

Assembly Instruction

COMPACTFLAT S10 PLUS

Version : 3.4

Language : English

Important! Read carefully before installation!



Legal Notice

Subject to change due to technical modifications! These assembly instructions correspond to the technical status of the delivered product and not to the current development status at the manufacturer. If pages or parts of the assembly instructions are missing, please contact the manufacturer's address given below. The original language of these assembly instructions is German. Any assembly instructions in another language are a translation of the assembly instructions in German. Therefore, in case of doubt or contradiction, the authentic German version shall prevail. The installation instructions are protected by copyright. The installation instructions may not be copied, reproduced, microfilmed, translated or converted for storage and processing in computer systems, either in part or in full, without the written permission of AEROCOMPACT Europe GmbH

Copyright by AEROCOMPACT Europe GmbH

Manufacturer

AEROCOMPACT Europe GmbH
Gewerbestrasse 14
6822 Satteins, Austria

office@aerocompact.com
www.aerocompact.com

Creation date

10/2024

TOC

General	4
Applicable documents	4
Limitation of liability	4
Explanation of symbols	4
Safety	5
Appropriate use	5
Personnel requirements	5
Working safely	5
Breakthrough protection	6
Personal protective equipment (PPE)	6
System Overview	7
Basic components S10 PLUS	7
System accessories	8
Accessories ballasting	8
Module accessories	8
System variants	9
Assembly	10
Assembly preparation	10
Required tools for assembly	10
Information for installing on gravel roofs	10
Mount the system on the sealing or protective fleece	10
Mount the system on the gravel	10
Pre-assemble the clamps	11
Measure the module field	12
Installing the modules	13
Installing modules with alpine supports (optional)	15
Ballasting	17
Direct ballasting	17
Ballast tray 450	18
Ballast tray 880	19
Ballast tray 1800 2050 2300	20
Ballasting with gravel	22
Install cable pipe assembly (optional)	23
Slide the cable pipe through the appropriate hole on the ballast tray	23
Attach cable pipe with brackets	24
Cable management	25
Assembly the roof anchor connection	26
Connect system with mechanical attachments	27
Connect angle connection with bracket	28
Assemble MLPE	29
Potential equalization	30
Maintenance, disassembly and disposal	32
Maintenance	32
Disassembly	32
Disposal	32
Appendix	33
Declaration of performance	33
Revision history	33

GENERAL

These assembly instructions describe the assembly procedure and must be strictly adhered to. Read these installation instructions carefully before starting installation. The basic prerequisite for safe working is compliance with all the safety and handling instructions in these installation instructions. In addition, the local accident prevention regulations and general safety regulations for the area of application of the product apply. Illustrations in these instructions are for basic understanding and may differ from the actual design.

APPLICABLE DOCUMENTS

In addition to this manual, you have received an AEROTOOL project report, planning documents and drawings. Always comply with the instructions and notes contained therein.

LIMITATION OF LIABILITY

All information and instructions in these assembly instructions have been compiled taking into account the applicable standards and regulations, the state of the art and our many years of knowledge and experience. Liability provisions are stated in our **terms** and can be accessed at www.aerocompact.com/downloads.

EXPLANATION OF SYMBOLS

SYMBOLS FOR INSTRUCTIONS



Prerequisites for action instruction



Results of action steps



Step by step action instruction



This note provides useful information for smooth installation

SYMBOLS IN ILLUSTRATIONS - ACTIVITIES



Optional component, optional mounting variation



Activity by hand



Check AEROTOOL project report or planning documents



Visual inspection



Observe right angle

SYMBOLS IN ILLUSTRATIONS - TOOLS



Measuring tape, measure



Pencil, mark



Chalk line



Scissors, tin snips, cut to size



Cordless screwdriver, screwdriver



Use a torque wrench, Observe torque



Use Allen key

SAFETY

The following list serves as an indication of the most common safety risks that can occur when installing these products. There is no liability for the completeness of the risks presented. A specific check of the necessary safety measures must be carried out by an authorized specialist company before installation.

APPROPRIATE USE

The CompactFLAT flat roof system is designed exclusively for mounting PV modules on flat roofs or similar flat surfaces. Proper use also includes correct installation in accordance with these installation instructions. Installation must be carried out by qualified personnel who are familiar with the installation of photovoltaic systems and strictly in accordance with the installation instructions, planning documents and project report. The building protection mat included in the scope of delivery is matched to the roof surface defined in the project. Due to the large number of different types of waterproofing used in the past and currently available on the market, the responsible planner must ensure compatibility and the static friction coefficient between the building protection mat and the roof structure of the building on which the system design is based. The friction coefficient is determined during the planning process using the Friction Measurement Kit.

PERSONNEL REQUIREMENTS

Installation may only be carried out by a specialist company and must be carried out strictly in accordance with the installation instructions, the project report and the planning documents. A specialist company is a company that is familiar with the installation and maintenance of photovoltaic systems as part of its normal business operations. National and local building regulations, standards and environmental protection must be complied with. Under no circumstances may the assembly personnel be under the influence of medication, alcohol, drugs or in any other condition that impairs consciousness (e.g. overtiredness). Trainee personnel may only carry out work under the instruction and supervision of specialist personnel who are authorized to train personnel.

WORKING SAFELY

The contractual partner must ensure that the necessary safety measures and the relevant labor law and occupational safety regulations are observed when installing products from AEROCOMPACT Europe GmbH. Information from AEROCOMPACT Europe GmbH on the need to comply with security measures is provided without guarantee and without any claim to completeness and serves only to support the contractual partner. The contractual partner is obliged to inform himself about all relevant regulations concerning working safety and to comply with them. AEROCOMPACT Europe GmbH expressly assumes no responsibility and consequently no liability. Areas below the roof on which work is being carried out must be protected from falling objects. Where this is not possible, the affected areas must be closed to the public and unauthorized personnel. If the weather is unsuitable, work on the roof must not be continued for longer than necessary or must not be started at all. Never carry out installation work in strong winds. Strong winds exert particular enormous forces on the large-area PV modules. There is a risk of a module being torn off the roof and people being injured. Never work in wet conditions or at temperatures below freezing. Depending on the roof pitch, there is a risk of slipping. Only use suitable, intact and tested ladders. Set up and secure ladders according to specifications. Separate rules apply to mechanical climbing aids (elevators, cherry pickers, etc.). Never use the PV mounting system as a climbing support. Keep sufficient distance from overhead power lines. Equipotential bonding between the individual system components must be carried out in accordance with the respective country-specific regulations. When cutting materials to size, make sure there are no burrs, especially on edges and corners where there is a risk of injury.

BREAKTHROUGH PROTECTION

Roof windows, skylights, large ventilation flaps, etc. generally cannot withstand the weight or impact of a person. Such objects must be secured in a similar way to the roof edge. Corrugated fiber-cement roofs can be at risk of breakthrough over the entire surface. Define routes and secure them with load distribution measures. Always use load distribution aids on roof coverings or roof structures (e.g. thin sheet metal, corrugated fiber cement) with insufficient load-bearing capacity.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personal protective equipment is used to protect people from health and safety hazards at work. Personnel must wear personal protective equipment during installation. Personal protective equipment is explained below:



Wear safety goggles when drilling and sawing



Wear cut-resistant work gloves during assembly



Wear safety shoes



Use fall protection



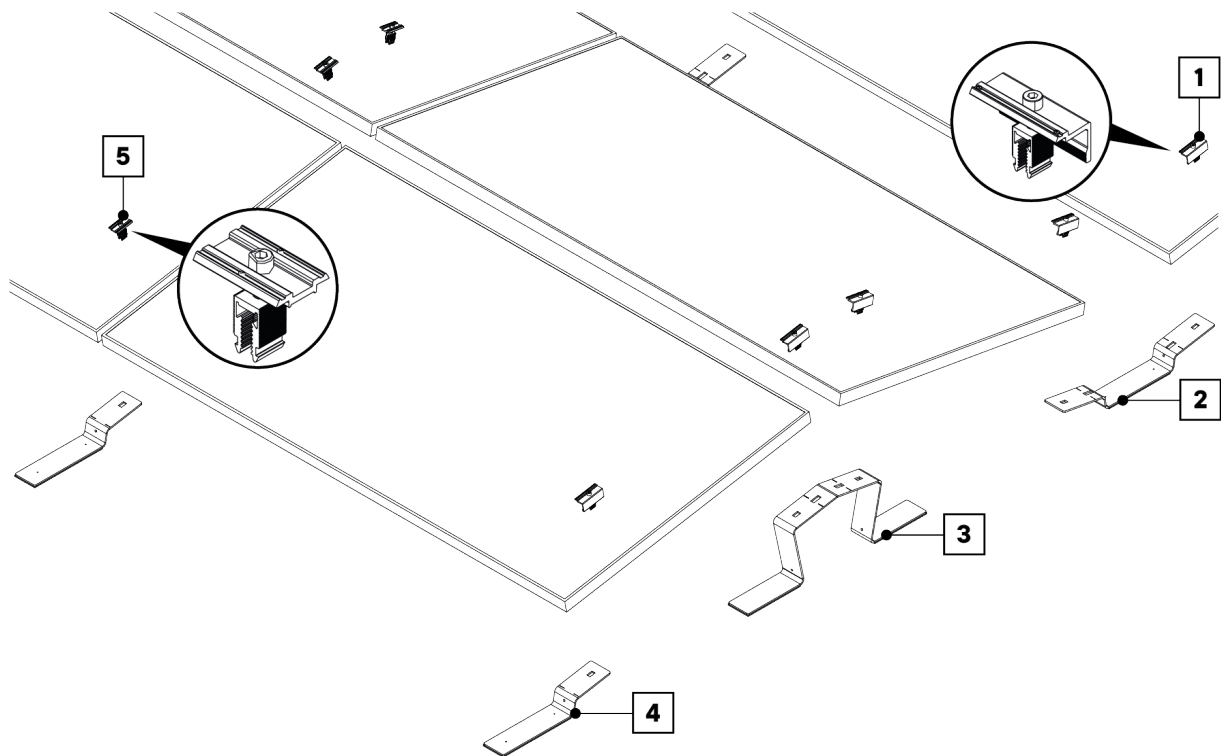
Helmets must be worn by all persons working on the construction site



Wear hearing protection

SYSTEM OVERVIEW

BASIC COMPONENTS S10 PLUS



1 CLE10 PLUS

End clamp Click 30 - 46 mm | length 80 mm

2 S10plusCNS-PP

Connector S10 PLUS long with pad

4 S10FB-PP

Front bracket S10 with pad

2 S10plusCNS-PP

Connector S10 PLUS short with pad

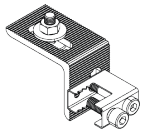
3 S10plusMB-PP

Middle bracket S10 PLUS with pads

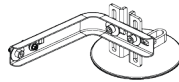
5 CLM10

Middle clamp Click 30 - 46 mm

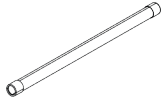
SYSTEM ACCESSORIES



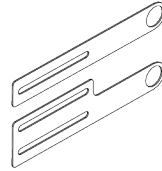
MA-BR
Mounting bracket for MLPE



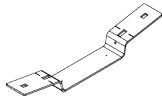
APA
Roof anchor connection



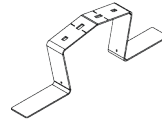
CP-430 | CP-620 | CP-840
Cable pipe



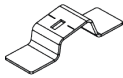
BR-CP
Brackets for cable pipe



S10+CNL-PP | S10+CNS-PP
Connector long and short with construction protection pad

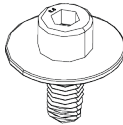


S10+MB-PP
Middle bracket with structural protection pad

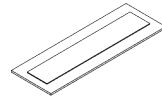


S05FS | S10FS | S15FS
Alpine bracket front

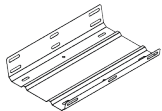
ACCESSORIES BALLASTING



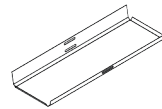
SCS8x20
Thread rolling combination screw M8x20



PP200
Building protection pad for ballast stones and ballast tray



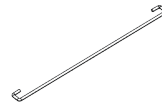
BT-450
Ballast tray short 450 mm



BT-880
Ballast tray short 880 mm



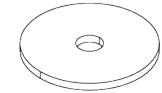
BT-1800 | BT-2050 | BT-2300
Ballast tray long



BSB
Ballast securing bracket

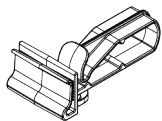


STS4x8
Self-tapping screw M4x8

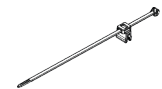


FW4.3
Washer (optional for mounting the ballast tray long)

MODULE ACCESSORIES



CLP-U
Cable clip universal



CLP-M
Cable tie clip for module frames with a thickness of 1 - 3 mm

SYSTEM VARIANTS



Compact FLAT S10plus | 464 mm spacing | 8° - 18° internal shading angle



Compact FLAT S10plus | 297 mm spacing | 10° internal shading angle

ASSEMBLY

ASSEMBLY PREPARATION

i We recommend using a bitumen sheet as a base before starting installation. This measure serves to effectively protect the roof surfaces from possible damage and thus ensure the longevity of the entire system.

Required tools for assembly

i Before starting the assembly, make sure that the assembly personnel are familiar with the proper use of the listed tools.



Bit hexagon socket 6 mm



Bit TORX T40



Measuring tape



Chalk line



Torque wrench 10 - 30 Nm with hexagon socket bit 6mm



Cordless screwdriver

INFORMATION FOR INSTALLING ON GRAVEL ROOFS

i According to the planning documents, the installation of the system takes place either directly on the seal or the protective fleece (coefficient of friction 1.5) or freely on the gravel (coefficient of friction 0.3).

Mount the system on the sealing or protective fleece

✓ Height gravel fill: 30 - 60 mm

i Due to possible damage to the roof waterproofing caused by excessive point loads, it is not recommended to mount the system on a gravel layer of less than **60 mm**.

- ▣ Carefully move aside the gravel in the array field.
- ▣ Install the system components on the roof surface or on the protective fleece.

Mount the system on the gravel

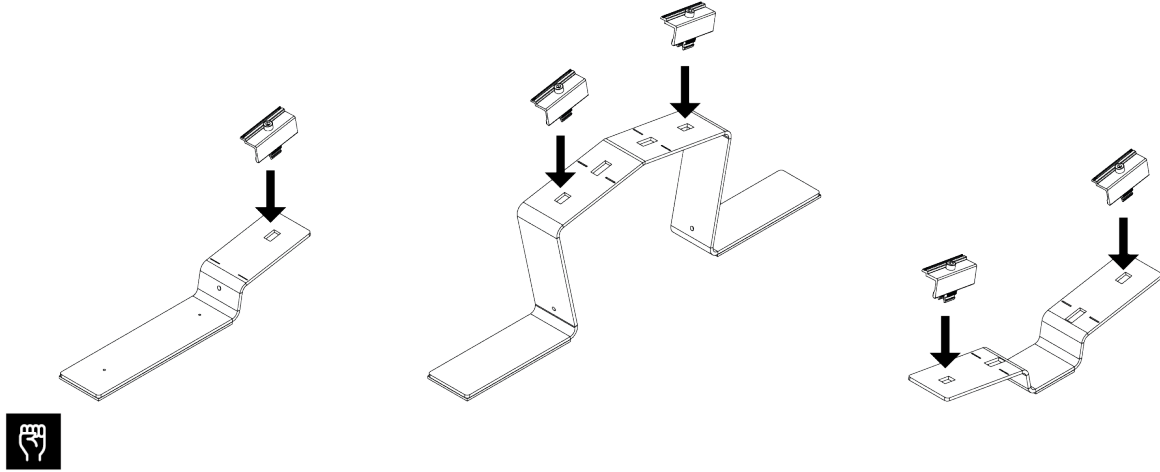
- ✓ The height of the gravel bed is 60 – 100 mm and protective fleece (min. 300 g/m²) is available or the
- ✓ gravel bed is 100 mm or more.

▣ Mount the system on the gravel.

PRE-ASSEMBLE THE CLAMPS

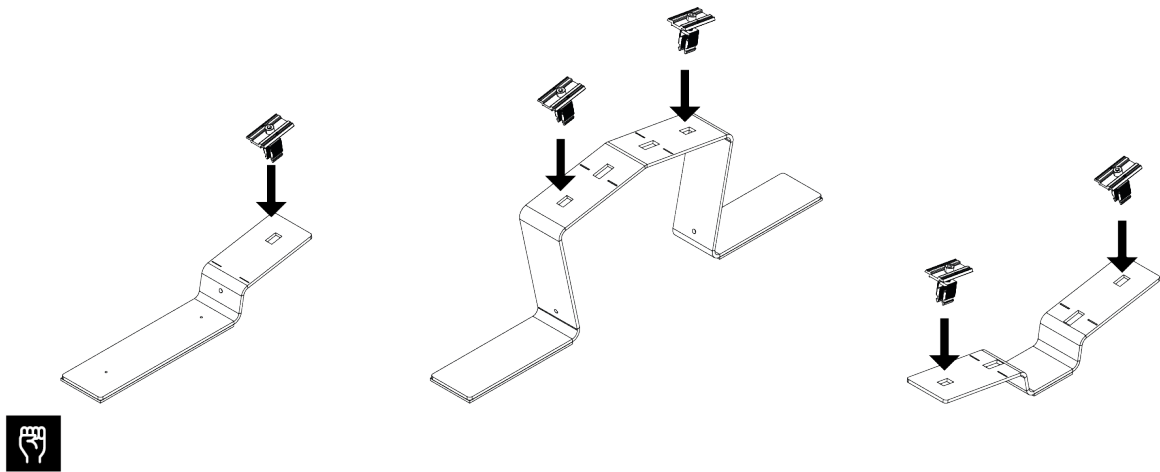
i When **pre-assembling** the end and middle clamps, it is important to ensure that the front brackets, middle brackets, connectors and rear brackets are correctly assigned, see "Measuring the module field" on the next page for more information.

END CLAMPS (NORTH AND SOUTH SIDE)



▶ Attach the end clamps to the front brackets, middle brackets and connectors.

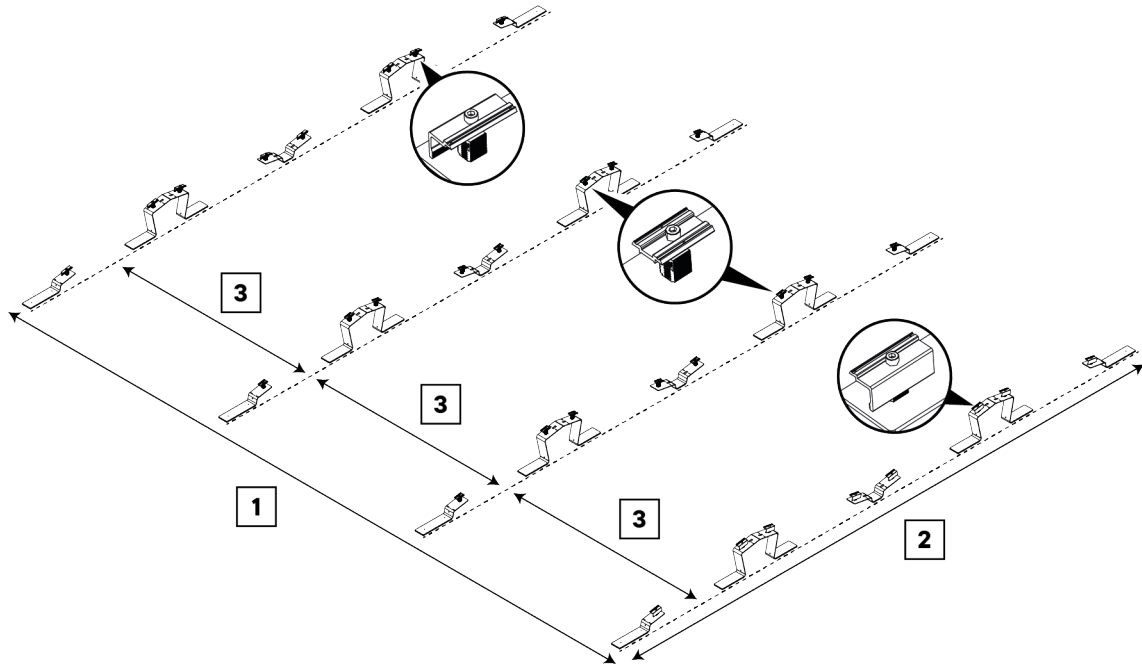
MIDDLE CLAMPS



▶ Attach the middle clamps to the front brackets, middle brackets and connectors.

MEASURE THE MODULE FIELD

i The exact **dimensions** can be found in the attached **planning documents**.



- Measure the length (1) and width (2) of the entire module field and mark the line.
- Measure the single module rows (3) and mark the line.
- Distribute the front brackets, middle brackets, connectors and end brackets in the module field in accordance with the planning documents.

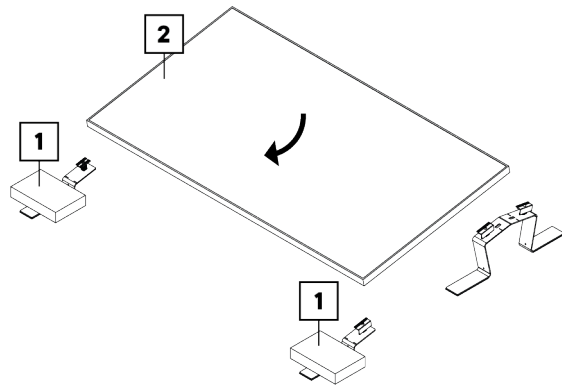
i When distributing, ensure that the **middle clamps** and **end clamps** are positioned correctly.

INSTALLING THE MODULES

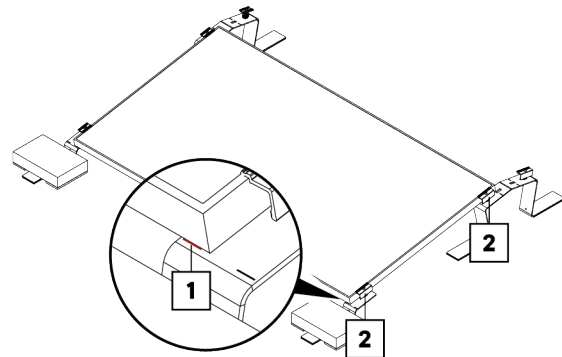
INSTALL THE FIRST MODULE ROW



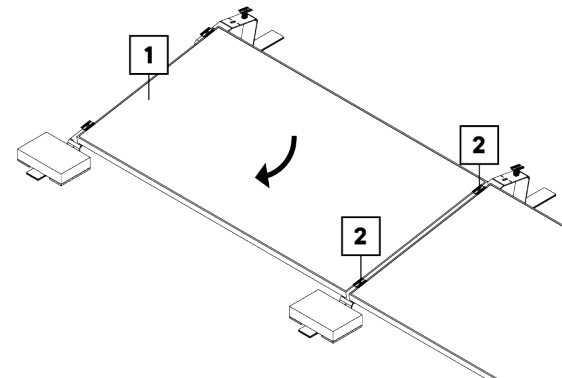
- ▶ Weigh down the front brackets with ballast blocks (1)
- ▶ Position the module (2) on the front brackets and middle brackets.



- ▶ Align the module with the notches (1) on the front brackets and middle brackets.
- ▶ Position the end clamps (2) flush with the module and then tighten to a torque of 15 Nm or 11 lb-ft.



- ▶ Position the following module (1) on the front brackets and middle brackets.
- ▶ Position the middle clamps (2) flush with the module and then tighten to a torque of 15 Nm or 11 lb-ft.

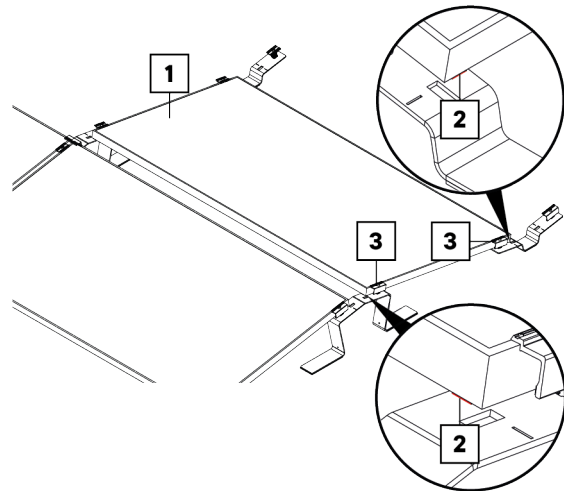


INSTALL THE SECOND MODULE ROW



- Align the module (1) with the notches (2) on the middle brackets and connectors.
- Position the end clamps (3) flush with the module and then tighten to a torque of 15 Nm or 11 lb-ft.
- Install the other modules in the **same sequence**.

i Install the other module rows in the **same sequence**.

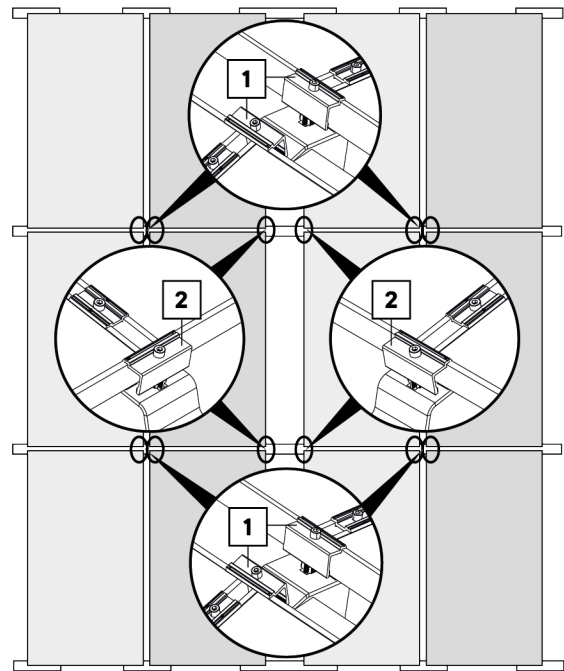


INSTALLING BRACING CLAMPS



i Additional end clamps must be fitted to all **middle brackets** and **connectors** that are **not** positioned at the edge of the module field.

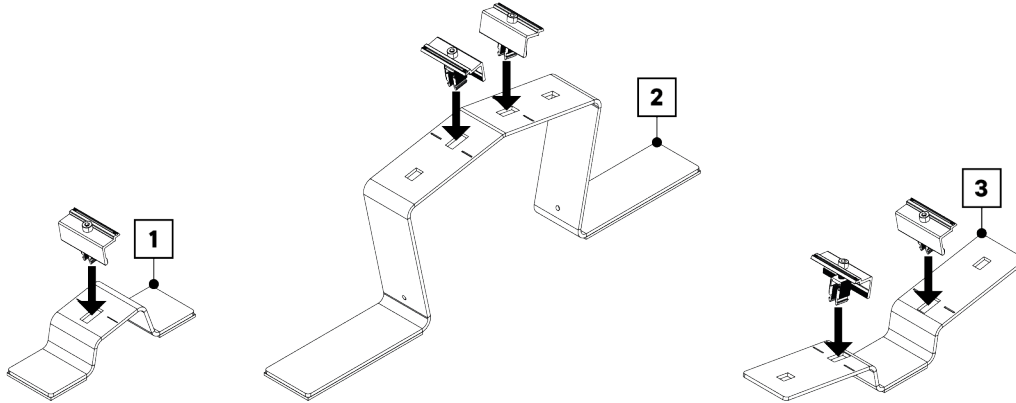
- Attach additional end clamps (1) to all middle brackets and tighten to a torque of 15 Nm or 11 lb-ft.
- Attach additional end clamps (1) to all connectors and tighten to a torque of 15 Nm or 11 lb-ft.



INSTALLING MODULES WITH ALPINE SUPPORTS (OPTIONAL)

i If the specified snow load is exceeded, additional Alpine brackets are attached in the middle of the module. The necessity of using alpine supports can be found in the **planning documents**. Before attaching the alpine supports, it is essential to ensure that the **modules** are suitable both for increased snow loads and for clamping in the intended clamping area.

PREPARE END CLAMPS

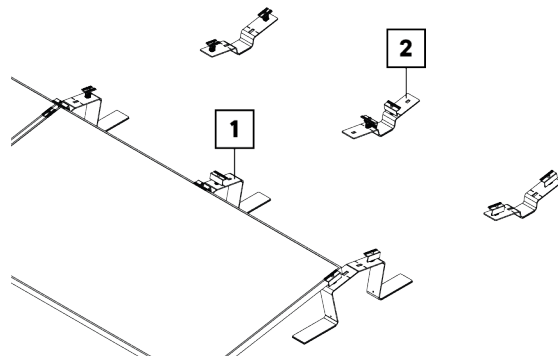


▶ Attach end clamps to the front alpine supports (1), middle supports (2) and connectors (3).

PLACE ALPINE SUPPORTS



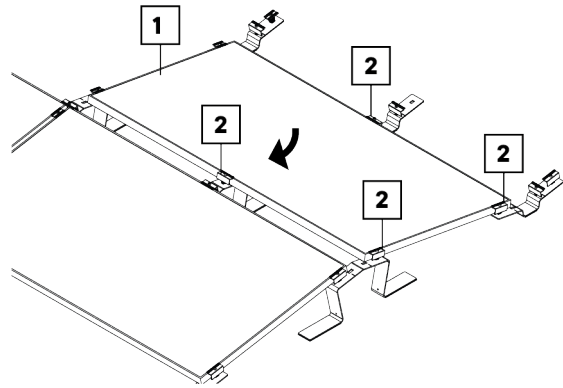
- ▶ Mount the first module row, see chapter "Installing the modules" on page 13
- ▶ Place an additional middle support (1) and a connector (2) in the center of the module.



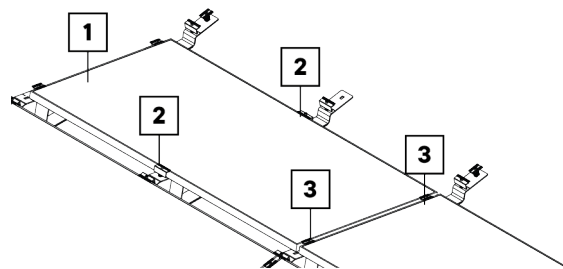
TIGHTEN ALPINE SUPPORTS



- Place module (1) on the middle and connectors brackets.
- Position the end clamps (2) flush with the module and then tighten to a torque of 15 Nm or 11 lb-ft.



- Position the following module (1) on the middle brackets and connectors.
- Position the end clamps (2) and middle clamps (3) flush with the module and then tighten to a torque of 15 Nm or 11 lb-ft.



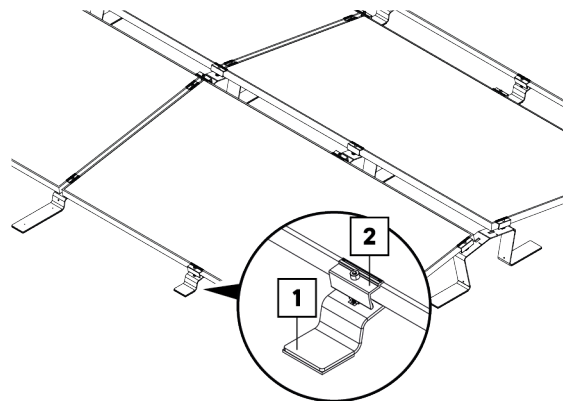
i Install the other module rows in the **same sequence**.

POSITIONING AND MOUNT THE FRONT ALPINE SUPPORTS



i Once all modules and alpine supports have been installed, the **front alpine supports** must be installed on the edge of the east and west sides of the module field.

- Place a front alpine support (1) in the middle of the module on the front and rear row of each module.
- Position the end clamps (2) flush with the module and then tighten to a torque of 15 Nm or 11 lb-ft.



BALLASTING

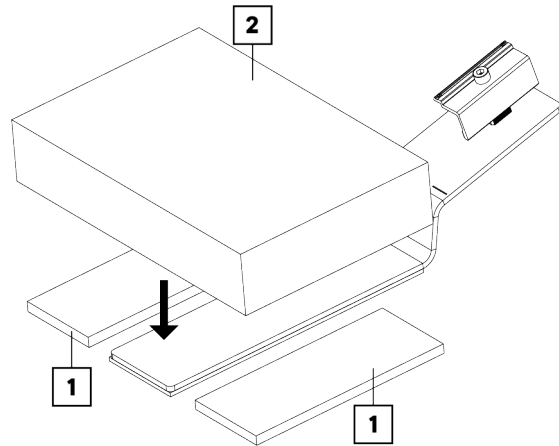
i The exact number and position of the ballast stones and ballast trays are specified in the **AEROTOOL planning documents**. If more than three stones have to be stacked, additional securing of the ballasting is required on site. In such cases, the use of a strap is recommended.

Direct ballasting



- Position the building protection pads (1) to the right and left of the bracket or connector.
- Place the ballast stone (2).

i Recommendation building protection pads:
Attach the building protection pads (1) to the ballast stones using highly weather-resistant construction adhesive to minimize maintenance.



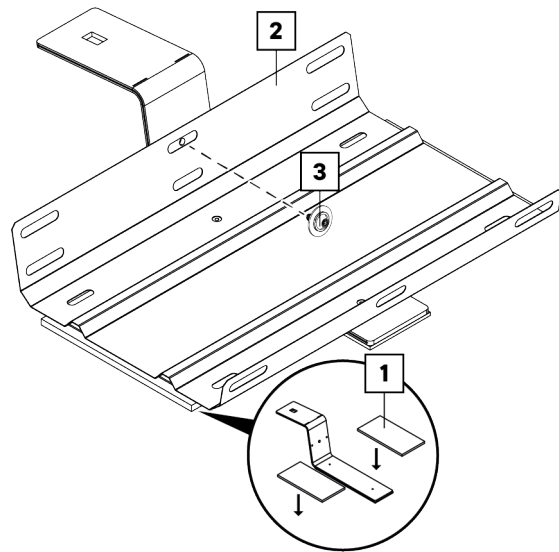
Ballast tray 450



i Recommendation building protection pads:

Attach the building protection pads (1) to the ballast trays using highly weather-resistant construction adhesive to minimize maintenance work.

- Position the building protection pads (1) to the right and left of the bracket or connector.
- Place the ballast tray (2) on top.
- Then tighten the screw (3) with a torque of 15 Nm or 11 lb-ft.

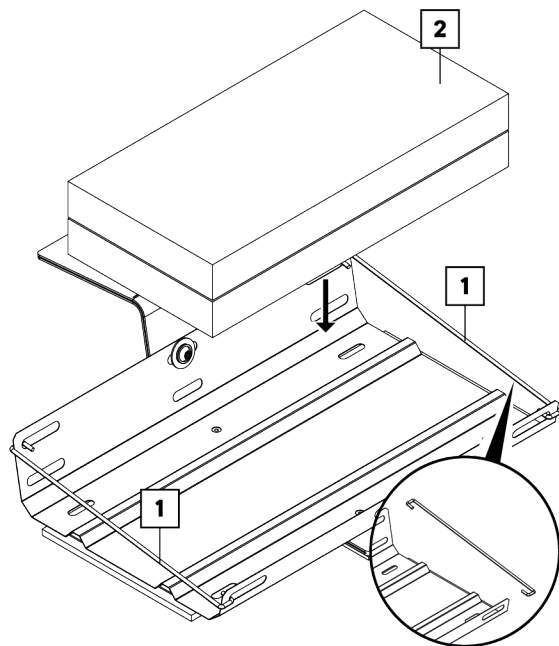


MOUNT THE BALLAST SECURING BRACKET (OPTIONAL)

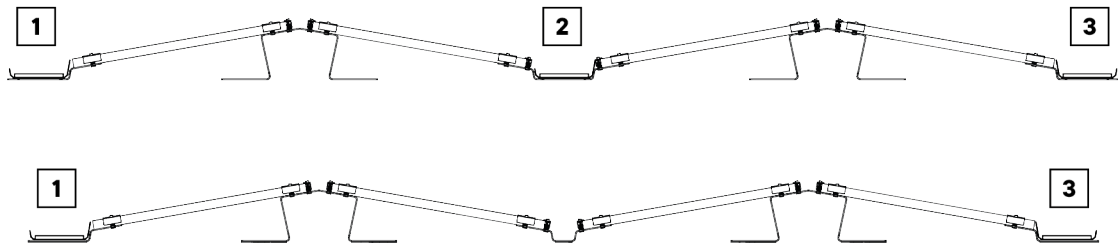


i The ballast securing brackets (1) can **optionally** be attached to the edge of the ballast tray.

- Attach the ballast securing brackets (1) at the side as shown in the illustration.
- Place the ballast stones (2).



Ballast tray 880



The short ballast tray can be attached in the following positions:

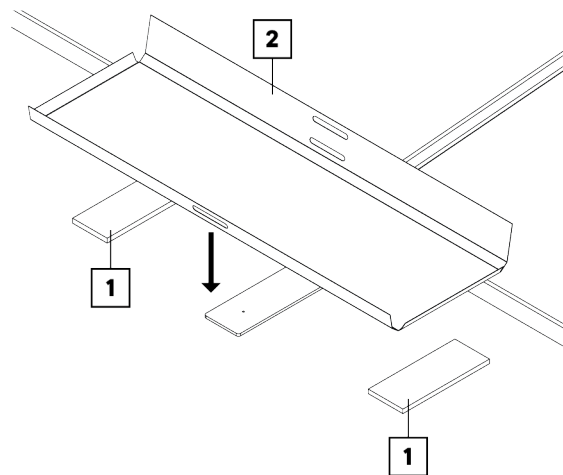
- | | |
|---|--|
| <p>1 S10FB-PP
Front bracket S10 with pad</p> <p>3 S10FB-PP
Front bracket S10 with pad</p> | <p>2 S10plusCNL-PP
Connector S10 PLUS long with pad</p> |
|---|--|

MOUNT BALLAST TRAY

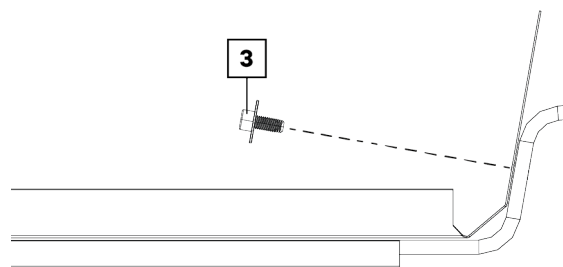


i Recommendation building protection pads:
Attach the building protection pads (1) to the ballast trays using highly weather-resistant construction adhesive to minimize maintenance work.

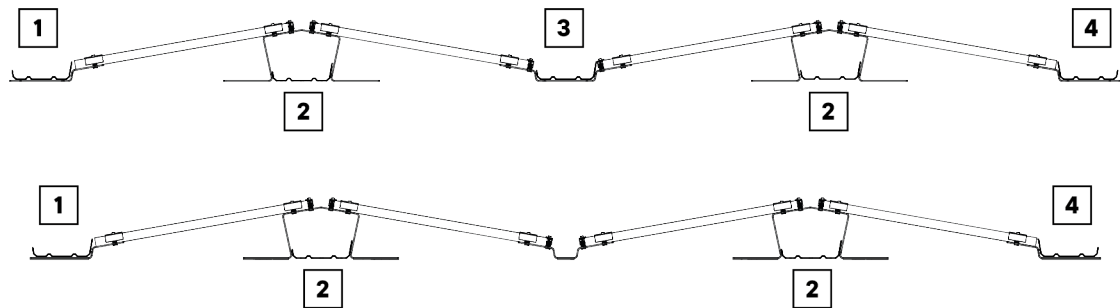
- ☑ Position the building protection pads (1) to the right and left of the bracket or connector.
- ☑ Place the ballast tray (2) on top.



- ☑ Screw the ballast tray (1) to the bracket or connector with a thread rolling screw (2).
- ☑ Tighten the screw with a torque of 15 Nm or 11 lb-ft.



Ballast tray 1800 | 2050 | 2300



The long ballast tray can be attached in the following positions:

- | | |
|--|--|
| <p>1 S10FB-PP
Front bracket S10 with pad</p> <p>3 S10plusCNL-PP
Connector S10 PLUS long with pad</p> | <p>2 S10plusMB-PP
Middle bracket S10 PLUS with pads</p> <p>4 S10FB-PP
Front bracket S10 with pad</p> |
|--|--|

PLACE ROOF PROTECTION PADS

i Recommendation building protection pads:

Attach the building protection pads to the ballast trays using highly weather-resistant construction adhesive to minimize maintenance work.

Depending on the length of the ballast tray, a different number of building protection pads are required per ballast tray:

Length 1800 mm: **3** structural protection pads per ballast tray

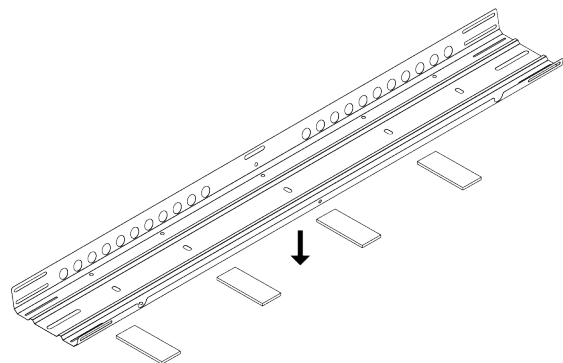
Length 2050 mm: **4** structural protection pads per ballast tray

Length 2300 mm: **5** structural protection pads per ballast tray



i When positioning the building protection pads, make sure that any drainage holes are not covered.

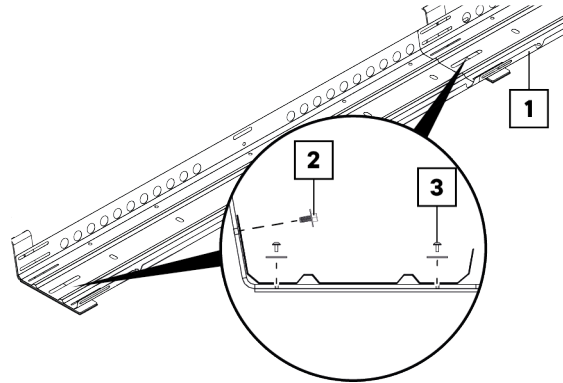
➤ Position the building protection pads (1) to the right and left of the bracket or connector.



S10 PLUS SYSTEM



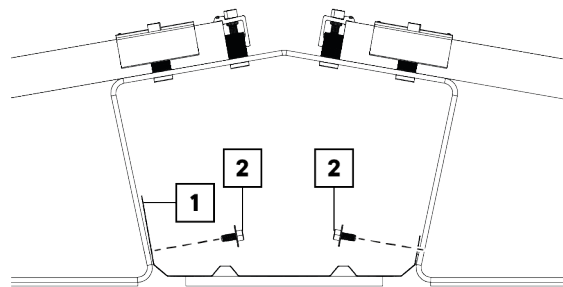
- When overlapping (1) the ballast trays, make sure that the overlap is at the brackets or connectors.
- Screw the ballast tray to the brackets or connectors with thread rolling screws (2).
- Tighten the screw with a torque of 15 Nm or 11 lb-ft.
- **Optional:** Screw the bottom of the ballast trays to the connectors or brackets (3)
- (Use Self-tapping screw STS 4x8).



MOUNT THE BALLAST TRAY FOR MIDDLE BRACKETS



- Place the ballast tray (1) under the middle bracket.
- Screw the ballast tray to the middle brackets with thread rolling screws (2).

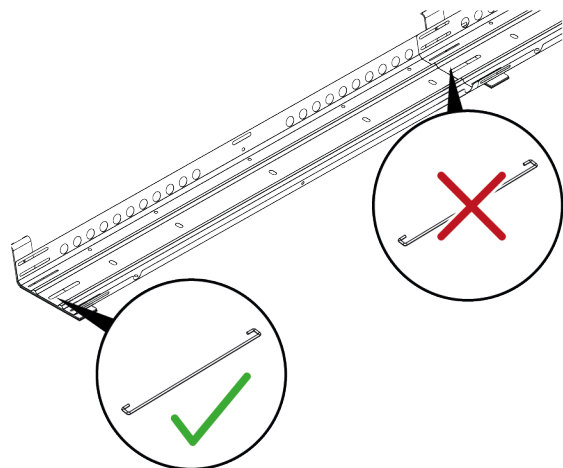


BALLAST SECURING BRACKET BSB (OPTIONAL)



i Important!

The ballast securing bracket **BSB** should only be attached to the edge of the ballast tray. It is not necessary to attach the ballast securing brackets at the overlapping points.



Ballasting with gravel

i In addition to ballasting with ballast stones, it is also possible to ballast **the roofs with gravel**. The prerequisite for this is the use of **short** or **long** ballast troughs.



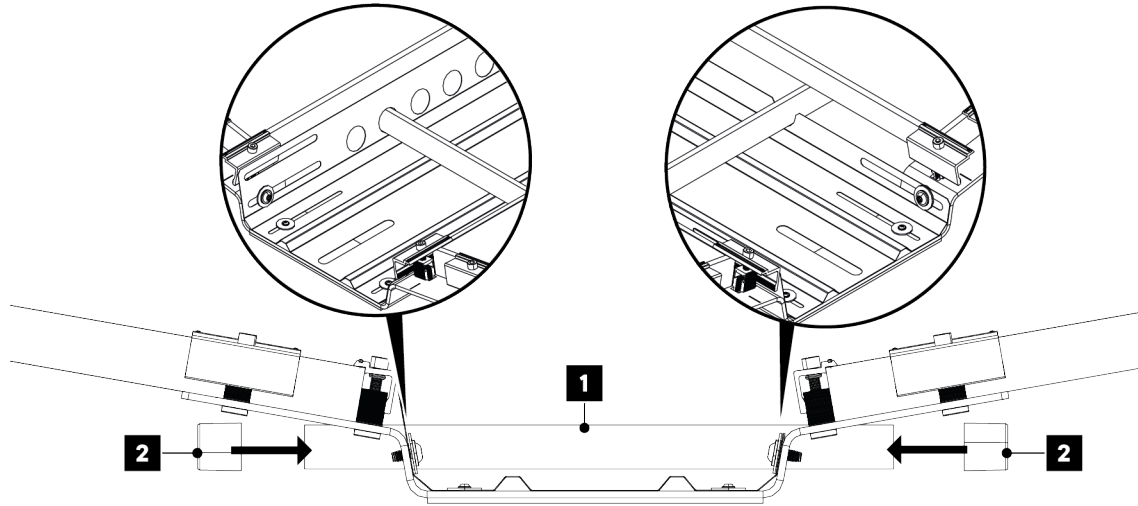
- The ballast walls according to assemble the AEROTOOL planning documents
- Backfill the ballast pans with gravel.
- Spread the remaining gravel evenly over the roof, adding additional gravel if necessary.

i For "Information for installing on gravel roofs" on page 10 see.

INSTALL CABLE PIPE ASSEMBLY (OPTIONAL)

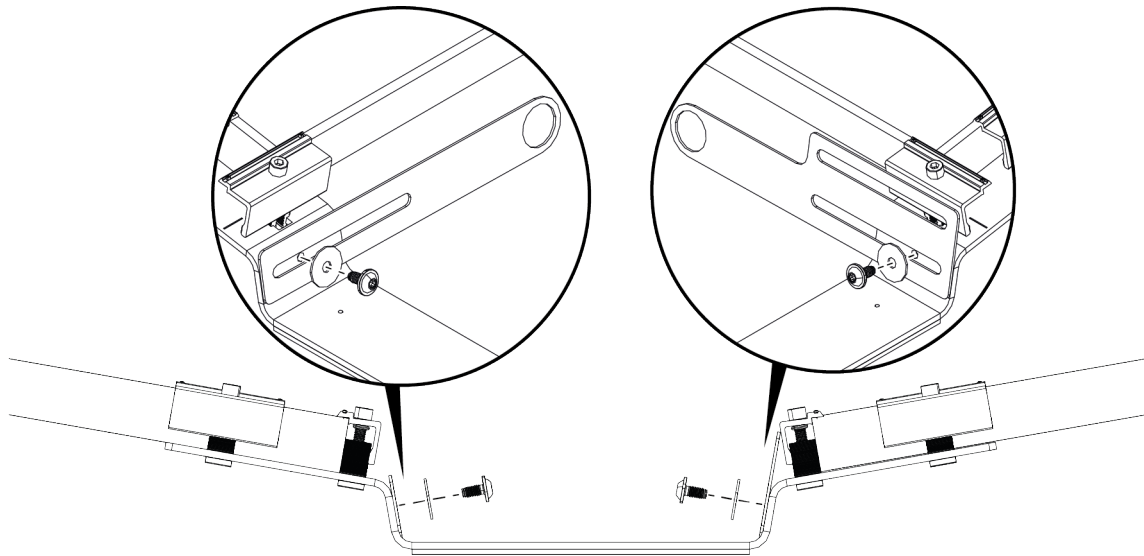
i The cable pipes can be installed at the edges or interior of the module field. Depending on the situation, the cable pipe is installed through the long ballast tray or with the brackets provided.

Slide the cable pipe through the appropriate hole on the ballast tray

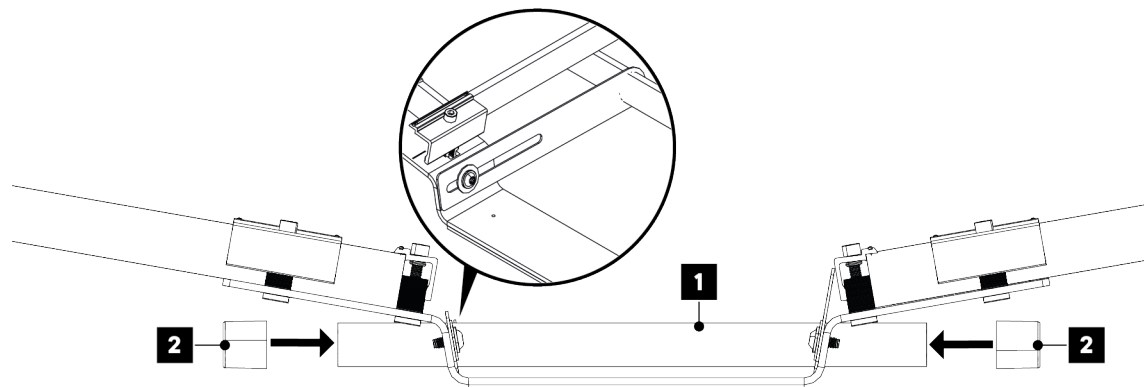


- Attach the cable pipe (1) to the ballast tray.
- Attach the plastic caps to the cable pipe (2).

Attach cable pipe with brackets



- ▶ Screw the brackets to the connector using a thread-forming screw and washer.
- ▶ Tighten the screw with a torque of 15 Nm or 11 lb-ft.

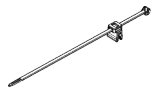


- ▶ Attach the cable pipe (1) to the brackets.
- ▶ Attach the plastic caps (2) to the end of the cable pipe.

CABLE MANAGEMENT

CABLE CLIP CLP-M FOR MODULES

i The **CLP-M cable clip** is suitable for module frames with a sheet thickness of **1 - 3 mm**.



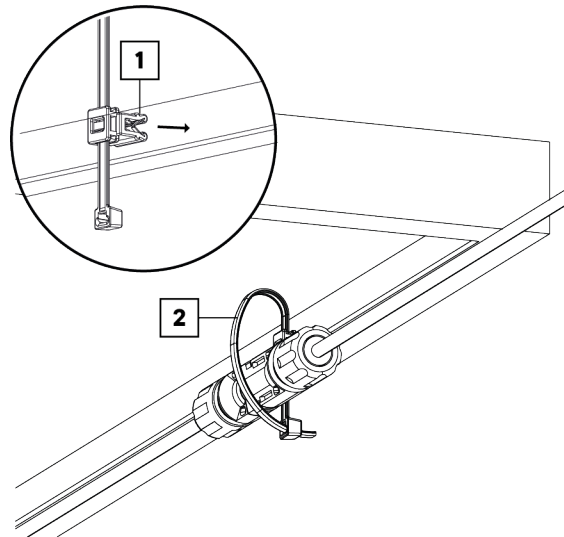
CLP-M

Cable tie clip for module frames with a thickness of 1 - 3 mm

ASSEMBLY

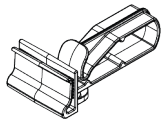


- ▶ Insert the CLP-M (1) into the module frame.
- ▶ The CLP-U is suitable for:
 - Solar plug (e.g. MC4)
 - Solar cable
- ▶ Then tighten the cable tie (2).



CABLE CLIP CLP-U FOR MODULES

i The **CLP-U cable clip** is suitable for module frames with a sheet thickness of **1.5 - 3 mm**.



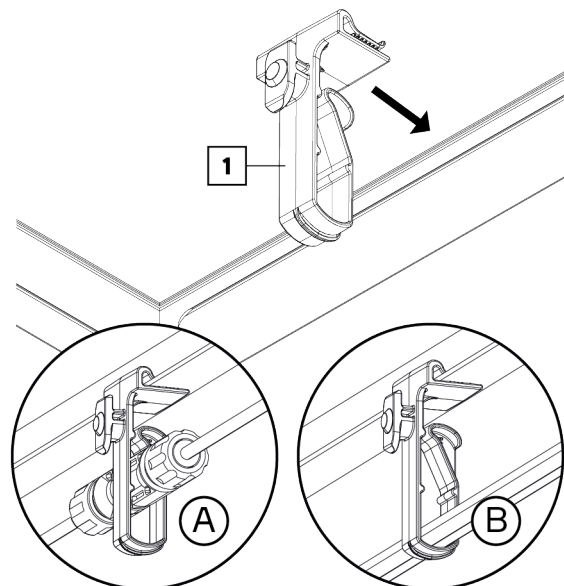
CLP-U

Cable clip universal

ASSEMBLY



- ▶ Insert the CLP-U (1) into the module frame.
- ▶ The CLP-U is suitable for:
 - A** - Solar connectors (e.g. MC4)
 - B** - Solar wire



ASSEMBLY THE ROOF ANCHOR CONNECTION

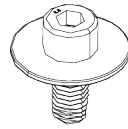
i The roof anchors must be provided by the customer and are not included in the scope of delivery of AEROCOMPACT Europe GmbH. For the installation of the roof anchor connection, the roof anchors must be equipped on site with a threaded rod with a maximum size of **M12 (7/16 inch)**. The number and positions of the roof anchors can be found in the planning documents.

REQUIRED COMPONENTS



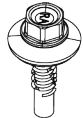
APA

Roof anchor connection



SCS8x20

Thread rolling combination screw M8x20



MSDS 5.5x25

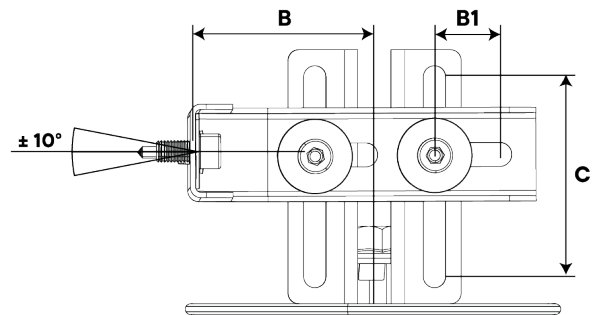
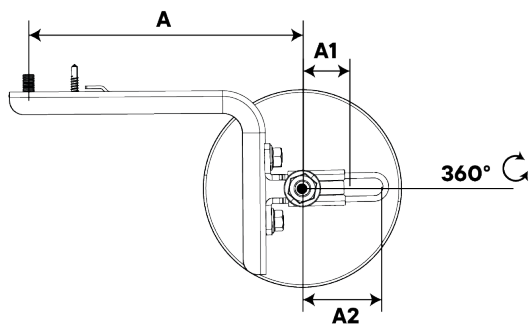
Self-drilling screw 5.5 x 25 mm



MSS6x25

Thin sheet metal screw 6x25

POSITION THE MECHANICAL ATTACHMENTS



i AEROTOOL marks only the components on which the mechanical attachments are mounted.

- Determine the exact position of the mechanical attachment according to the following dimensions/tolerances:
 A: 218 mm / 8.58 inch; A1: 0 - 30 mm / 0 - 1.18 inch; A2: 64 mm / 2.52 inch; B: 66 - 89 mm / 2.60 - 3.50 inch; B1: 28 mm / 1.10 inch; C: 74 mm / 2.91 inch

Connect system with mechanical attachments

i It is possible to install the roof anchor in combination with the wind deflectors and/or ballast trays.

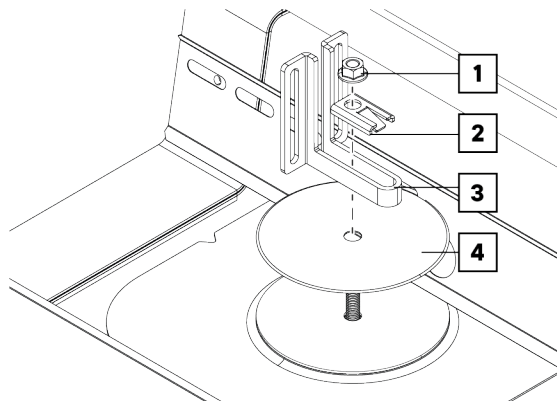


i The hexagon nut (1) is not included in the scope of delivery and must be organized by the customer.

➤ Fit the washer (4), bracket (3) and spacer (2) as shown in the illustration.

➤ Then tighten the hexagon nut (1) hand-tight.

i Make sure that the tab of the spacer (2) faces outwards.



INSTALL ANGLE CONNECTION WITH SELF-DRILLING SCREW

i The self-drilling screw is used when pre-drilling is not possible. It is recommended to always pre-drill if possible.



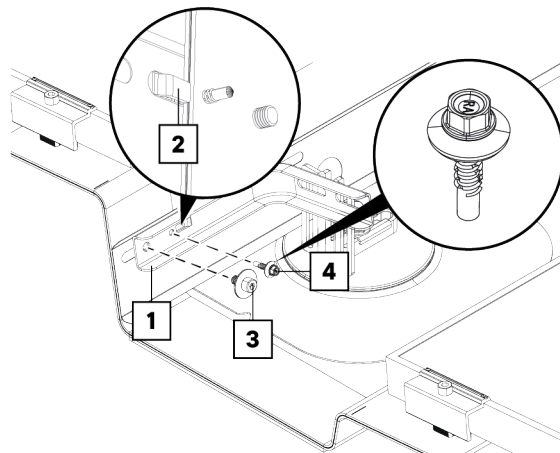
➤ When attaching the angle connection (1) to the connector, ensure that the tab (2) is in contact.

➤ Tighten the angle connection (2) with the SCS8x20 screw (3).

➤ Then screw in the MSDS 5.5x25 screw (4).

i Attention:

Remove the metal shavings from the MSDS 5.5x25 screw (4) from the roof covering.





INSTALL ANGLE CONNECTION WITH THIN SHEET METAL SCREW

Warning







Risk of injury from chips and sharp edges

Cut injury due to contact

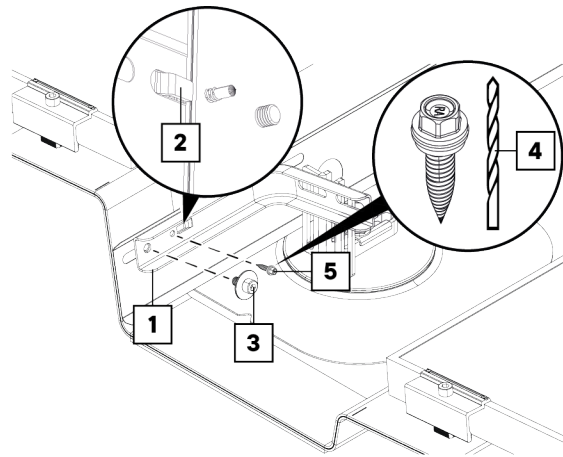
-  Wear safety goggles
-  Tie your hair up



-  When attaching the angle connection (1) to the connector, ensure that the tab (2) is in contact.
-  Tighten the angle connection (2) with the SCS8x20 screw (3).
-  Pre-drill the second hole of the angle connection with a drill \varnothing 4 mm.
-  Then screw in the MSS6x25 screw (4).




Attention:

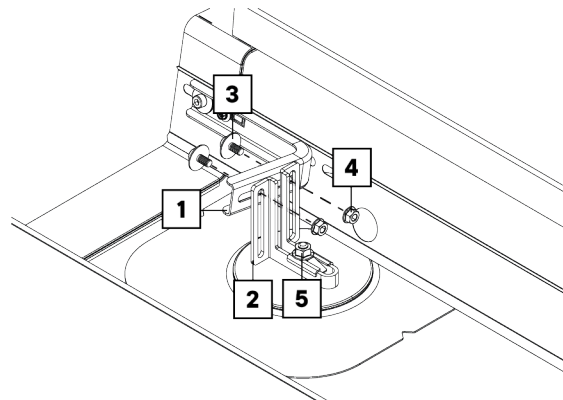
Remove the metal shavings from the MSS6x25 screw (4) from the roof covering.



Connect angle connection with bracket



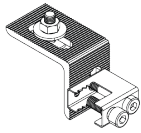
-  Position the angle connection (2) and the bracket (3) flush against each other.
-  Connect the angle connector (2) and the bracket (3) to each other at the slotted holes using the thread-forming screws (1) and hexagon nuts (4).
-  Tighten the hexagon nuts (4) and (5) each to a torque of 15 Nm or 11 ft-lb.



ASSEMBLE MLPE

i The **MLPE (Module Level Power Electronics)** is mounted on the front brackets, middle brackets, connectors or rear brackets.

REQUIRED COMPONENTS

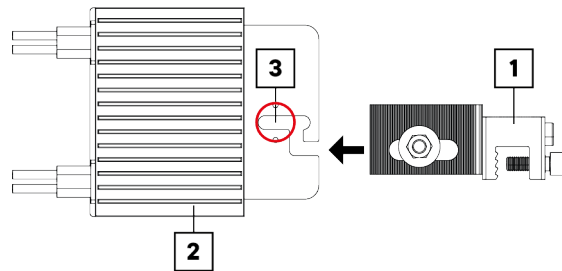


MA-BR
Mounting bracket for MLPE

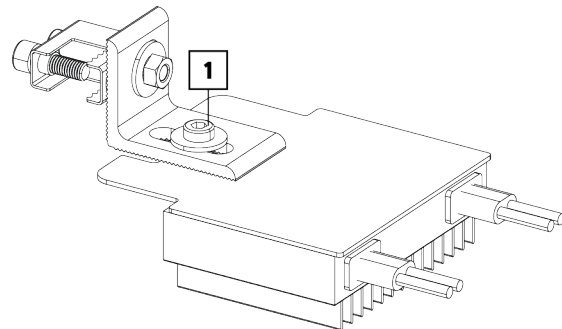
ASSEMBLY (EXAMPLE CONNECTOR)



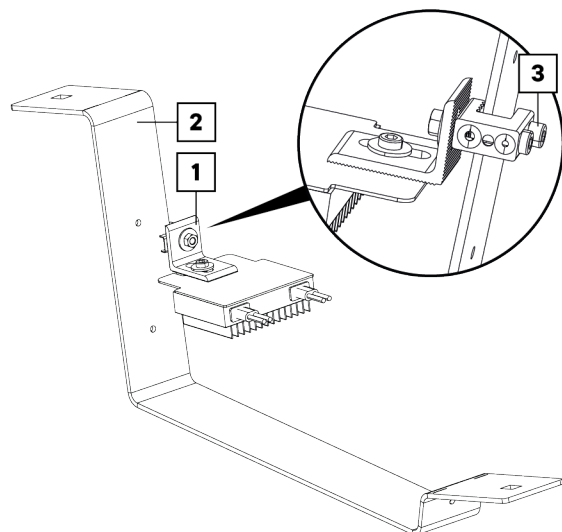
- ▶ Insert the clamp (1) into the device (3) of the MLPE (2) as shown in the illustration.



- ▶ Tighten the screw (1) with a torque of 15 Nm or 11 lb-ft.

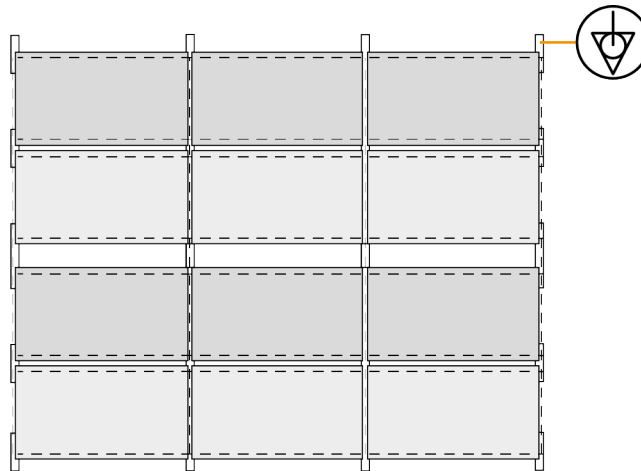


- ▶ Guide the MLPE (1) with the clamp to the connector (2).
- ▶ Insert the clamp (1) so that the connector (2) is between the clamp.
- ▶ Then tighten the screw (3) with a torque of 15 Nm or 11 lb-ft.
- ✓ The MLPE is now mounted.



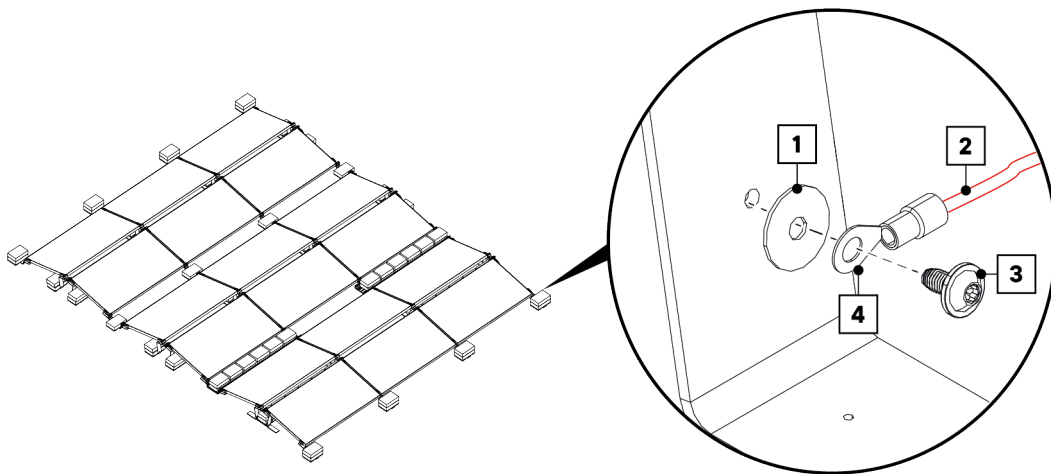
POTENTIAL EQUALIZATION

i The modules of an array field are bonded to each other by the module clamps and brackets/ connector brackets.



MOUNT EQUIPOTENTIAL BONDING

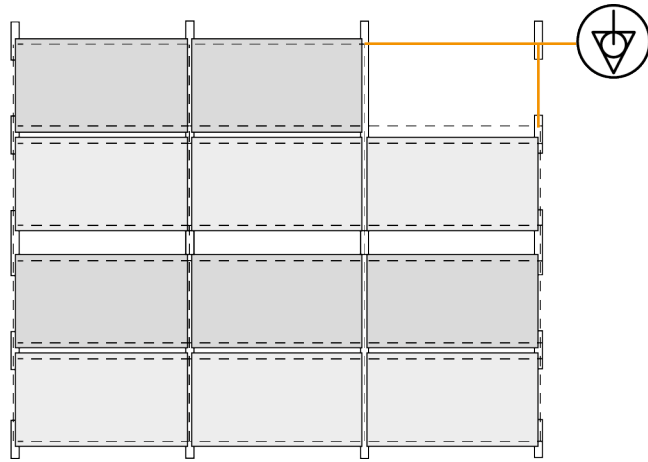
i For grounding, use a commercially available cable lug in accordance with national regulations / certifications. Use a suitable bolt (M6), washer and self-locking nut. The grounding materials must be provided by the customer (cable lug, M6 screw, washer, self-locking nut, ground wire).



i Attach the grounding to the bracket. If wind deflectors/ballast trays are available, they can be mounted together.

- Remove existing screw.
- Connect ground wire (2) firmly to cable lug (4).
- Fasten the cable lug to the bracket with screw (3), washer (1) and tighten with a torque of 15 Nm or 11 ft lb.

POTENTIAL EQUALIZATION DURING MAINTENANCE WORK



i Heads up!

To ensure that the connection between the remaining modules and the equipotential bonding is guaranteed, additional grounding clamps and grounding wire must be attached when a module is removed.

MAINTENANCE, DISASSEMBLY AND DISPOSAL

MAINTENANCE

To prevent personal injury and damage to property, the system must be checked regularly by qualified personnel and annual maintenance is required.

- Check all system components for damage. In the event of damage, replace the affected component immediately.
- Check all screw connections. Tighten loose screw connections, observing the tightening torque specified in the installation instructions.
- Checking all components for damage caused by the weather, animals, dirt, deposits, build-up, vegetation, roof penetrations, seals, stability and corrosion. In the event of damage, clean, repair or replace the affected component.

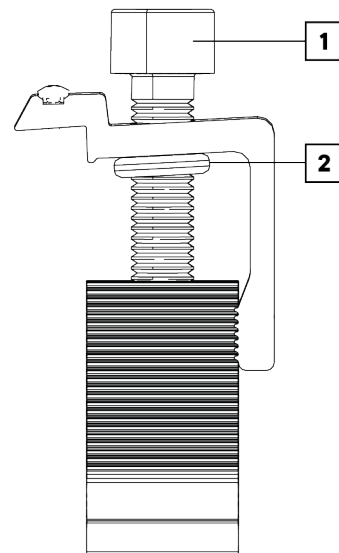
DISASSEMBLY

DISMANTLING THE CLAMPS (EXAMPLE)



i To disassemble the system, carry out the assembly steps in reverse order.

- ☒ Unscrew the screw (1) on the clamp.
- ☒ When reusing the clamp, ensure that the O-ring (2) is not lost.
- i** If the components are reused, it must be noted that these are wearing parts. Therefore, the AEROCOMPACT Europe GmbH cannot assume any responsibility for checking the degree of wear. For this reason, any liability or warranty of AEROCOMPACT Europe GmbH in case of reuse is excluded and reuse is at the installer's own responsibility.



DISPOSAL

Unless a take-back or disposal agreement has been made, disassembled components should be recycled:

- Give metals and plastic elements for recycling.
- Dispose of remaining components sorted according to material composition.

i Incorrect disposal may result in hazards to the environment. In case of doubt, obtain information on environmentally sound disposal from the local municipal authority or from specialized disposal companies.

APPENDIX

DECLARATION OF PERFORMANCE



Manufacturer: **AERCOMPACT Europe GmbH**
Designation: **CompactFLAT S10plus East/West system for flat roofs**
Identification code: **S10plus**
Applied standard: **EN 1090**
Certification body: **2397**



[For the declaration of performance](#)

REVISION HISTORY

Version	Chapter	Modification
v3.4	"Cable management" on page 25	New chapter added

Europe / APAC

AEROCOMPACT® Europe GmbH
Gewerbestraße 14
6822 Satteins
Austria
phone: +43 5524 22 566
e-mail: office@aerocompact.com

USA / Canada

AEROCOMPACT® Inc.
901A Matthews Mint Hill Road
Matthews, NC 28105
USA
phone: +1 800 578 0474
e-mail: office.us@aerocompact.com

India

AEROCOMPACT® India Private Ltd.
Hub and Oak
C-360, Defence Colony
New Delhi, 110024
phone: +91 888 26 32 902
e-mail: office.in@aerocompact.com

