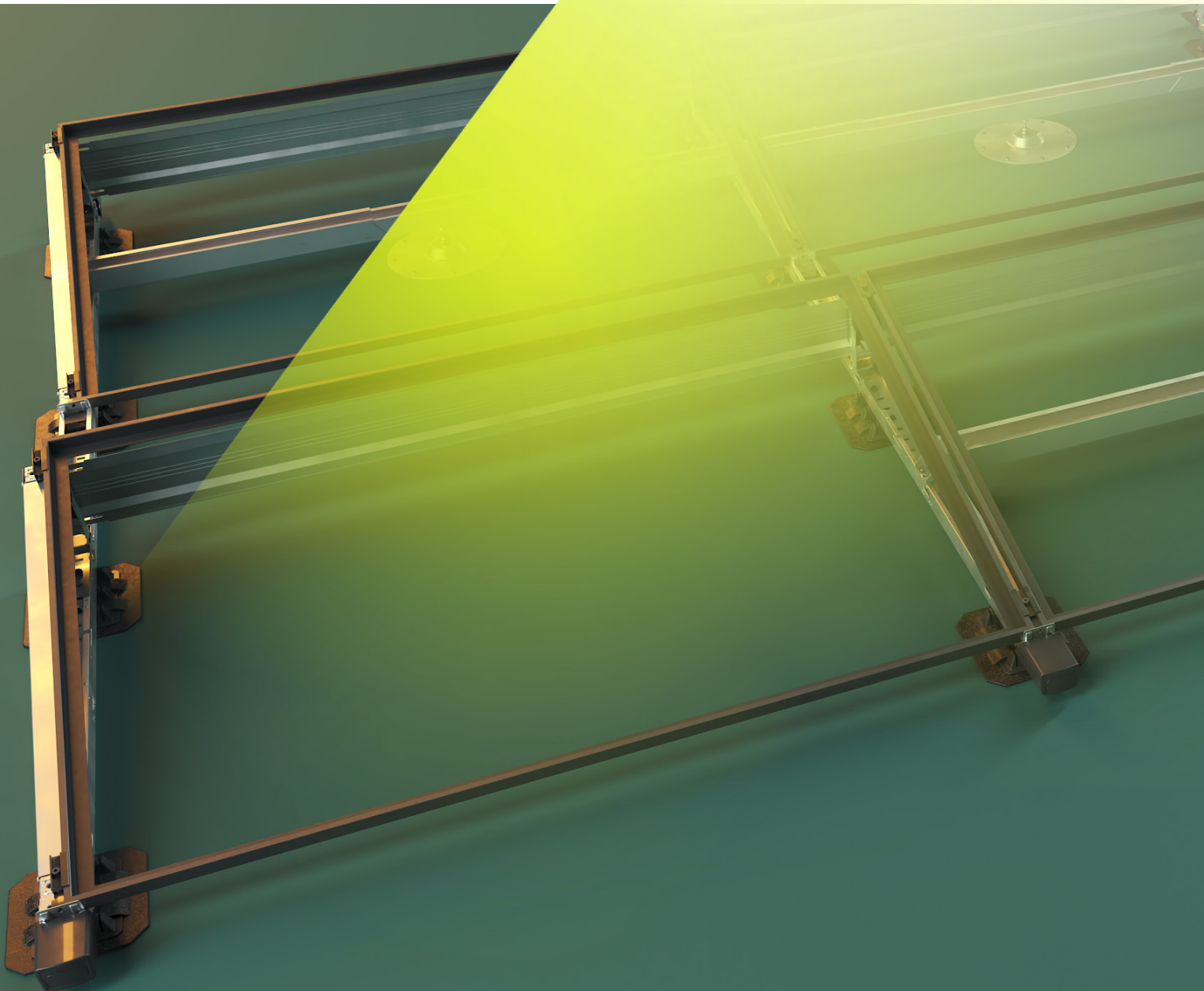


ENSTALL

Connect

Connect Anchoring Profile Manual



blu**base**

TABLE OF CONTENTS

Introduction	3
About this document	3
Other relevant documents	3
Symbols used in this manual	3
Warranty and liability	3
Warranty	3
Liability	3
Product information	4
Intended use	4
Specifications	4
Compatible anchor specifications	4
System and application	5
1. Components	5
Safety	6
1. Personal protective equipment	6
2. Safety warnings and regulations	6
Installation	7
1. Preparation	7
2. Single anchoring base profile	8
3. Multiple anchoring profiles	11
Annexes	17
A. Self-tapping screw examples	17

INTRODUCTION

ABOUT THIS DOCUMENT

This manual covers the installation instructions for Connect Anchoring profiles used in combination with roof anchors to secure Connect systems to flat roofs.

These instructions are addressed at qualified technical personnel.

You can download the latest version of this manual from eu.enstall.com.

OTHER RELEVANT DOCUMENTS

When installing the Blubase Connect Anchoring profiles, you will need the following documents in addition to this manual:

- The project plan, which you can create in the calculator at <https://eu.enstall.com/en/calculator>.
- The installation manuals for the solar panels, inverters and any other components.

During the installation of the mounting system, it is important to adhere to the installation manual, the installation manual of the components, and the accompanying standards to prevent accidents. Pay special attention to (local) standards, regulations and legislation (among others):

- Local Building Regulations (latest version)
- Health and Safety at Work etc Act 1974
- Health and Safety in Roof work - HSE
- Eurocodes 0 (EN 1990 - Structural Design)
- Eurocodes 1 (EN 1991 - Influences on structures)
- HD-IEC 60364 series - Electrical installations for low voltage
- EN-IEC 62305-2 - Protection lightning - Risk Management
- MIS 3002 – The solar PV standard
- MCS012 - Product Certification Scheme Requirements: Pitched Roof Installation Kits

SYMBOLS USED IN THIS MANUAL

	Warning!	Failure to follow this instruction could result in serious injury or major damage to the product.
	Caution!	Failure to follow this instruction could result in personal injury or damage to the product.
	Note	Emphasises an instruction.

WARRANTY AND LIABILITY

WARRANTY

The warranty is subject to the warranty terms and general terms & conditions of Enstall. These can be found on the eu.enstall.com website.

LIABILITY

The manufacturer accepts no liability for damage or injury caused by the failure to comply (strictly) with the safety guidelines and instructions in this manual, or by negligence during installation of the product and the accessories listed in this document. Enstall reserves the right to change this document without notice.

PRODUCT INFORMATION

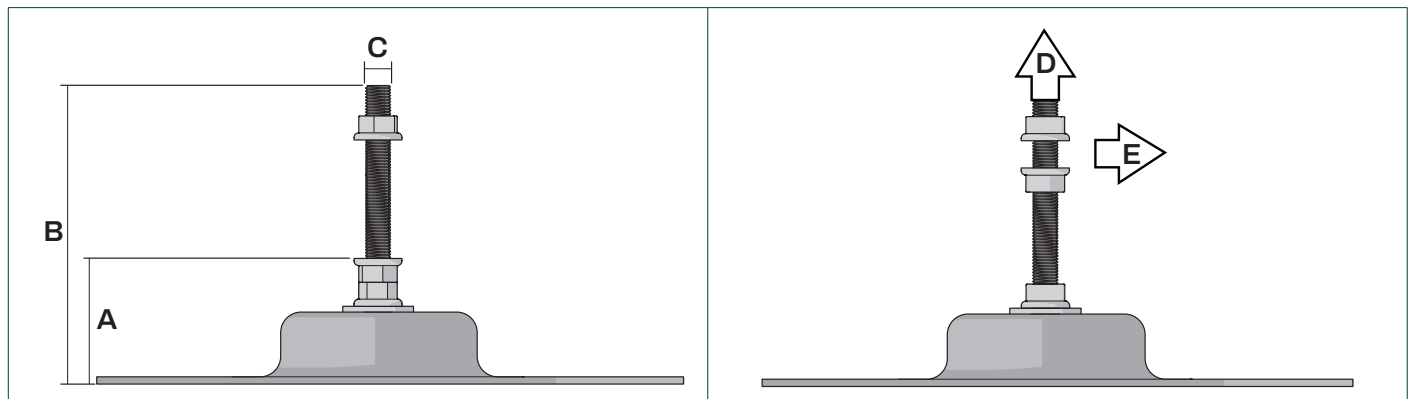
INTENDED USE

The Blubase Connect XL Single mounting system is intended for mounting solar panels on flat roofs. With this mounting system you can install solar panels with the long side at the bottom (landscape). The mounting system is intended to be installed in a single arrangement.

SPECIFICATIONS

Compatible mounting systems	Connect Landscape Connect XL Connect OW Landscape Connect OW projects 2280
Compatible solar panel length	1690-1940mm
Roof pitch	0 - 5°  If your roof slope is > 5°, please contact your supplier.
Maximum roof height	 Subject to Eurocode guidelines and national additions. Use the calculator to calculate the possibilities of your project.
Edge zone	 Calculate the edge zone with the calculator.

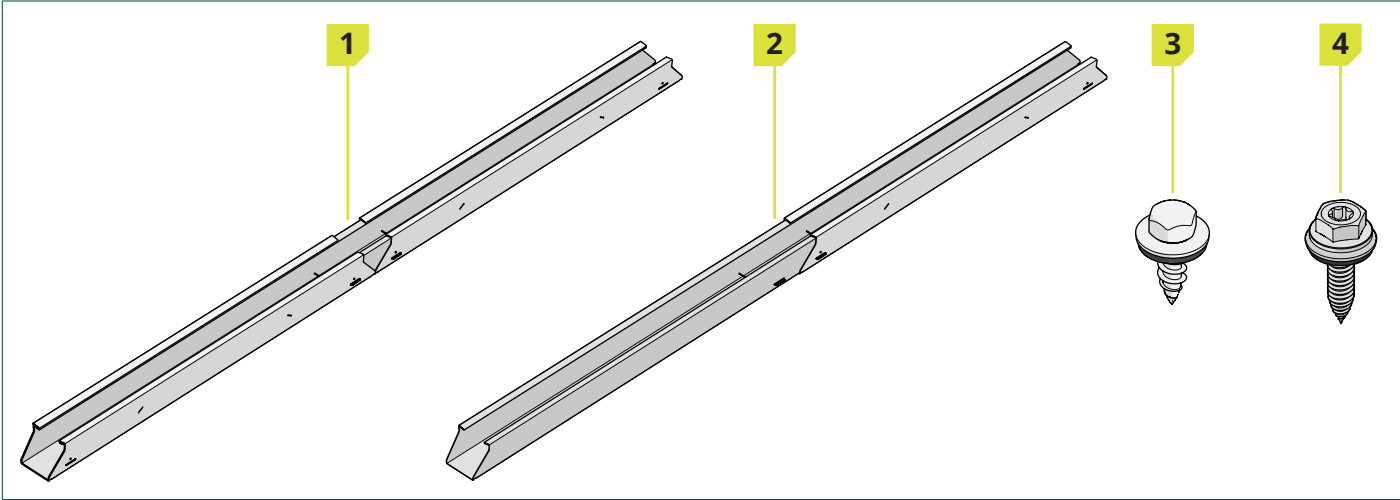
COMPATIBLE ANCHOR SPECIFICATIONS



Dimension	Description	Value
A	Total anchor height, including nut	≤75mm
B	Thread height including top nut	95-165mm
C	Thread size	M10
D	Minimum lift force resistance	2.4 kN
E	Minimum shear force resistance	1.2 kN

SYSTEM AND APPLICATION

1. Components

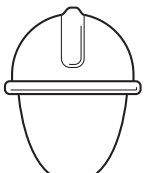


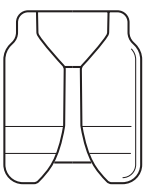
Component		Article number
1)	Connect Anchoring base profile pl=1690-1940	500410
2)	Connect Anchoring extension profile pl=1690-1940	500420
3)	Cladding screw Connect 6.5×19mm	500901
4)	Self-tapping Sheet Metal Screw mounting rail 6.0×25 mm SW10 HEX/T30	1008085

i Check that the correct components are present in the required numbers according to the project plan generated by the calculator.

SAFETY

1. Personal protective equipment

			
Hearing protection	Safety helmet	Safety glasses	Face masks

		
Safety gloves	Safety clothing	Safety shoes

2. Safety warnings and regulations

Warning!

-  Installation work should always be carried out by at least two people.
-  Do not use components from other mounting systems.
-  Do not leave out parts.
-  Always work according to the current regulations for working on roofs.
-  Do not perform the installation in strong winds, or when the roof is slippery or wet.
-  Always work on the roof with fall protection and, if necessary, with safety nets and edge protection.
-  Always use a lifting aid or hoisting device when moving heavy equipment.

Caution!

-  Never walk on the system or on the solar panels.
-  Enstall is in no way responsible for the installation and/or connection of lightning protection on the roof. Get expert advice from your specialist and ensure that a safe installation can be guaranteed according to EN-IEC 62305 and HD-IEC 60364.

INSTALLATION

1. Preparation

1 Check the project plan and components.



Follow the Connect installation manual steps to lay out the grid for the solar panel field, up until the ballast is placed.

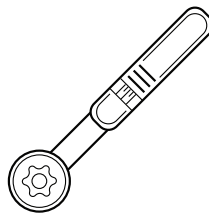


Check the project plan.



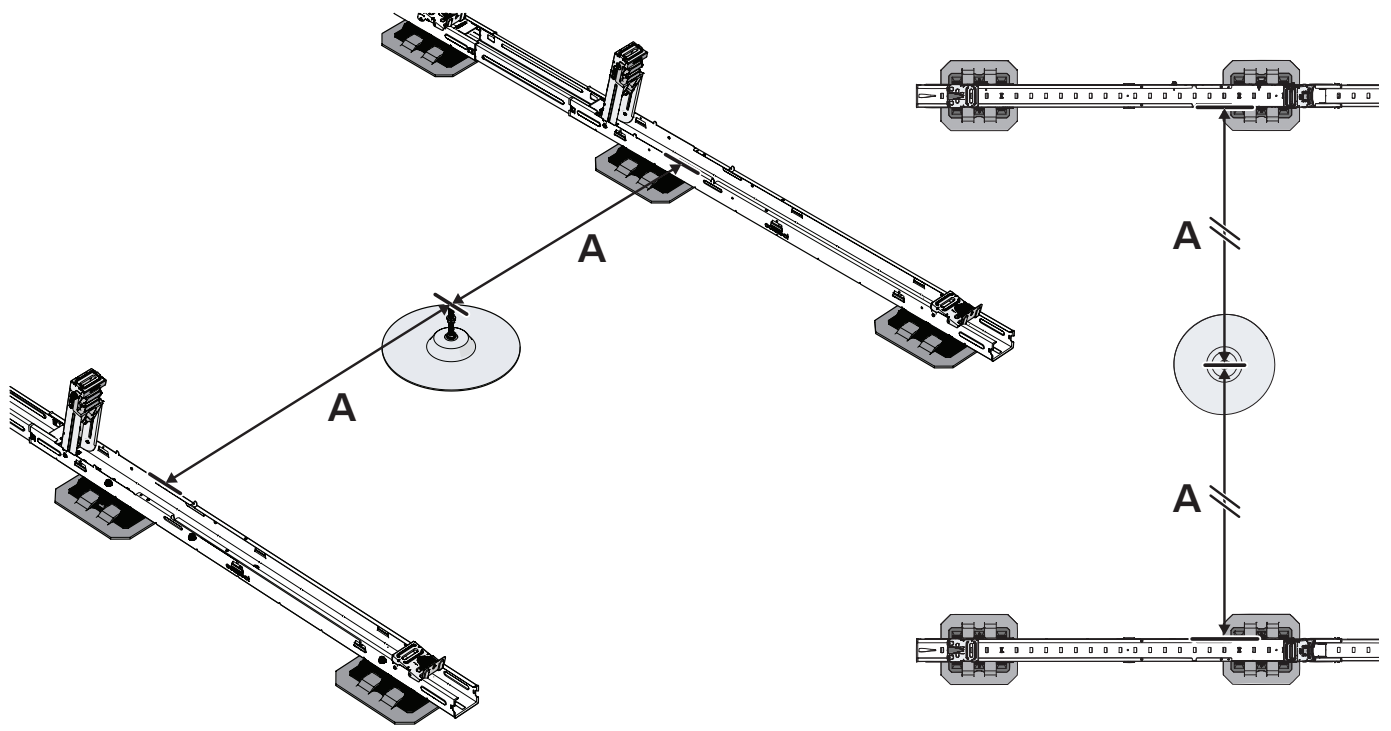
Check that all components are present (page 5).

2 Make sure all the required tools are at hand.



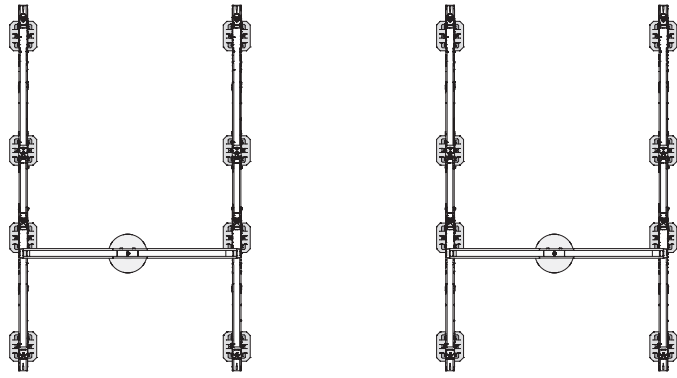
Torque wrench up to 20Nm with TR30 safety bit

3 Check the alignment of the Connect base modules and the roof anchors. The roof anchors should be installed exactly in the middle between two modules, aligned with the screw holes in the modules.

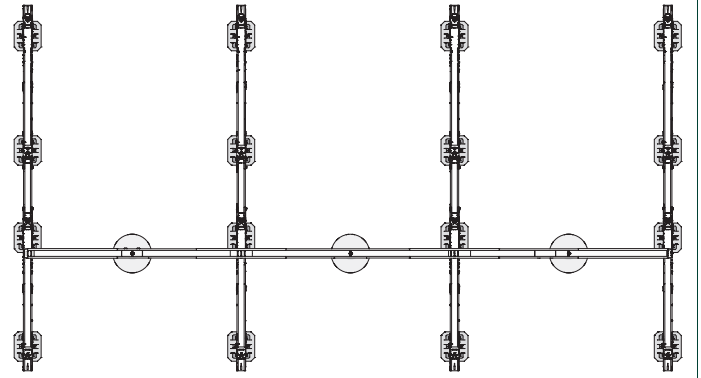


4 Check the project plan and continue to the chapter that matches your configuration.

Go to chapter :

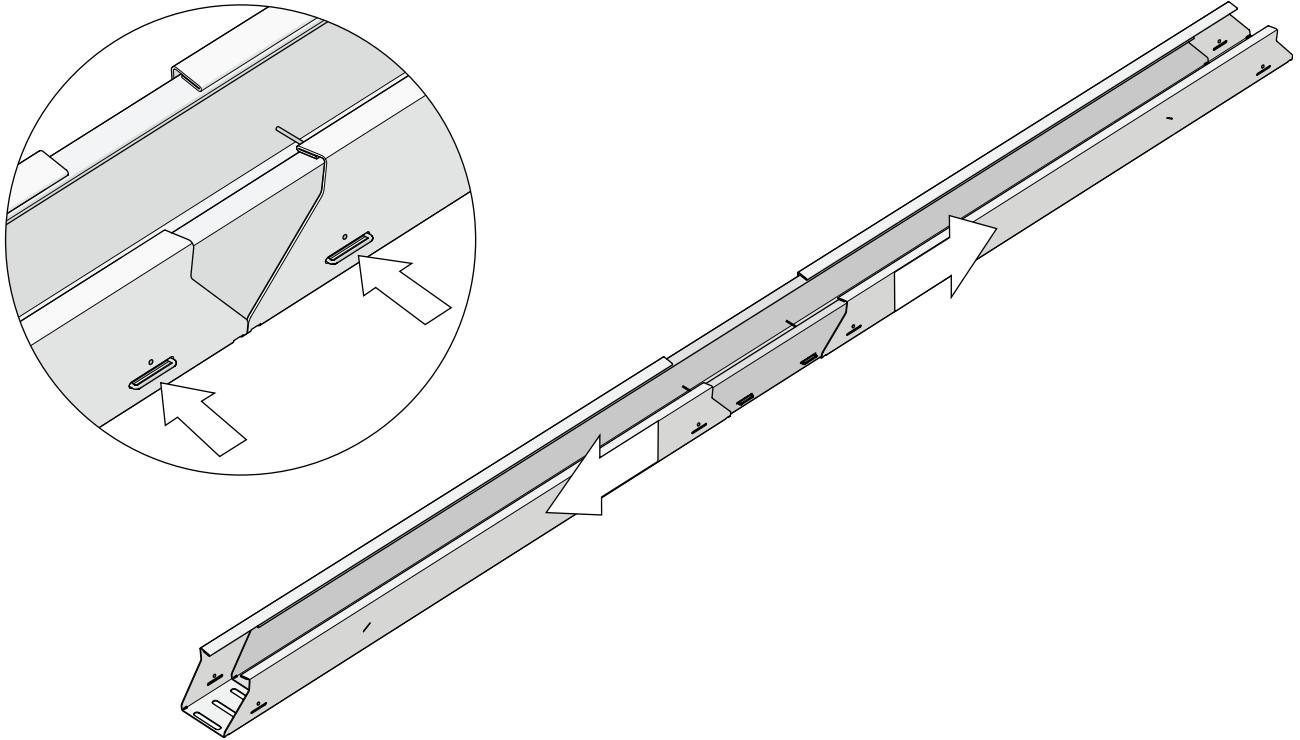


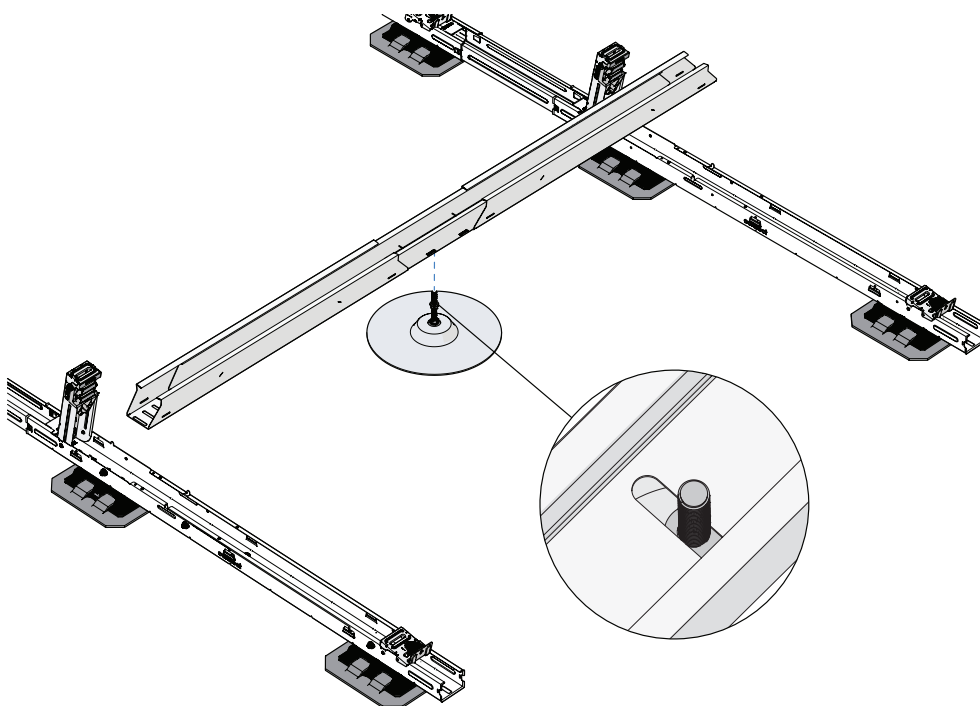
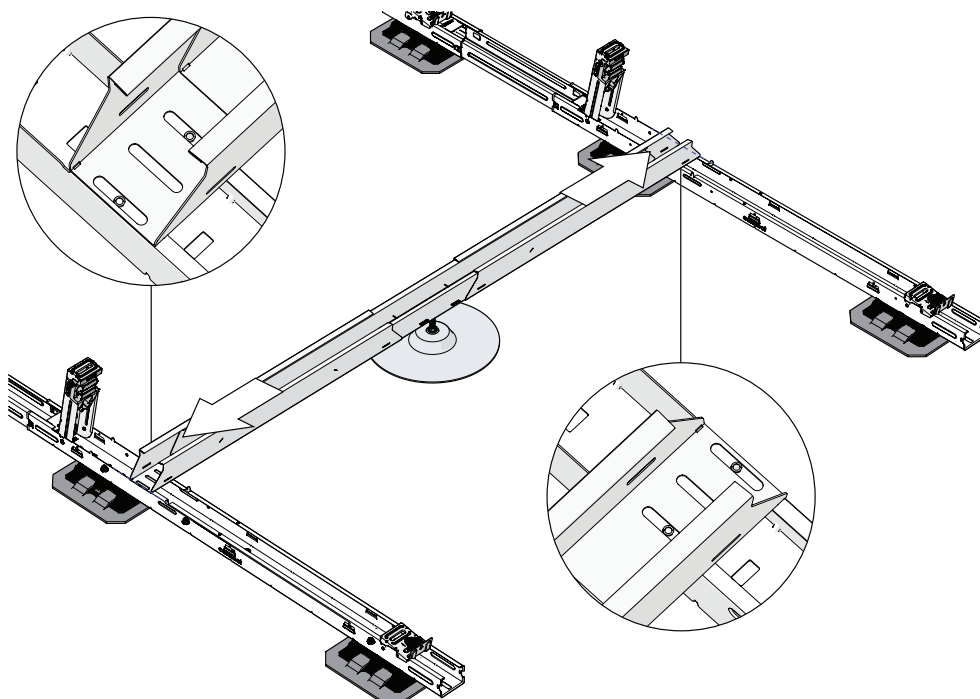
Go to chapter :



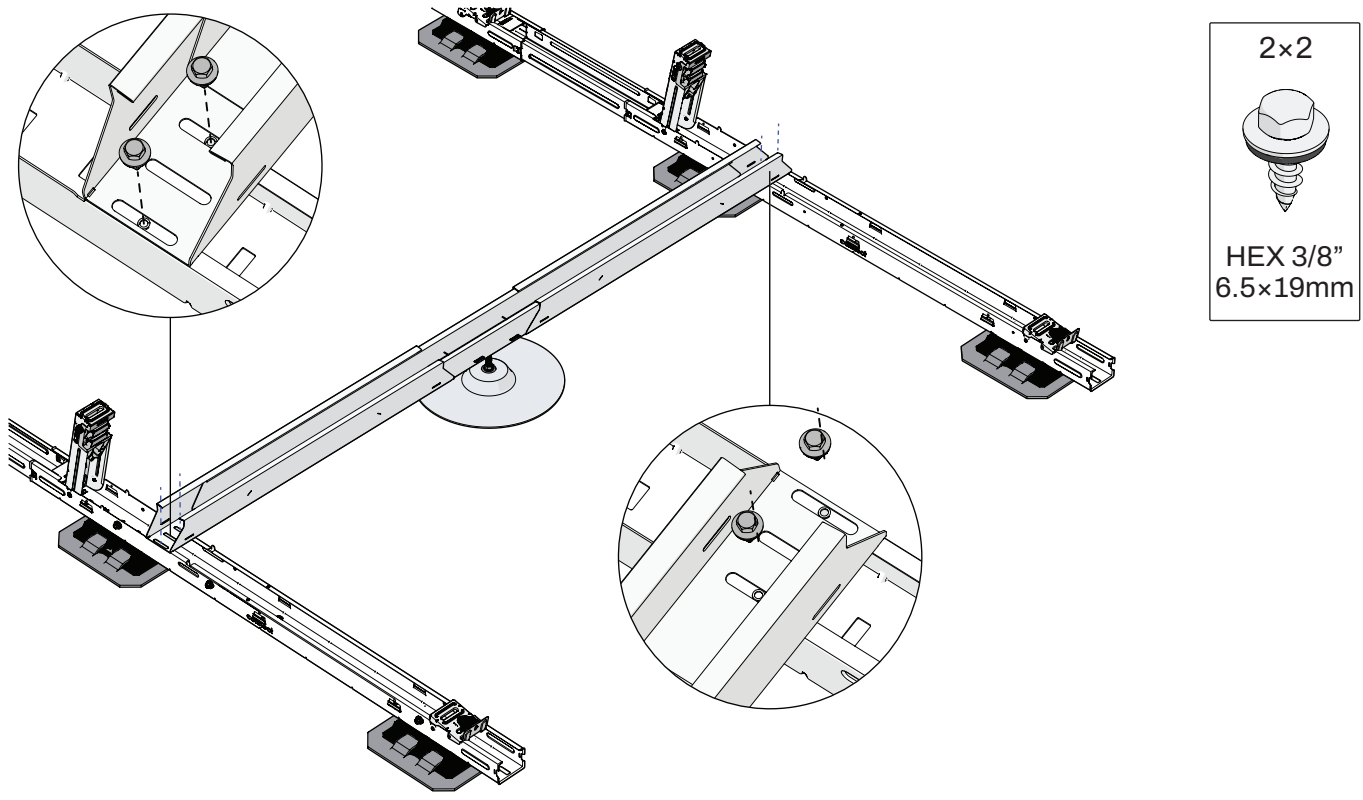
2. Single anchoring base profile

5 Unlock the anchoring base profile and pull to extend the outer profiles.



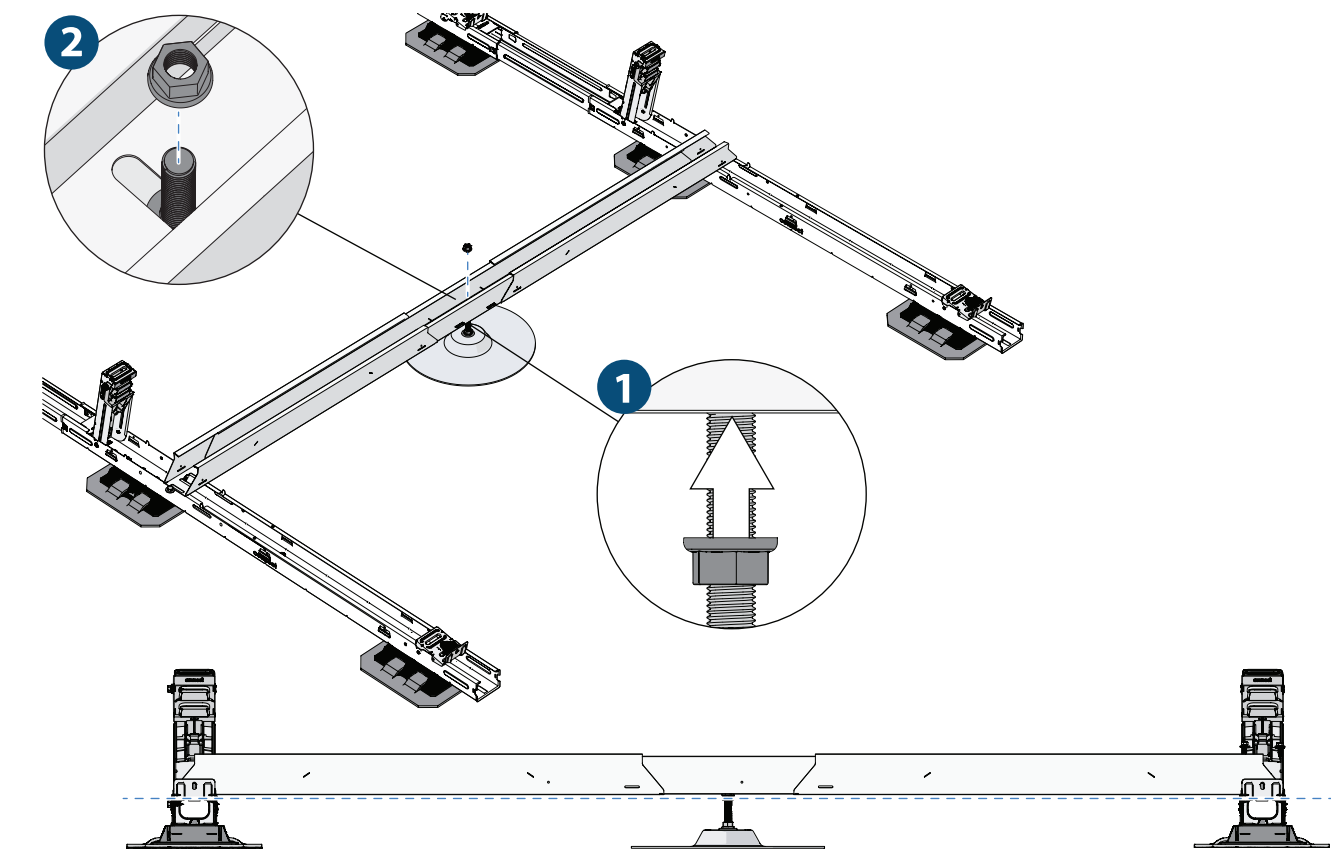
6 Place the slot in the inner profile over the roof anchor.**7** Align the slots of the outer profiles to the holes in the base modules.

- 8 Secure the outer profiles to the base modules with four cladding screws.



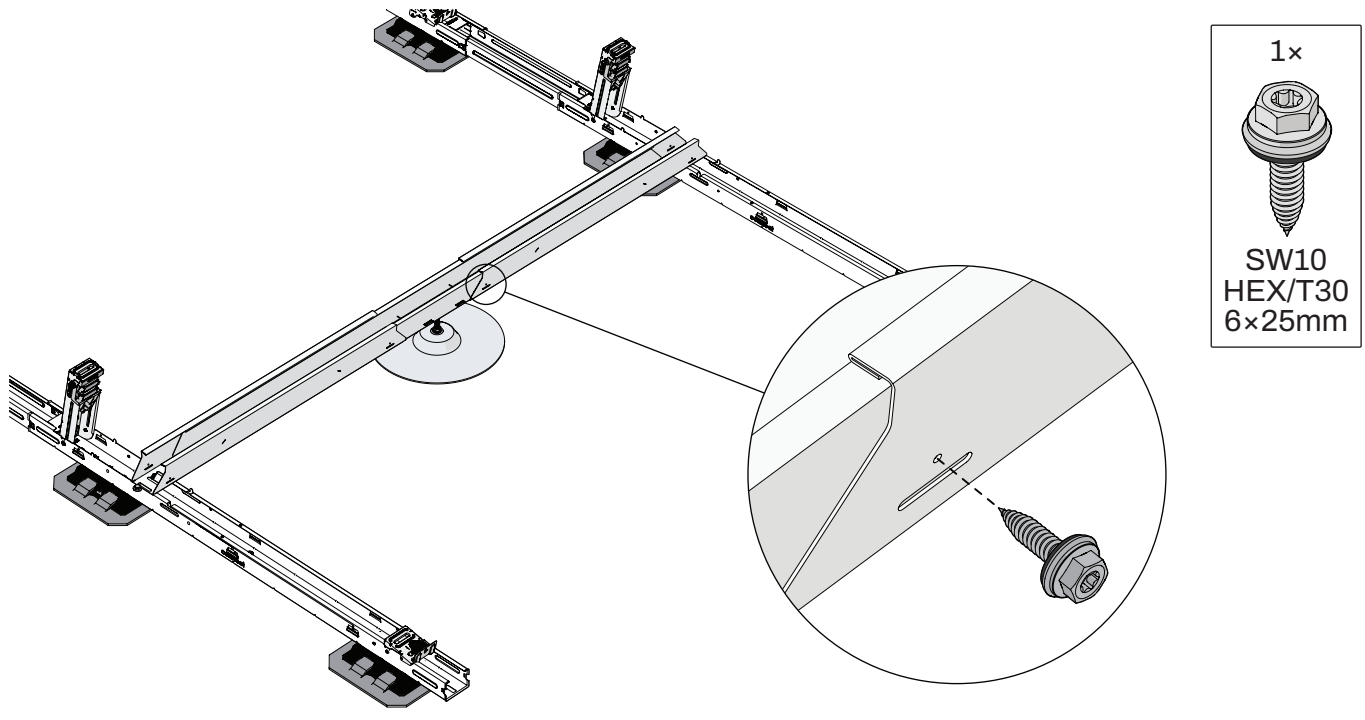
- 9 Turn the bottom nut of the roof anchor against the inner profile.
10 Secure the inner profile to the roof anchor with an M10 nut.

i Make sure the anchoring base profile is straight and not bent up or down by the roof anchor.



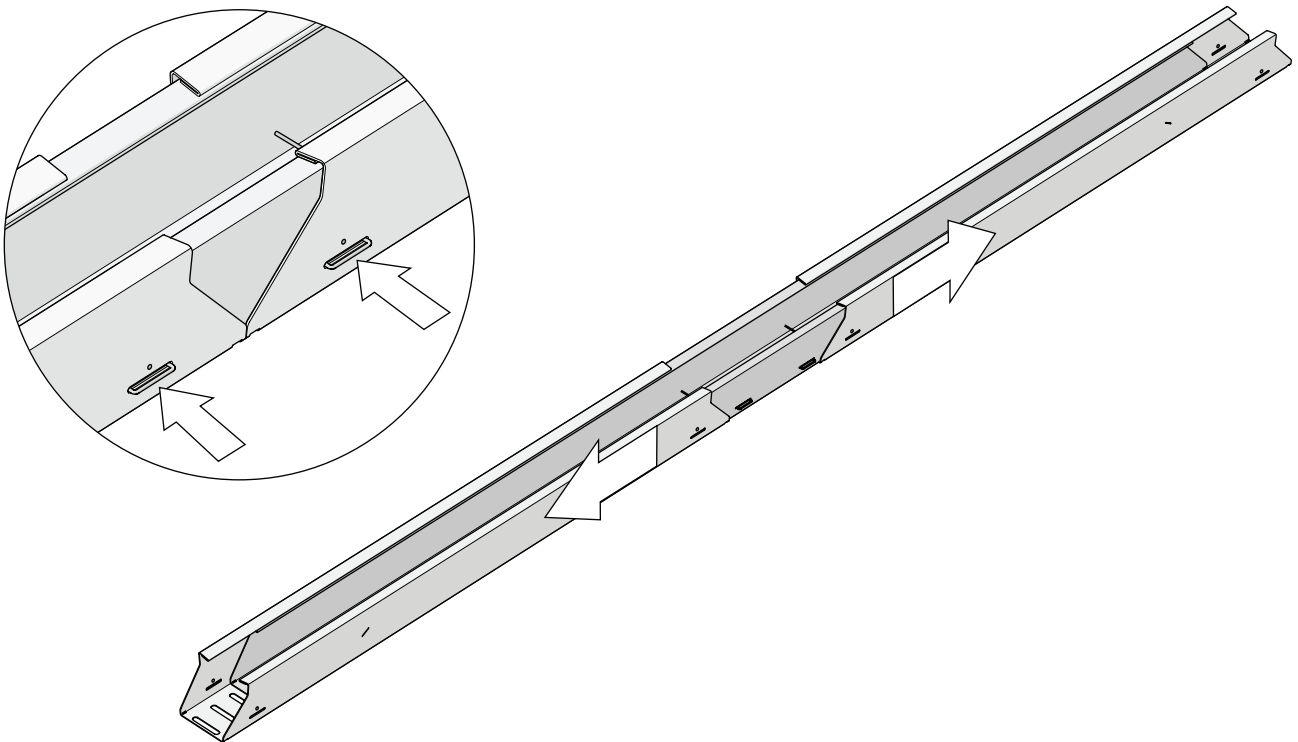
11 Fix the outer profiles in place with the provided self tapping screws.

i Use one screw for each separate anchoring base profile. See Appendix A for more information.

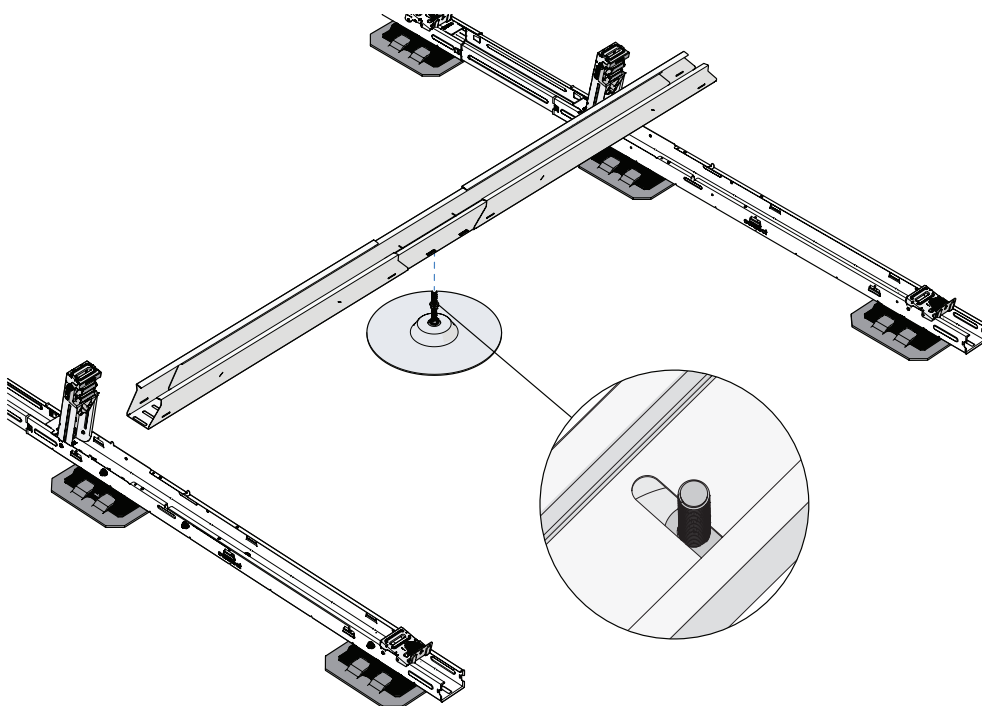


3. Multiple anchoring profiles

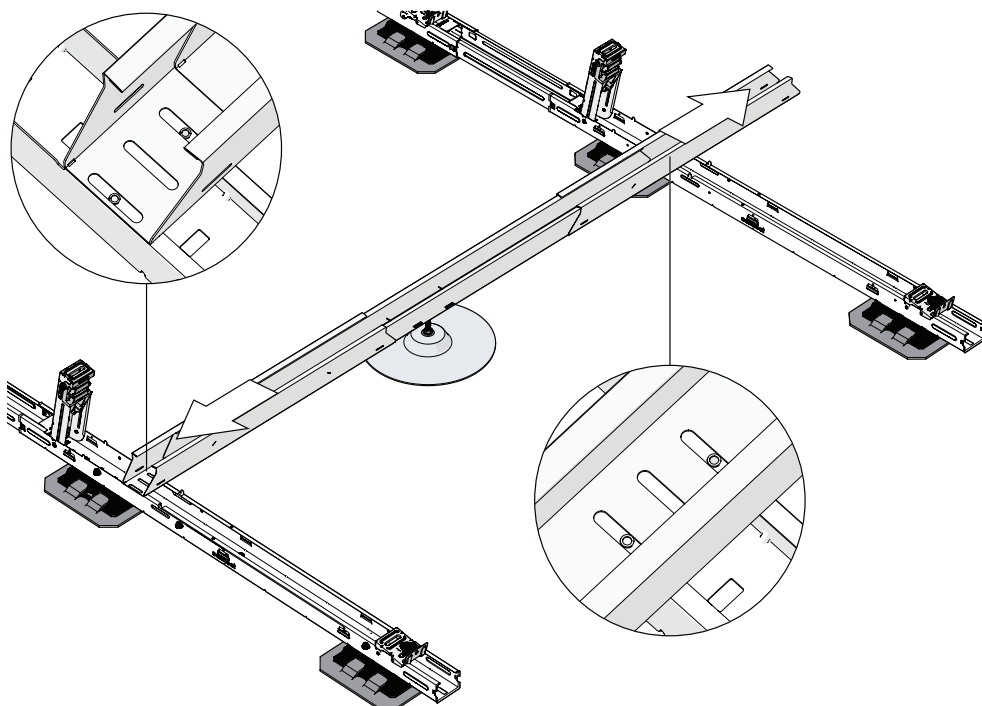
1 Unlock the first anchoring base profile and pull to extend the outer profiles.



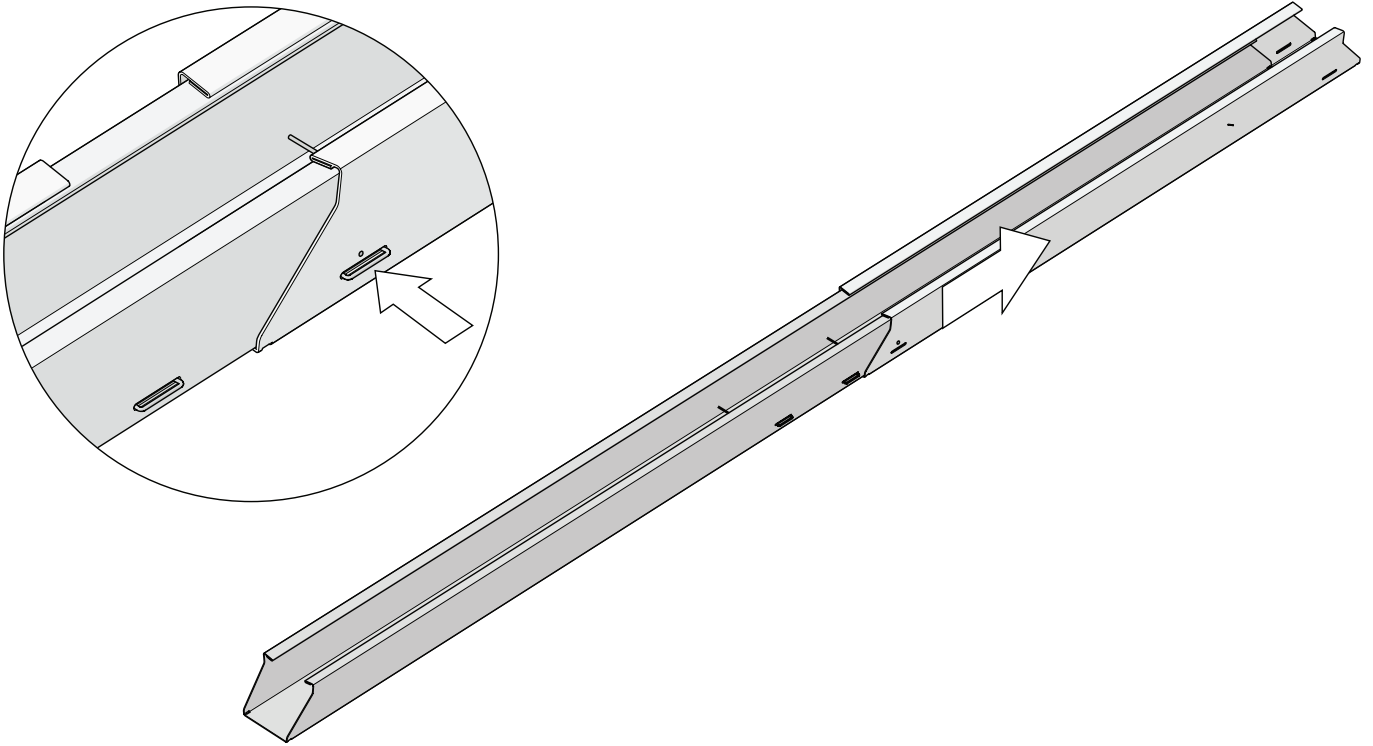
- 2 Place the slot in the inner profile over the roof anchor.



- 3 Align the slots of the first outer profile to the holes in the first base module.
- 4 Align the middle slots of the outer profile on the other side of the anchoring base profile to the holes in the second base module.

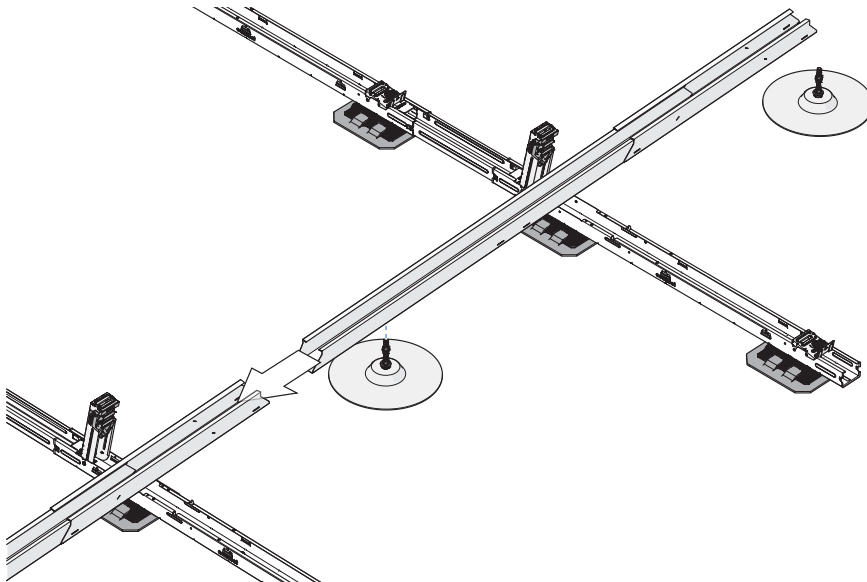


- 5 Unlock the anchoring extension profile and pull to extend the outer profile.

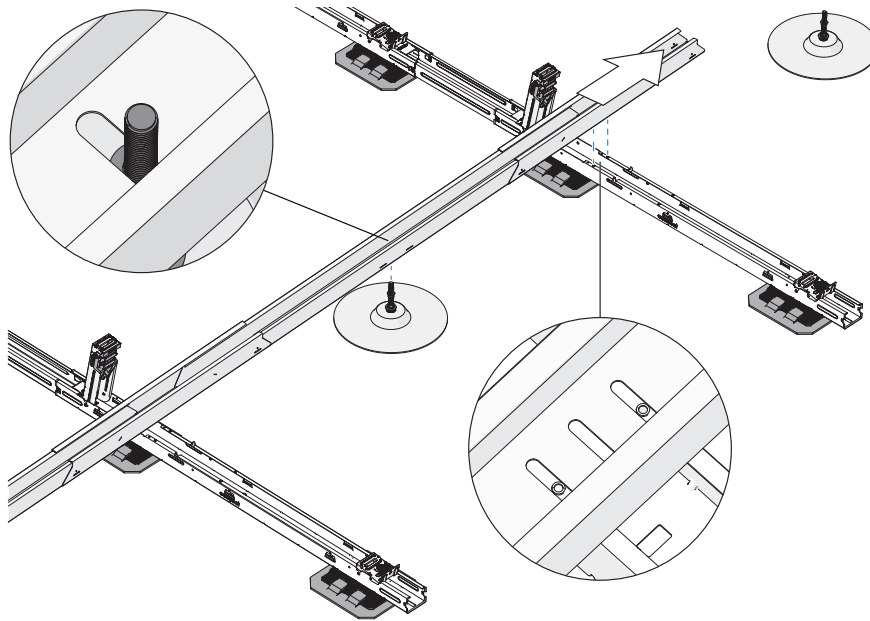


- 6 Slide the inner profile of the anchoring extension profile into the anchoring base profile.
7 Align the slot of the inner profile of the anchoring extension profile with the roof anchor.

- i** Slightly lift the previous anchor bar for easy insertion.



- 8 Align the middle slots of the outer profile to the holes in the next base module.



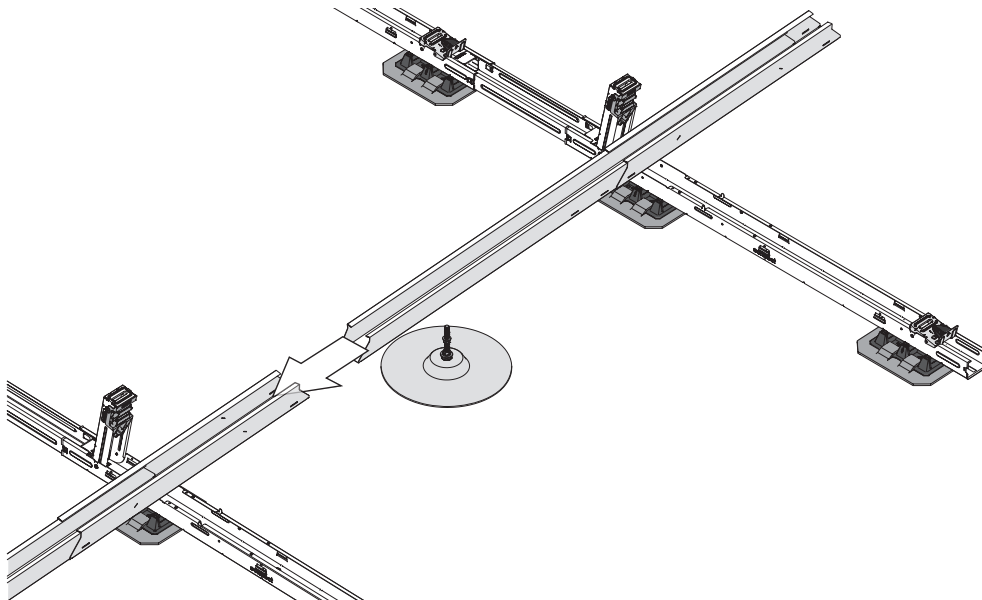
Repeat steps - for every anchoring extension profile of the row, except for the last one.

- 9 Slide the inside profile of the last anchoring extension profile into the previous anchoring extension profile.

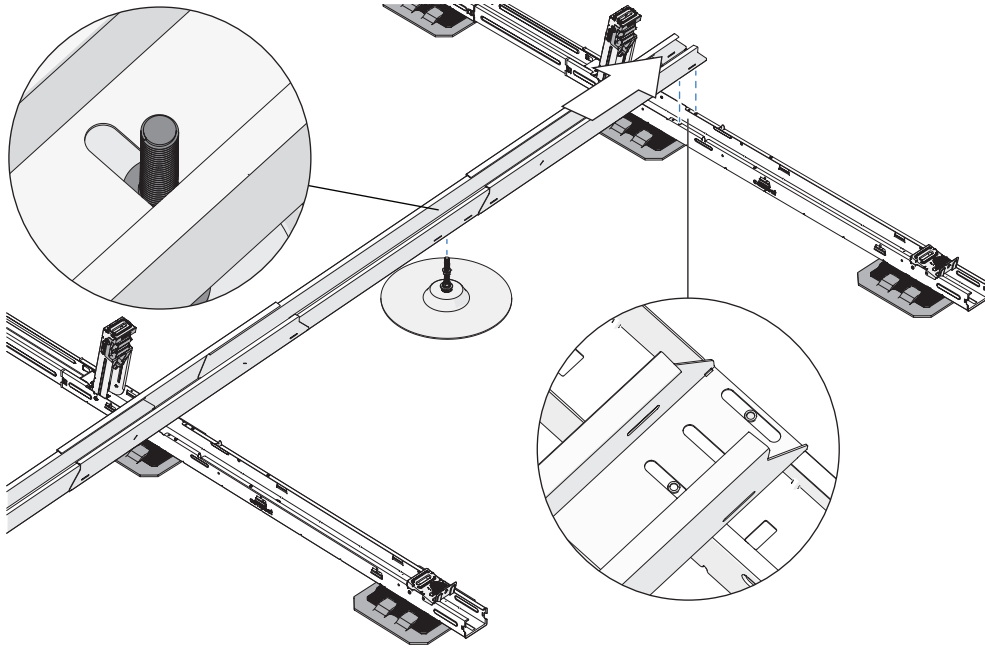
- 10 Align the hole of the inner profile of the anchoring extension profile to the roof anchor.



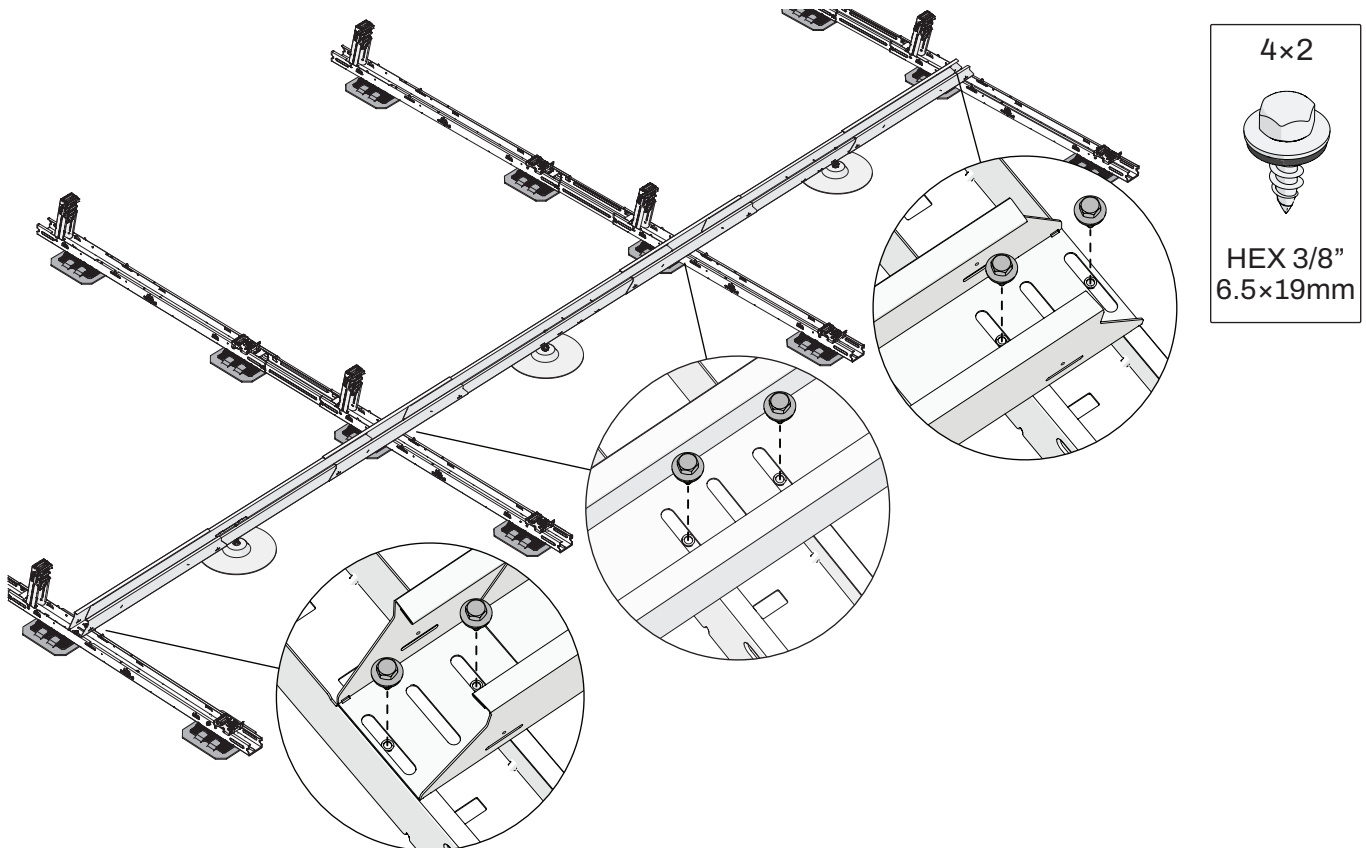
Slightly lift the previous anchoring extension profile for easy insertion.



- 11 Place the inner profile of the last extension profile over the threaded rod of the roof anchor.
- 12 Align the outer slots of the outer profile to the holes in the last base module.



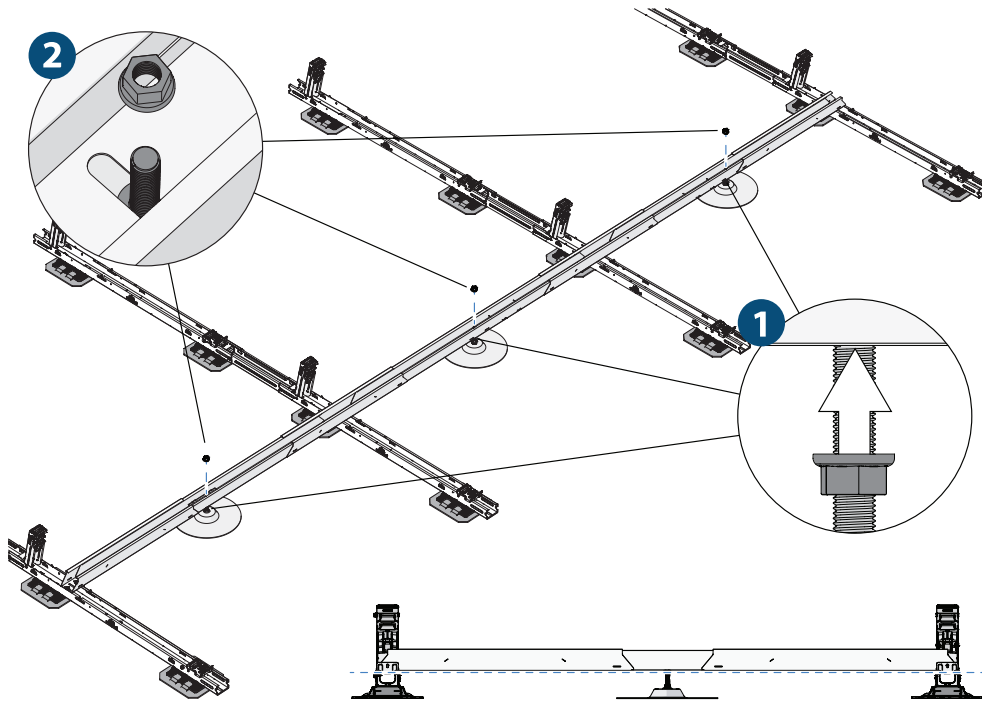
- 13 Secure the anchoring profiles to the base modules with two cladding screws.



14 Turn the bottom nut of the roof anchors against the inner profiles.

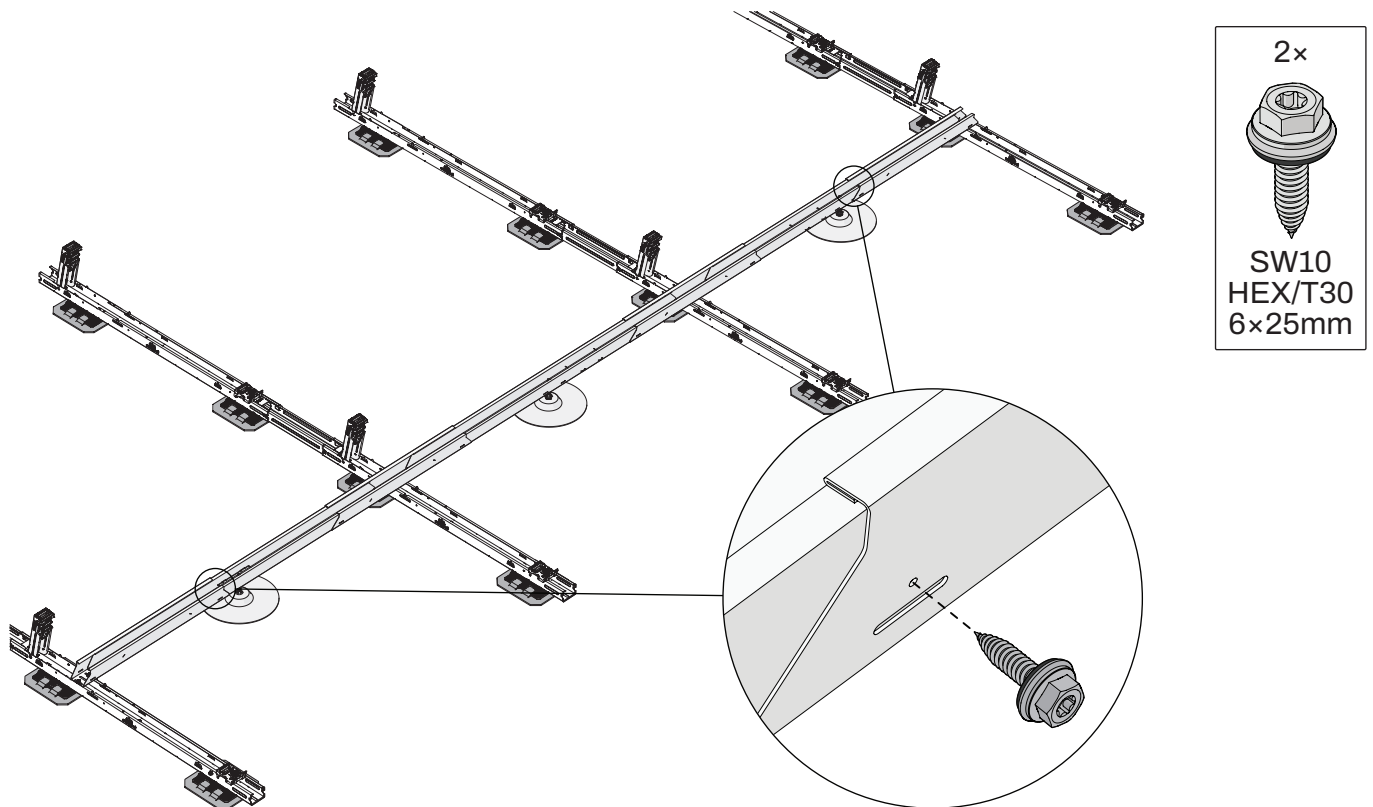
15 Secure every anchor profile to the roof anchors with M10 nuts.

i Make sure all the anchor profiles are straight and not bent up or down by the roof anchors.



16 Fix the first and last anchoring profiles of the row in place with the provided self tapping screws.

i Use one screw for the first and last anchoring profile of a row. See appendix for more information.

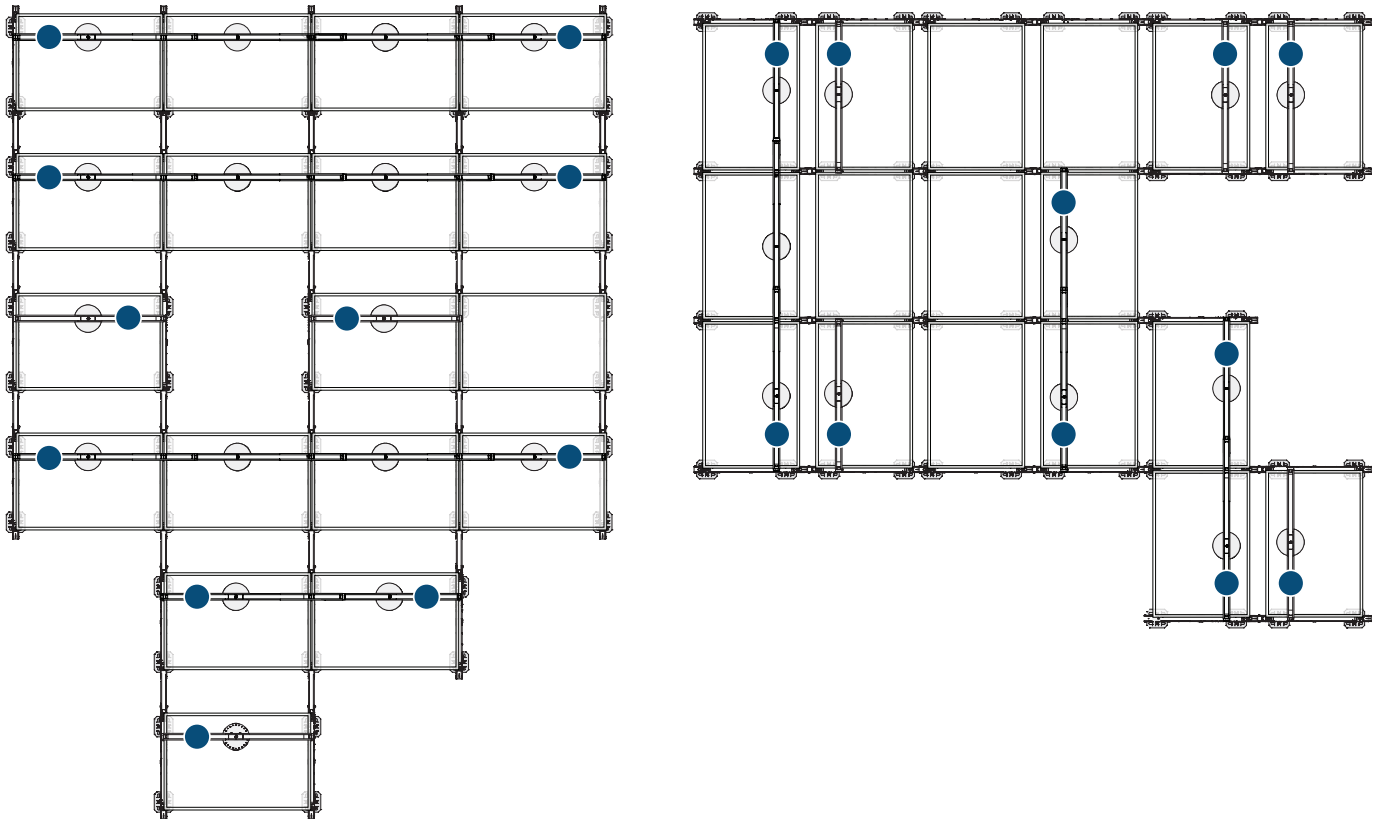


ANNEXES

A. Self-tapping screw examples

Every anchoring profile with no or one adjacent panel in the longitudinal direction needs to be fixed with a self-tapping sheet metal screw 6.0×25 mm SW10 HEX/T30. Below you can find some examples of screw locations for both single and dual configurations.

i Since each project plan is unique, this overview only serves as a general guideline for the placement of the self-tapping screws.





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