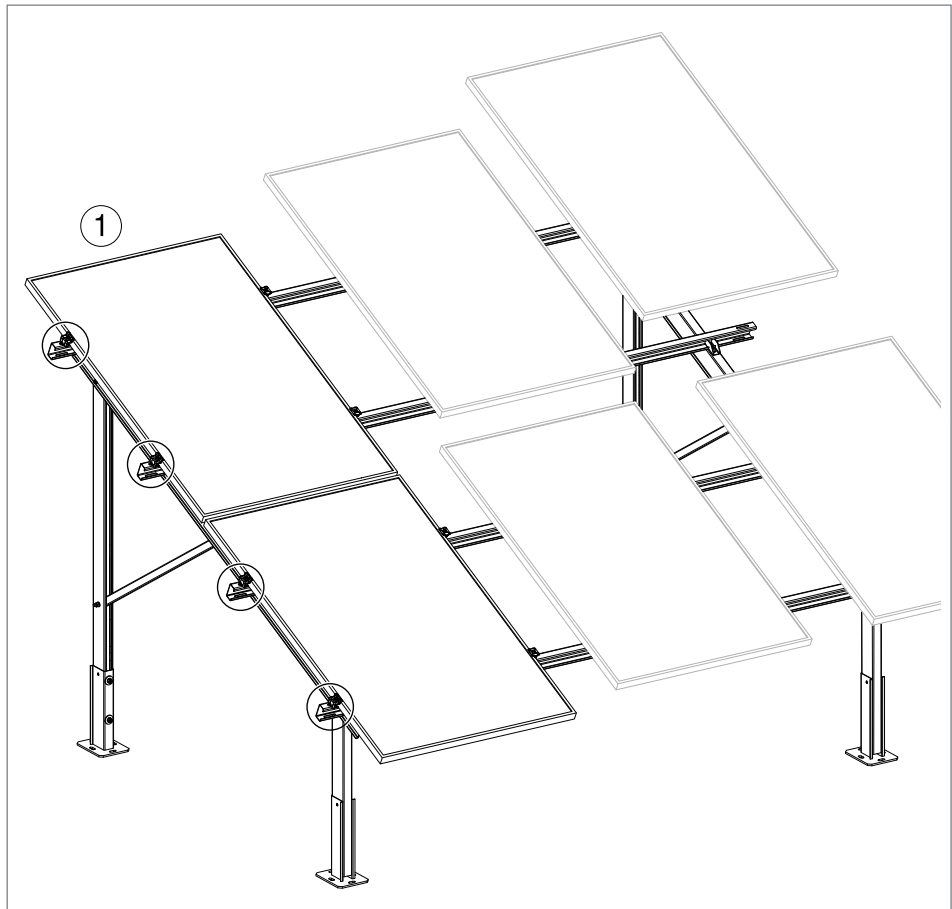


Fig. 32: Position the external PV modules

1. Position the external PV modules and slide them up to the end clamps with springs (①).

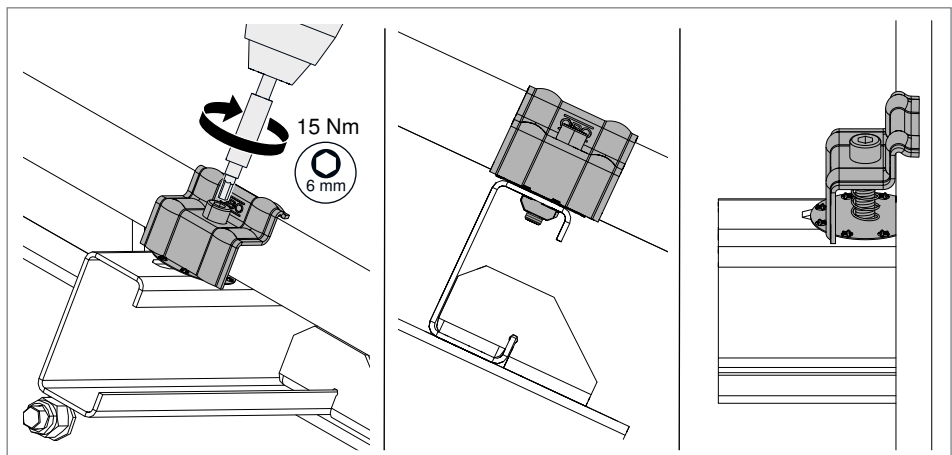


Fig. 33: Screw on end clamp with spring

2. Tighten the screws for end clamps with springs with 15 Nm.

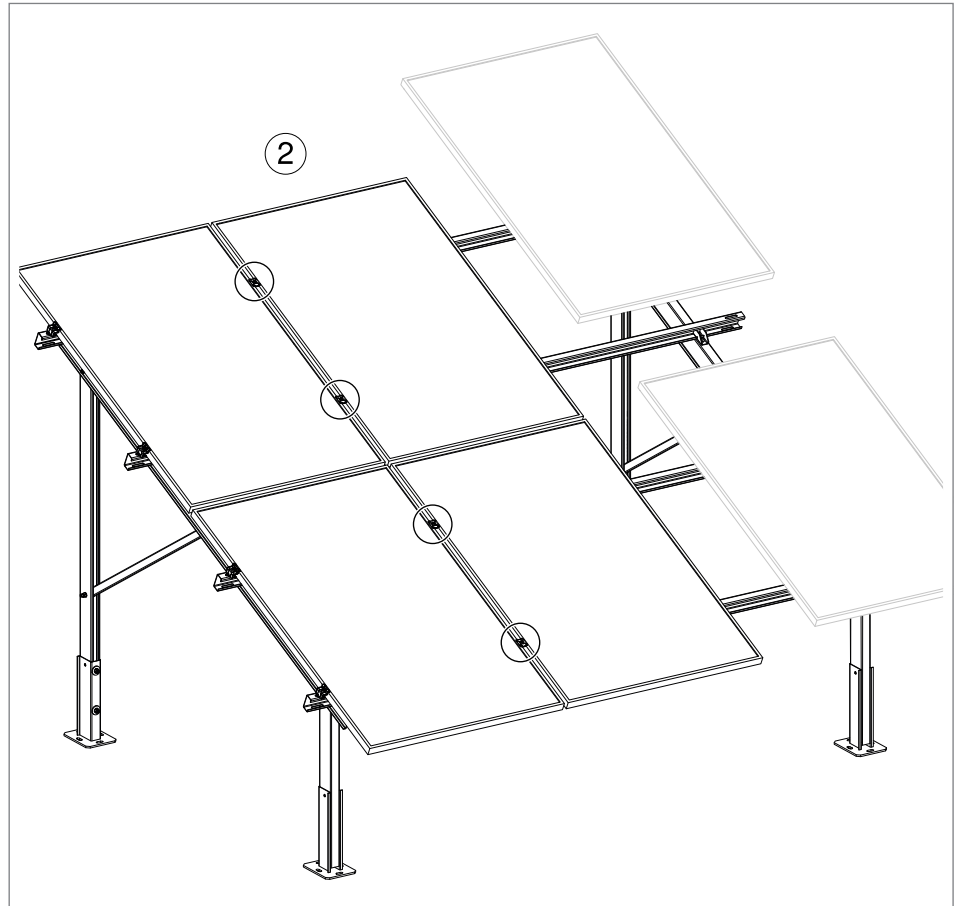


Fig. 34: Position the centre PV modules

3. Position the centre PV modules and slide them up to the intermediate clamps with springs (2).

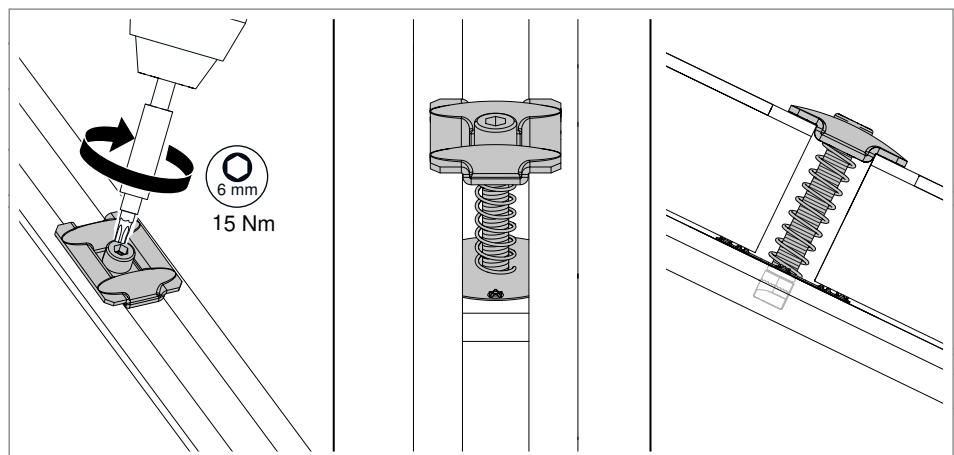


Fig. 35: Screw on the intermediate clamp with spring

4. Tighten the screws for the intermediate clamps with springs with 15 Nm.

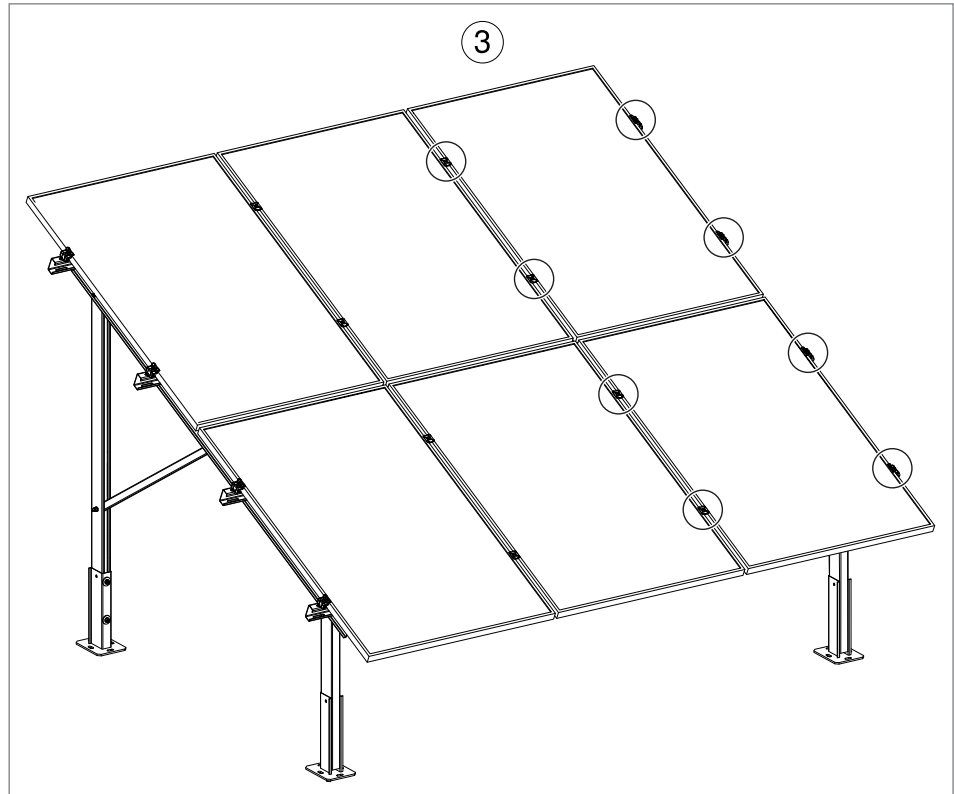


Fig. 36: Position the external PV modules

5. Position the external PV modules and slide them up to the intermediate clamps with springs (③).

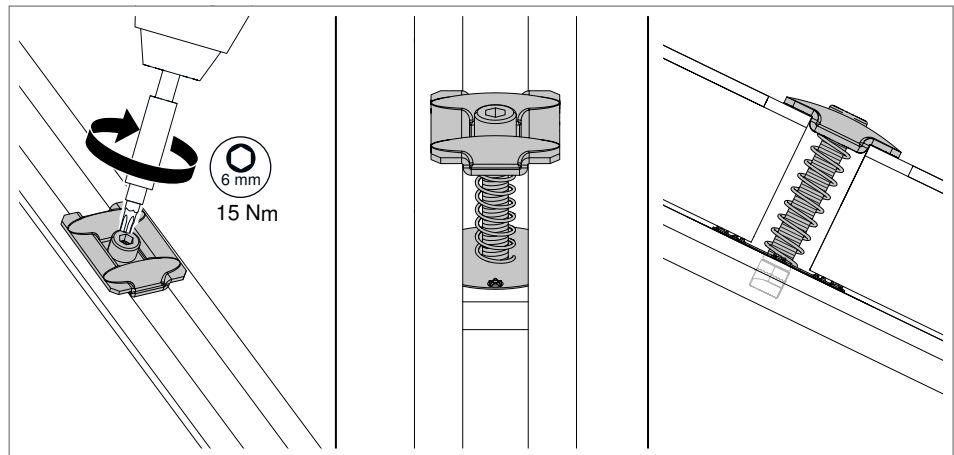


Fig. 37: Screw on the intermediate clamp with spring

6. Tighten the screws for the intermediate clamps with springs with 15 Nm.

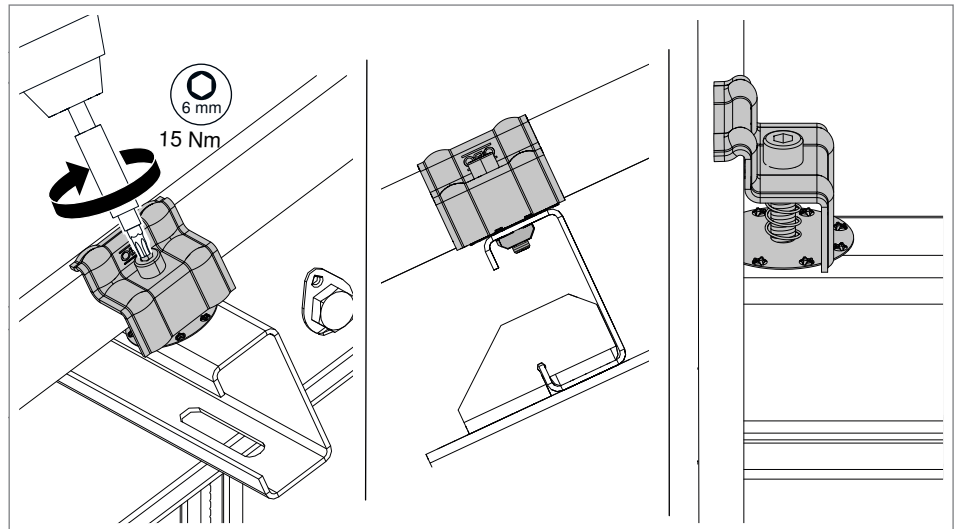


Fig. 38: Screw on end clamp with spring

7. Slide the end clamps with springs up to the PV modules and tighten the screws with 15 Nm.

7 Maintaining the system

The PV mounting systems must be maintained once a year. Maintenance includes a visual inspection as well as the testing of different system components, repairing damage and removing impurities.

Visual inspection of the system

- Repair any obvious damage such as corrosion, deformations or cracks.
- Tighten the module fastenings, such as loose screws or clamps.
- Repair or replace worn materials, e.g. seals or fastenings.

Check the fastening system

- Check the stability and secure positioning of the support structure and repair if necessary.
- Check the tightening torque of screws, nuts and connection elements and tighten if necessary.
- Check anchors in the floor (stability, corrosion) and repair or replace if necessary.

Check vegetation

- Remove growth that can negatively affect performance.
- Remove growth that comes into contact with the structure or cabling.
- Clear access paths and maintenance paths.

Check the electrical components

- Perform a visual inspection of the cable paths and plug connections and repair if necessary.
- Repair any damage due to UV radiation, animals or mechanical loads.
- Ensure proper earthing of the mounting system.

Clean the system

- Eliminate any impurities that negatively affect performance.
- If necessary, remove dirt and leaves from the support structure.

8 Dismantling the system

The PV mounting systems are dismantled in the reverse order to the mounting.

9 Disposing of the system

Comply with the local waste disposal regulations.

- Metal parts: As scrap metal
- Plastic parts/accessories: As plastic
- Packaging: As household waste/as metal (depending on packaging type)

10 Technical data

10.1 Article list

Designation	Type	Dimension mm	Material/ surface	Item number
Stand for concrete foundation	SF 400 FT	220 x 170 x 408	FT	5900900
Pile profile for ground ramming	RP 1800 FT	1,800 x 50 x 102.5	FT	5900106
Pile profile for ground ramming	RP 2300 FT	2,300 x 50 x 102.5	FT	5900110
Pre-mounted support for free-standing systems	VT 10S FT	2,698 x 91 x 1,376	FT	5901550
Pre-mounted support for free-standing systems	VT 10M FT	3,110 x 91 x 1,413	FT	5901552
Pre-mounted support for free-standing systems	VT 10L FT	3,489 x 91 x 1,445	FT	5901554
Pre-mounted support for free-standing systems	VT 25S FT	2,517 x 91 x 1,996	FT	5901556
Pre-mounted support for free-standing systems	VT 25M FT	2,898 x 91 x 2,085	FT	5901558
Pre-mounted support for free-standing systems	VT 25L FT	3,236 x 91 x 2,160	FT	5901560
Pre-mounted support for free-standing systems	VT 30S FT	2,732 x 91 x 2,188	FT	5901562
Pre-mounted support for free-standing systems	VT 30M FT	2,779 x 91 x 2,293	FT	5901564
Pre-mounted support for free-standing systems	VT 30L FT	3,104 x 91 x 2,387	FT	5901566
Truss profile for free-standing systems	TP 1000 FT	5,650 x 40 x 80	FT	5900500
Truss profile for free-standing systems	TP 1010 FT	5,705 x 40 x 80	FT	5900502
Truss profile for free-standing systems	TP 1020 FT	5,760 x 40 x 80	FT	5900504
Truss profile for free-standing systems	TP 1030 FT	5,815 x 40 x 80	FT	5900506
Truss profile for free-standing systems	TP 1040 FT	5,780 x 40 x 80	FT	5900508
Truss profile for free-standing systems	TP 1050 FT	5,925 x 40 x 80	FT	5900510
Truss profile for free-standing systems	TP 1060 FT	5,980 x 40 x 80	FT	5900512
Truss profile for free-standing systems	TP 1100 FT	5,090 x 40 x 80	FT	5900520
Truss profile for free-standing systems	TP 1140 FT	5,270 x 40 x 80	FT	5900522
Truss profile for free-standing systems	TP 1310 FT	4,715 x 40 x 80	FT	5900530
Cross connector for free-standing systems	KV FT	40 x 40 x 80	FT	5901255
Straight connector for free-standing systems for profile rail MS 5030	LV FT	35 x 74.5 x 200	FT	5901215
Hook-head screw for profile rail MS5030	MS50HB M12x30 A4	M12 x 30	A4	1148276

Designation	Type	Dimension mm	Material/surface	Item number
Hook-head screw for profile rail MS5030	MS50HB M12x60 A4	M12 x 60	A4	1148280
Intermediate clamp for free-standing systems	KLZ 2030 A2	63 x 54 x 66	A2	5901050
Intermediate clamp for free-standing systems	KLZ 3040 A2	73 x 54 x 66	A2	5901054
Intermediate clamp for free-standing systems	KLZ 4050 A2	83 x 54 x 66	A2	5901058
End clamp for free-standing systems	KLE 20 A2	55 x 70 x 54	A2	5901070
End clamp for free-standing systems	KLE 25 A2	60 x 70 x 54	A2	5901072
End clamp for free-standing systems	KLE 30 A2	65 x 70 x 54	A2	5901074
End clamp for free-standing systems	KLE 35 A2	70 x 70 x 54	A2	5901076
End clamp for free-standing systems	KLE 40 A2	75 x 70 x 54	A2	5901078
End clamp for free-standing systems	KLE 45 A2	80 x 70 x 54	A2	5901080
End clamp for free-standing systems	KLE 50 A2	85 x 70 x 54	A2	5901082
Perforated strip	LB FT	2,000 x 30 x 3	FT	5901950
End clamp with spring	KLE F 25 A2	56 x 46 x 48	A2	5901092
	KLE F 30 A2	56 x 46 x 53		5901093
	KLE F 35 A2	56 x 46 x 58		5901094
	KLE F 40 A2	56 x 46 x 63		5901095
Intermediate clamp with spring	KLZ F 25 A2	50 x 40 x 48	A2	5901062
	KLZ F 30 A2	50 x 40 x 53		5901063
	KLZ F 35 A2	50 x 40 x 58		5901064
	KLZ F 40 A2	50 x 40 x 63		5901065
Screw set for perforated strip	SVLB	-	A2	5901960
Zinc repair spray	ZSF	-	-	2362970

Tab. 4: System item technical data

10.2 PV module sizes matching truss profile types

Truss profile type	Module length mm	Module width mm
TP 1000 FT	5,650	990–1,000
TP 1010 FT	5,705	1,000–1,010
TP 1020 FT	5,760	1,010–1,020
TP 1030 FT	5,815	1,020–1,030
TP 1040 FT	5,780	1,030–1,040
TP 1050 FT	5,925	1,040–1,050
TP 1060 FT	5,980	1,050–1,060
TP 1100 FT	5,090	1,090–1,100
TP 1140 FT	5,270	1,130–1,140
TP 1310 FT	6,035	1,300–1,310

Tab. 5: Truss profiles with matching PV module sizes

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Building Connections

