

MA 00072

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Sortimo®
Intelligent Mobility



FR5

en-EN Assembly instructions

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Before starting



WARNING

Risk of injury due to missing components

The load can enter the passenger compartment from the FR5 system. This could result in serious or fatal injuries.

- ▶ **Authorised installation.**
 - ▷ Certified ProPartition as per DIN ISO 27956
 - ▷ ProPartition with sliding door
- ▶ If you have questions, please contact the manufacturer's Technical Support.
- ▶ **Unauthorised installation.**
 - ▷ With partition grid
 - ▷ Without ProPartition



CAUTION

Injury from lifting too heavy a load

The FR5 system may be too heavy for one person depending on the configuration. This could result in minor injuries.

- ▶ Two people should install the system

ATTENTION

Damage due to incorrect positioning

The incorrect positioning of the FR5 system can lead to damage to the vehicle body and the system itself.

- ▶ Avoid installation on the wheel housing.
- ▶ Keep the rear and door area clear

Recommendation

Several FR5 systems are included in the scope of delivery depending on the configuration. We recommend that you install them separately from each other.

Workplace

Make sure that your working environment is safe. Position the vehicle on flat solid ground.

Screw locking device

If the vehicle is to be driven off normal roads, all screw connections must be attached using a suitable screw locking device.

Personal configuration

The “Personal configuration” document is included with delivery. This document contains additional information about the installation of your personal configuration. The parts of this document are described below.



When the following symbol appears, the corresponding information must be taken from the "Personal configuration" document.

Intermediate view

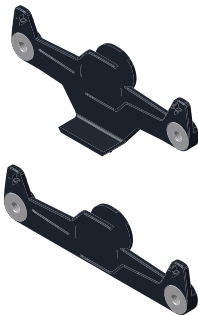
The intermediate view shows the position of the installation adapters for the profile of the configuration.

Figure 1 displays a 3x6 grid of bar charts showing the distribution of the number of children per family for different countries and age groups. The columns are labeled A 95, B 95, B 95, C 95, C 95, and D 95. The rows are labeled 1, 2, and 3. Each chart has a y-axis from 0 to 100 and an x-axis with categories 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. The bars are colored in shades of gray. The data shows a general trend of decreasing frequency as the number of children increases, with some variations between countries and age groups.

- 1) Designation
- 2) Grid position
- 3) Installation adapter

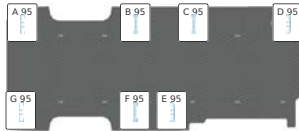
There are two different installation adapters:

- Installation adapter with lug
The installation adapter with lug is solely used to attach **shelves**.
- Installation adapter without lug
This installation adapter is used to install the remaining elements, e.g. **frame** or **traverse frame**.

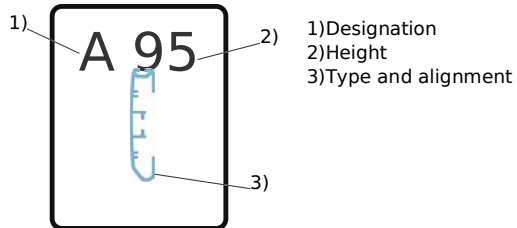


Top view of SoboPro

This view shows the SoboPro, the side profiles and the intermediate profiles from above. The side and intermediate profiles are clearly marked. This illustration also provides the height information for the individual side and intermediate profiles.

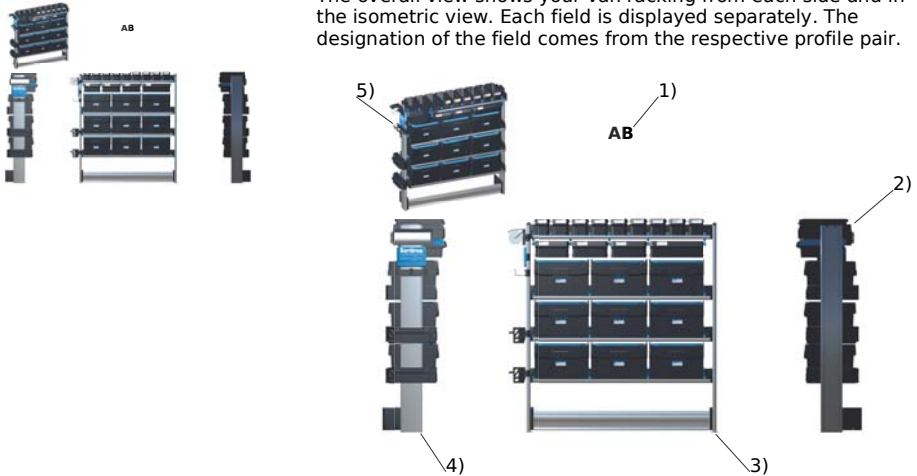


Information on the individual profiles:



Overall view

The overall view shows your van racking from each side and in the isometric view. Each field is displayed separately. The designation of the field comes from the respective profile pair.

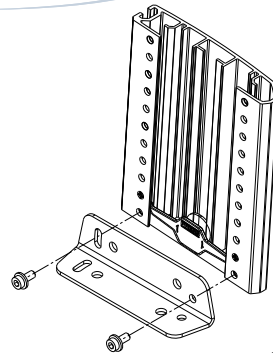
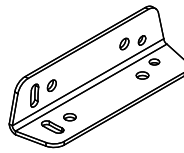


- 1) Field designation
- 2) Side view right
- 3) Front view
- 4) Side view left
- 5) Isometric view

Preparing profiles

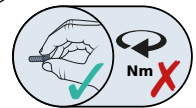
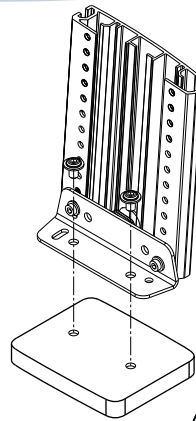
Step 1 — Securing the fastening shoe to the side profile

- Secure the fastening shoe to the side profile.



Step 2 — Securing the fastening shoe to the floor

- Secure the fastening shoe to the SoboPro.

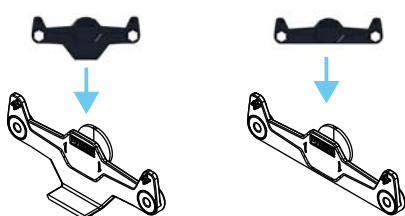


Step 3 — Positioning the installation adapter

- Determine the position.

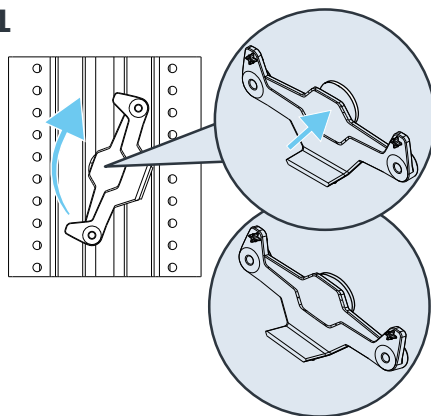
Note: The Sortimo folding rule supplied can be used to measure the grid height.

Note: There are two different installation adapters. The symbol indicates which installation adapter should be used.

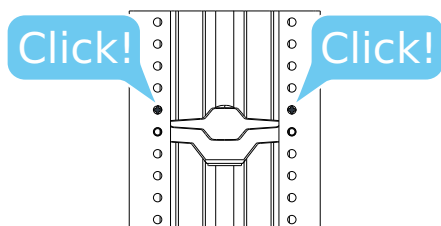


- Insert the installation adapter into the profile.

1



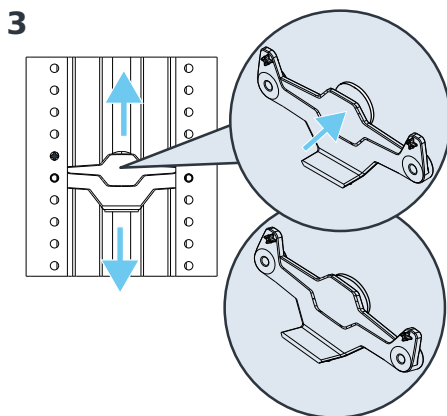
2



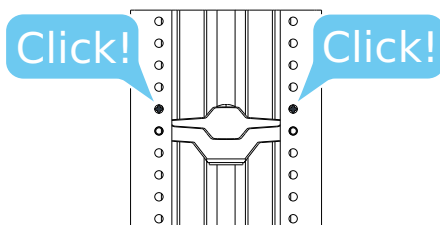
Step 3 — Positioning the installation adapter

- Position the installation adapter.

Note: Pressing on the "Press" surface lets you position the installation adapter at the corresponding height.



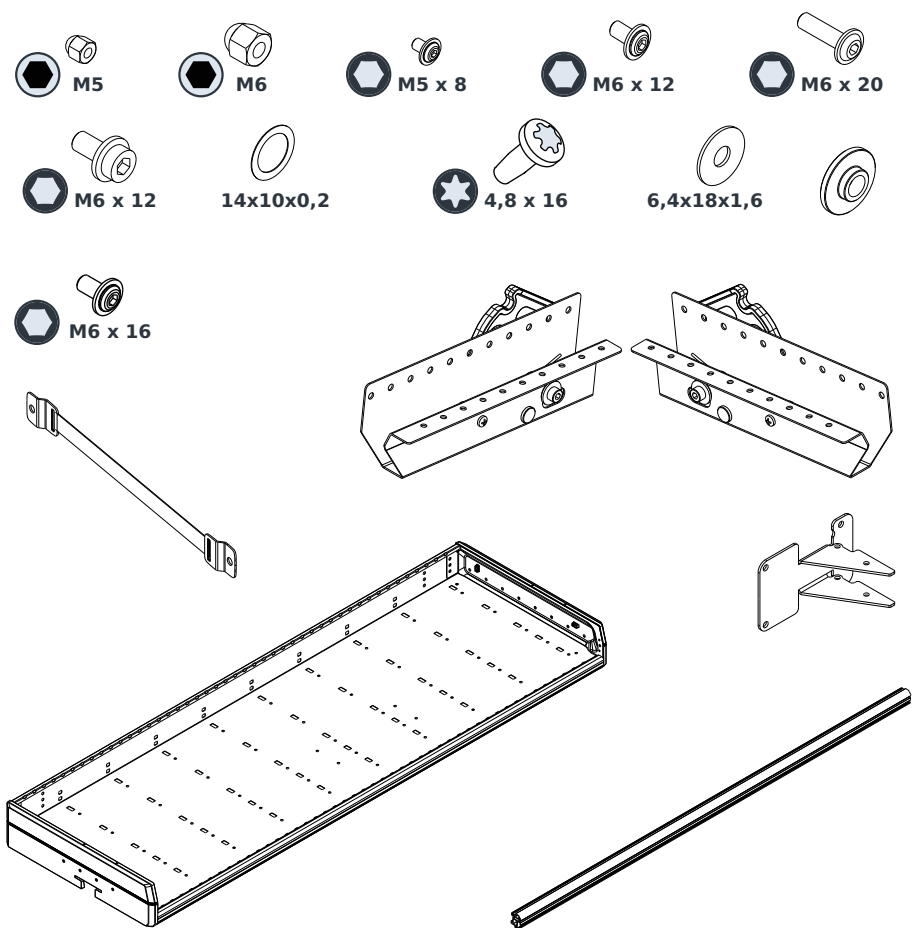
4



- Repeat these steps until all installation adapters have been positioned.

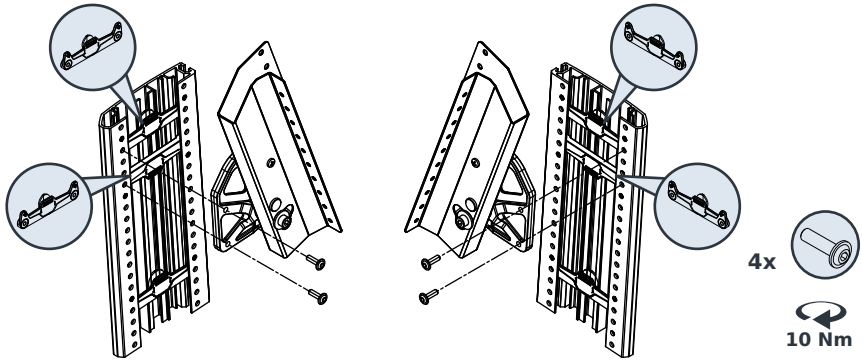
Installing the FR5 system

Scope of delivery

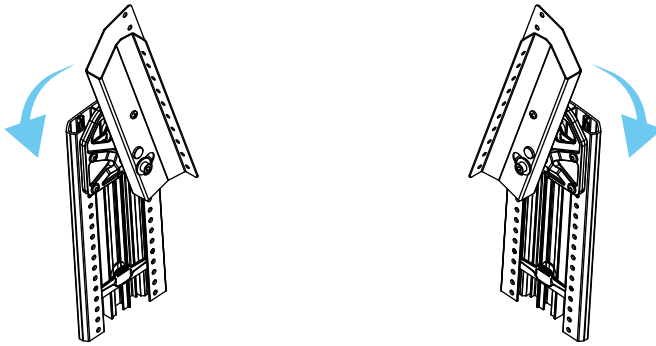


Step 1 — Installing the bearing block

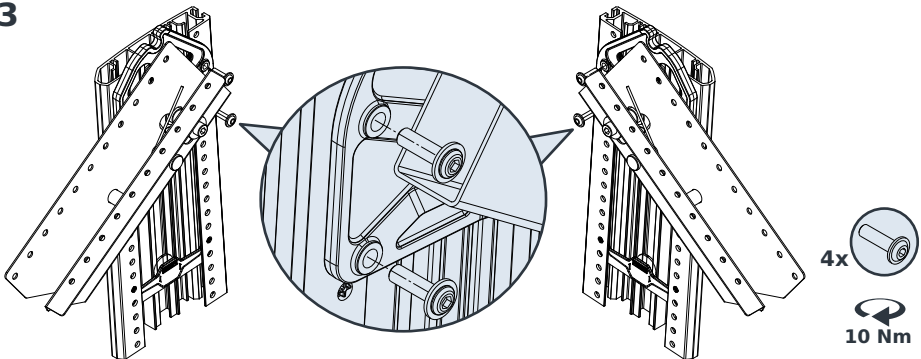
1



2

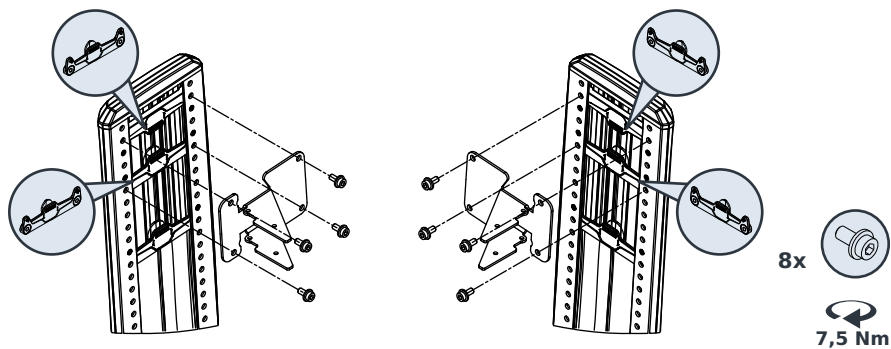


3

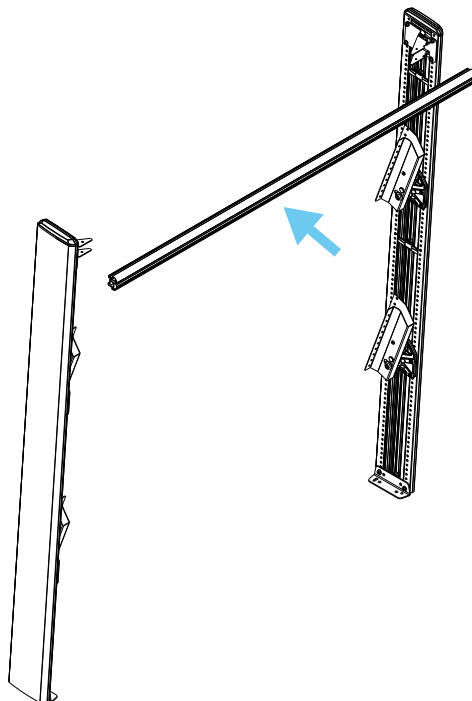


Step 2 — Installing the traverse frame

1

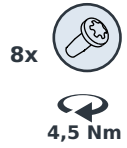
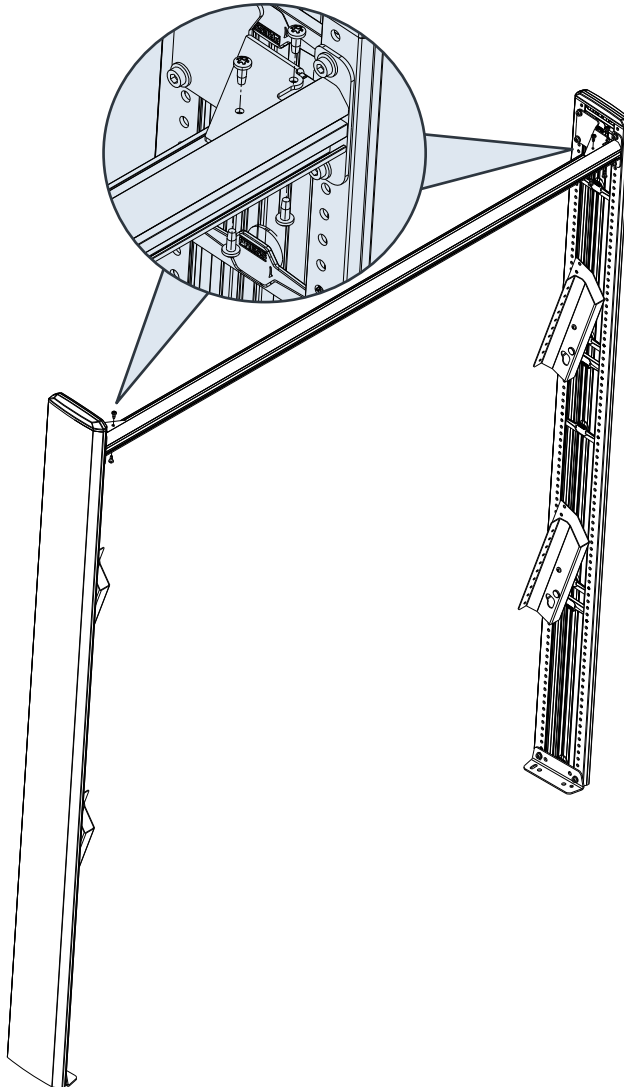


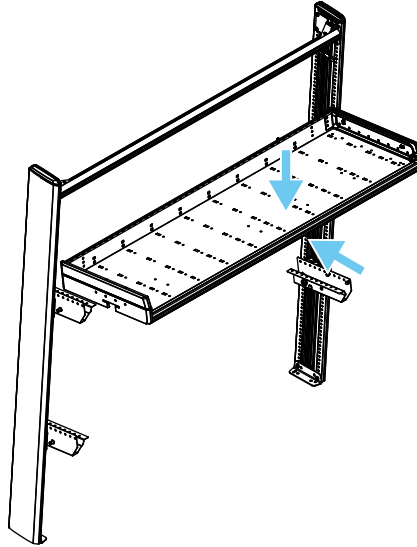
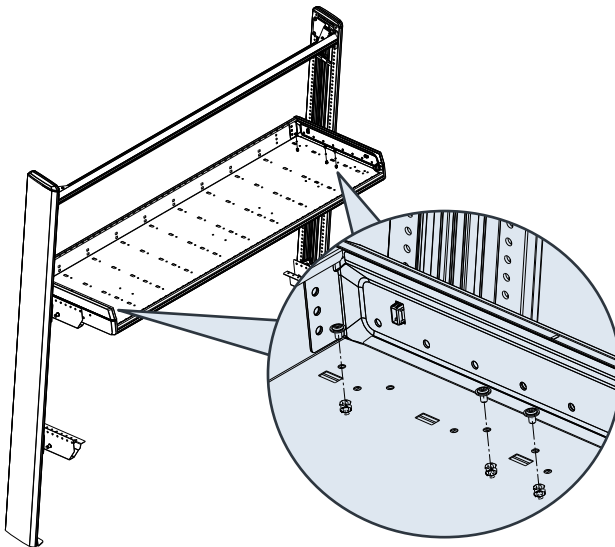
2



Step 2 – Installing the traverse frame

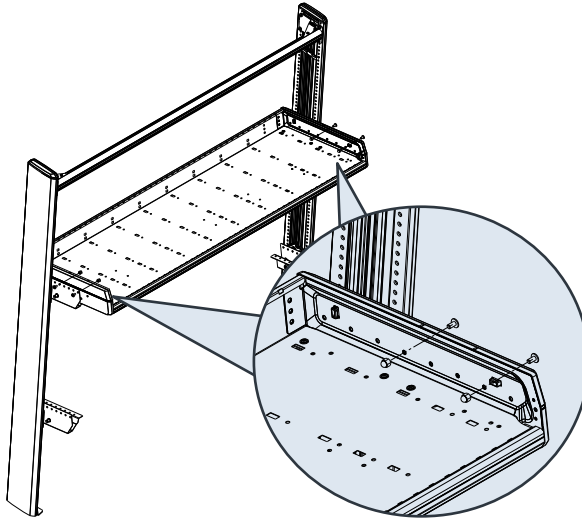
3



Step 3 — Installing the shelf**1****2**

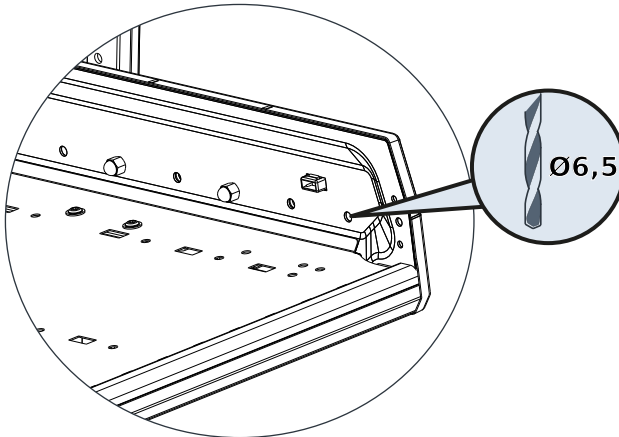
Step 3 — Installing the shelf

3



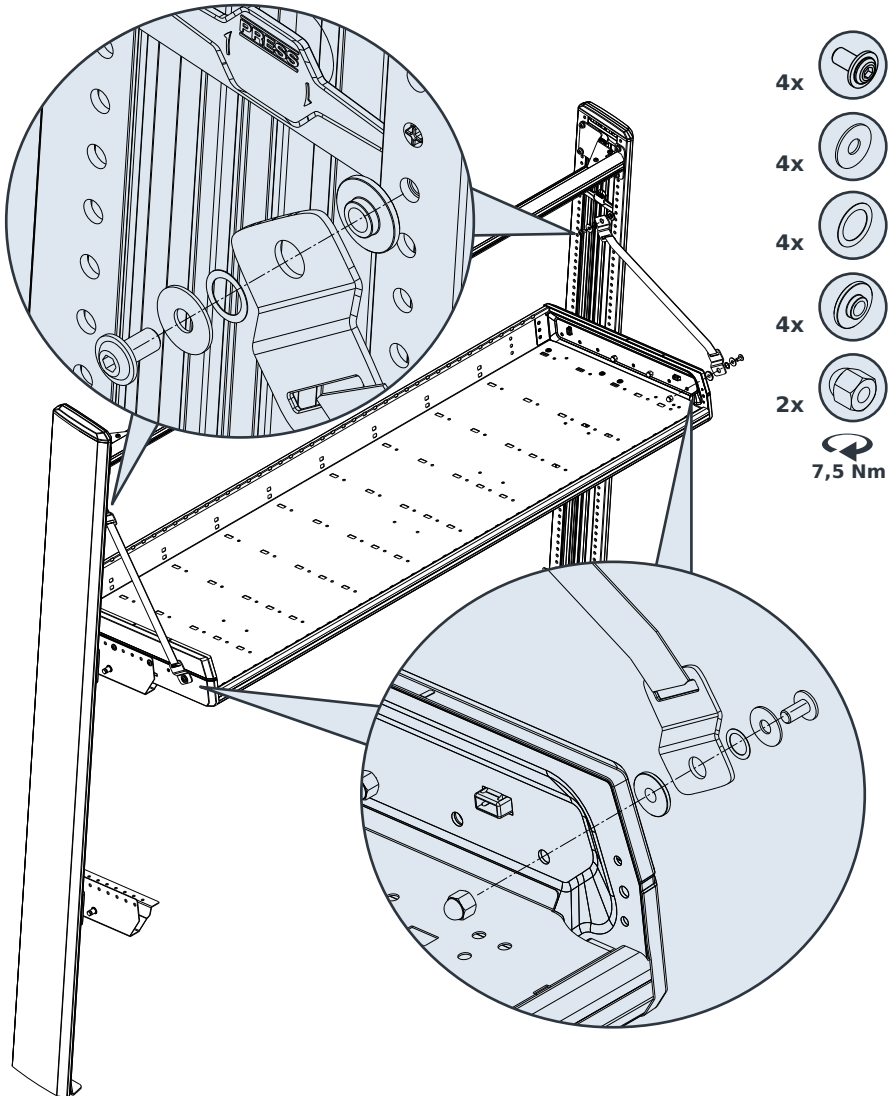
Step 4 — Installing lashing straps

1



Step 4 — Installing lashing straps

2



Installing SoboPro

ATTENTION

Damage caused by rough handling.

The connection folds of the floor panels are sensitive to bumps and crushing.

- ▶ Connect the floor panels carefully.

Step 1 — Preparing the vehicle

Note: If your vehicle has a floor cladding, it needs to be removed.

- ▶ Remove the lashing eyes in the floor area.

Note: Keep the components of the lashing eyes that have been removed for subsequent re-assembly.

- ▶ Clean the vehicle floor.

Step 2 — Positioning the floor panels

- ▶ Check whether or not the floor panel folds are damaged.
- ▶ Position the first floor panel.

Note: This is laid from the ProPartition to the rear of the vehicle.

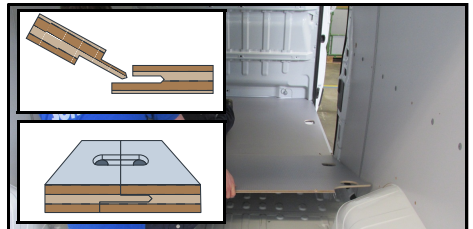


- ▶ Position the next floor panel.
- ▶ Fit the floor panels together.

Note:

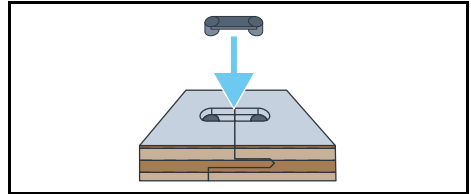
- The connecting ends must be flush.
- Make sure that the cut-outs line up with each other.

- ▶ If available, position additional floor panels one by one and connect to the previous ones.



Step 3 — Attaching floor retainer clips

- ▶ Position the floor retainer clip.
- ▶ Carefully use a rubber hammer to secure the floor retainer clip.
- ▶ Repeat these steps until all floor panels have been connected to each other.

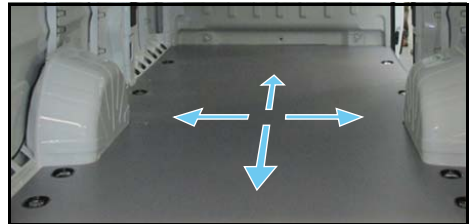


Step 4 — Aligning floor panels

- ▶ Align adjoining floor panels.

Note: The floor must have the same gap from the vehicle chassis in all directions. The following can be of assistance in this regard:

- Lashing points,
- Wheel housings.



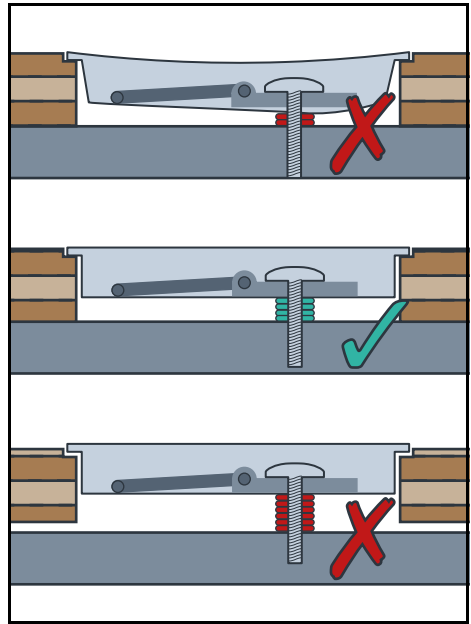
Step 5 — Attaching lashing eyes

- Assign the lashing eyes with their original screws to the original positions.

Note: The floor panel requires the installation of a lashing rail. The lashing rail may need to be raised using shims depending on the floor of the vehicle chassis.

- Determine the number of shims.

Note: The number of shims should ensure that the floor panel is slightly pressed.

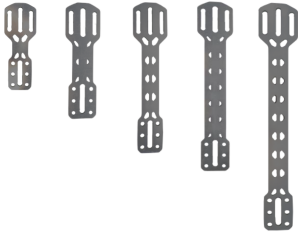


- Tighten the original screws using the required torque.

Note: The respective torque can be found in the manufacturer's set-up guidelines.

How to attach the racking

EcoFix — What is it?



The FR5 system is attached to the vehicle wall using EcoFix brackets (EFI). There are different version of EFI available. Bend the EFI brackets in compliance with the following strict rules to attach the FR5 system to the vehicle wall.



Rules

An EcoFix can be bent at several places, however ...

- ... a max. of 45° at one point.
- ... only once at each point.
- ... the bending radius must be at least 4 mm.

Rules

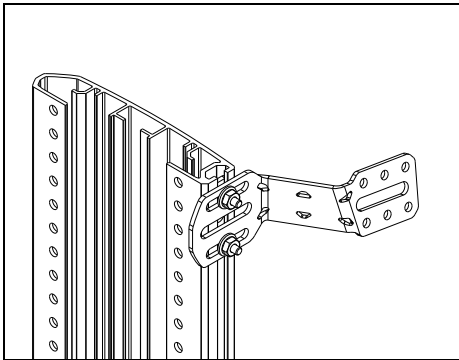
EcoFix can be twisted a max. of 90°.

Attaching EcoFix brackets to the FR5 System

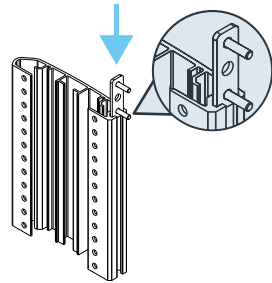
Depending on the configuration, they can be attached to various elements of the FR5 system.

- a) Back of the profile
- b) Side of the profile

Back of the profile



1



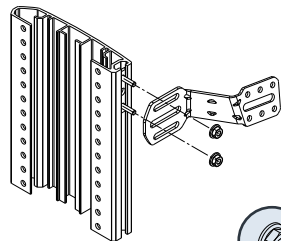
2



M6 x 20



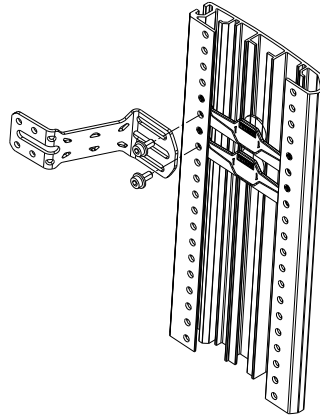
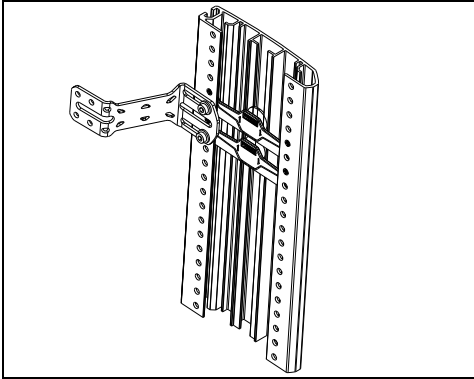
M6



2x



Side of the profile



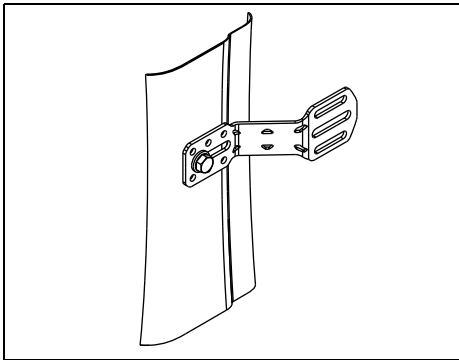
Attaching EcoFix brackets to the vehicle wall

There are two options for attaching the EFI to the wall of the vehicle.

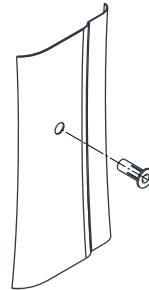
- a) Blind rivet nuts,
- b) Fastening plates.

Rules If possible, attaching the EcoFix bracket using a fastening plate is preferable to attaching it with blind rivet nuts.

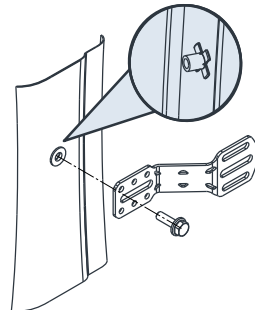
Blind rivet nut



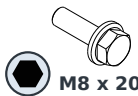
1



2



M8 x 29



M8 x 20

ATTENTION

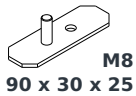
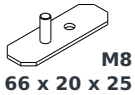
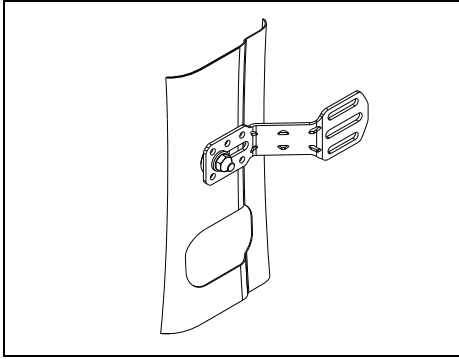
Damage to vehicle due to drilling

- Note the warning information in the chapter "Attaching the FR5 system".

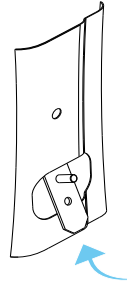
Note:

- Requires a Ø 11.2 mm hole.
- Use the existing hole on the chassis (original hole) or drill a new hole.

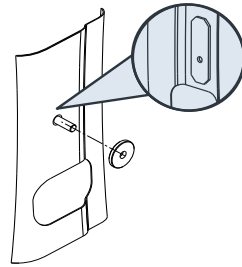
Fastening plate



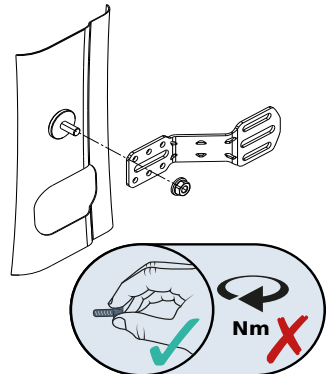
1



2



3

**ATTENTION****Damage to vehicle due to drilling**

- Note the warning information in the chapter "Attaching the FR5 system".

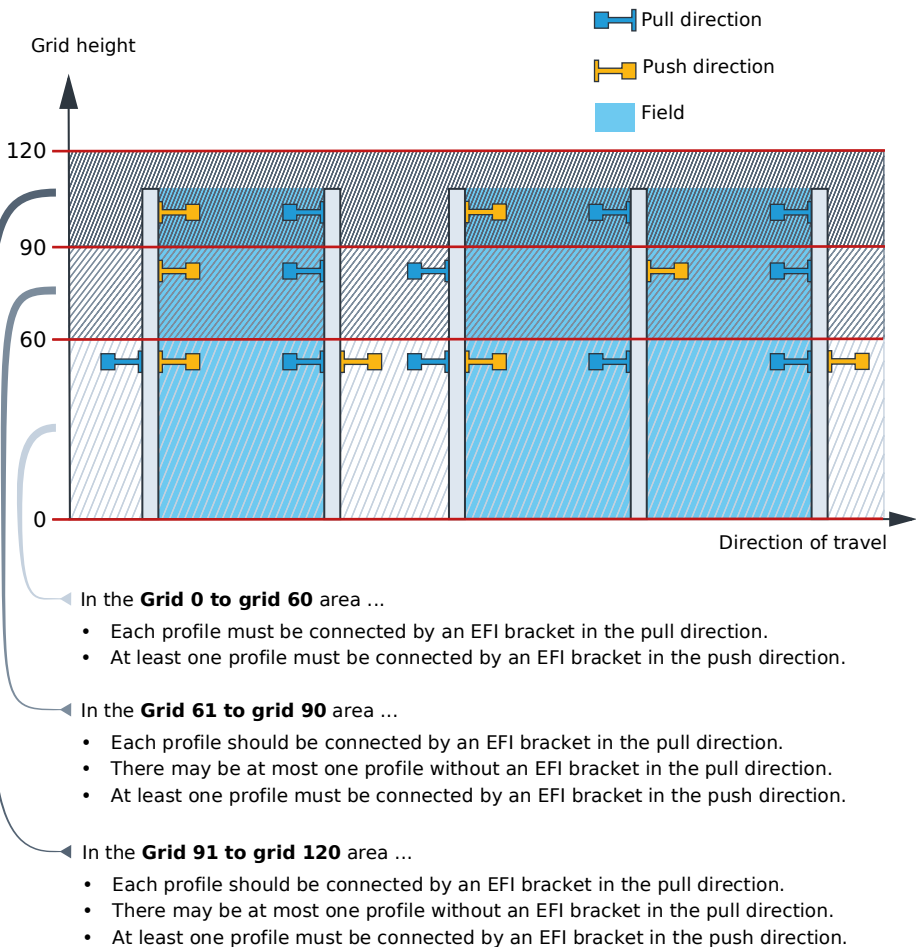
Note:

- This fastening requires a sufficient cavity behind the load-bearing elements. The fastening plates cannot be positioned without this hollow space.
- Requires a $\varnothing 8.5$ mm hole.
- Use the existing hole on the chassis (original hole) or drill a new hole.

Determining the number and position

An EcoFix bracket is attached in either a pull or push direction. The FR5 system needs to be secured in place in both directions. Up to three areas are defined depending on the grid height of the FR5 system. Rules are defined below for these areas.

Rules Position the EFI as high as possible in each area.



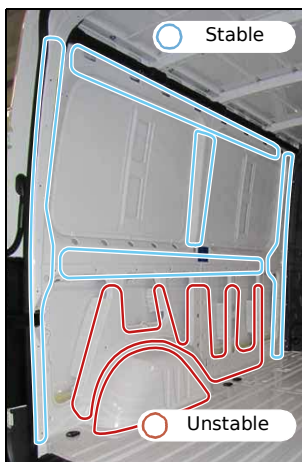
Attaching the FR5 system

ATTENTION

Damage to vehicle due to drilling

Components within the vehicle wall could be damaged.

- ▶ Pay attention to components within the vehicle wall such as lines, etc.
- ▶ Use a drill sleeve.
- ▶ Pay attention to the manufacturer's set-up guidelines.
- ▶ Only attach to suitable locations.
 - ▷ Stable pillars,
 - ▷ Stable longitudinal beams.
- ▶ Do **not** attach to an unstable intermediate support or wheel housing.



Step 1 — Preparing the EcoFix brackets

- ▶ Find a suitable position.
- ▶ Use a pen to mark the positions on the FR5 system and the vehicle wall.
- ▶ Bend the EcoFix.
- ▶ Repeat these steps until all EcoFix brackets have been prepared for use.

Step 2 — Preparing the vehicle wall

- ▶ Prepare the attachment points on the vehicle wall.
 - ▶ Repeat these steps until all the attachment points have been prepared.
-
- ▶ If a side wall cladding is to be installed in the vehicle, the attachment points should be transferred to the side wall cladding.
 - ▶ Install the prepared side wall cladding in the vehicle.

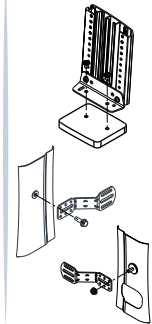
Step 3 — Attaching the FR5 system to the vehicle wall

- ▶ Secure the EcoFix brackets to the FR5 system and the vehicle wall.
-
- ▶ Align the FR5 system.
-
- ▶ Tighten the screw fixings to the following torques.

M6 ⇒ 7,5 Nm



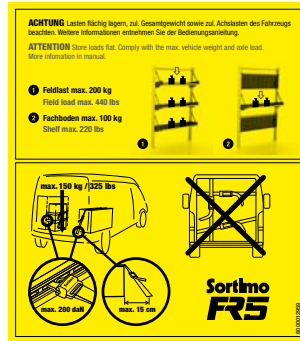
M8 ⇒ 20 Nm



Step 4 — Attaching safety markings

- Attach safety markings to the ProPartition in the cargo area so that they are clearly visible.

Note: 6000012959



Step 5 — Attaching the logo

- Attach the FR5 logo parallel to the floor in the upper area of the side profile. Align the logo centred on the profile.

Note: 6000012958



Adjust the FR5 system

The FR5 system offers various adjustment options. The most important of these are explained below:

- a) Adjust shelf height
- b) Adjust shelf horizontally
- c) Adjust the inclination of the shelf



CAUTION

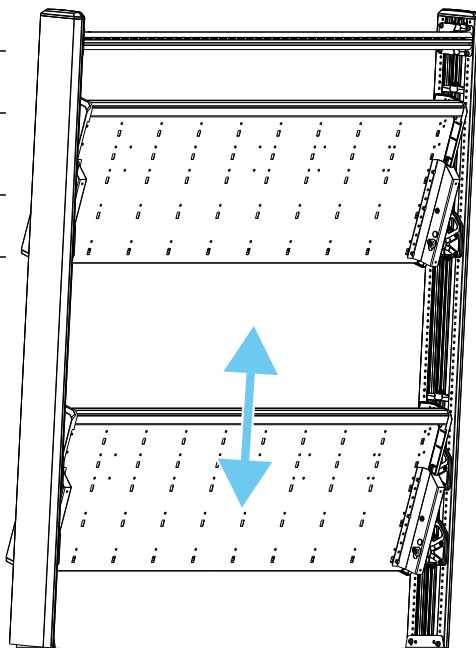
Crushing by incorrect positioning

Fingers can get crushed if too little distance is left between shelf and frame traverse.

- Keep a minimum distance of 2 pitches (34 mm) between the shelf and frame traverse.

Adjust shelf height

- Remove the shelf in reverse order to page 13.
- Remove the bearing brackets (page 10).
- Move the installation adapter on both sides to the desired position (page 7).
- Mount the bearing brackets again.
- Mount the shelf at the newly defined position.



Adjust shelf horizontally

ATTENTION

Damage caused by collision

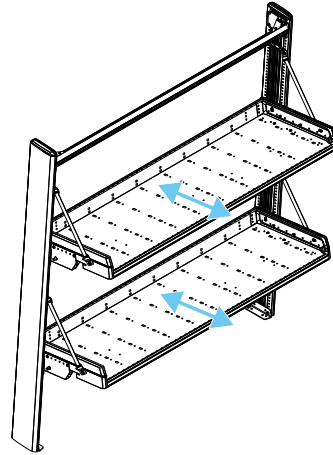
If the distance between the shelf and the wall of the vehicle is too low, there is a risk of collision.

- ▶ Keep a distance of at least 5 mm.
- ▶ Check the function.

-
- ▶ Remove the shelf in reverse order to page 13.

-
- ▶ Move the shelf horizontally to the desired position.

-
- ▶ Mount the shelf at the new position.



Adjust the inclination of the shelf

ATTENTION

Damage to the load

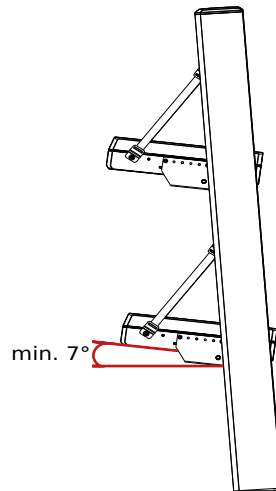
If the inclination is less than 7°, the payload can fall out from an open shelf without a border.

- ▶ Set the inclination larger than 7°.

-
- ▶ Release the upper screws of the lashing strap (page 15).

-
- ▶ Move the installation adapter to the desired position (page 7).

-
- ▶ Mount the lashing strap in the new position.



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