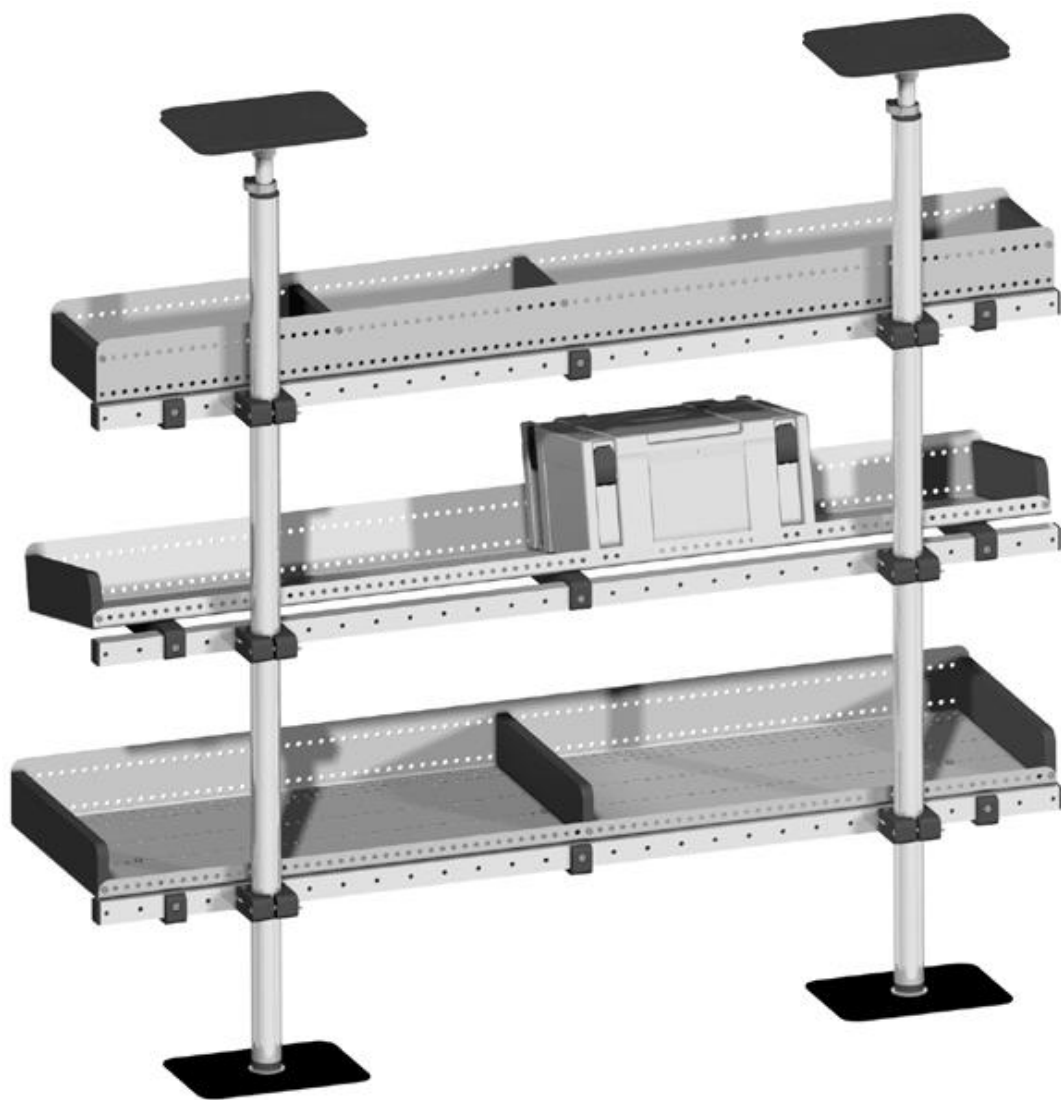


# ASSEMBLY INSTRUCTIONS

## VanTainer<sup>®</sup> mobil



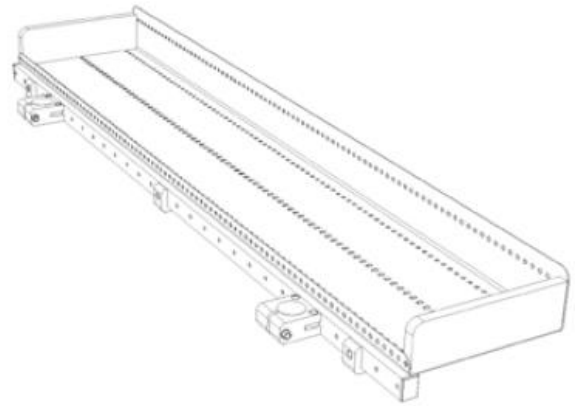
## Subassemblies

A VanTainer® shelf basically consists of the following components:

### Support Strut



### Shelf Unit



Struts are fixed in the vehicle with their Velcro mats. The Velcro mats are attached via the self-adhesive fleece, which is glued to the floor and roof of the vehicle. The shelves can then be attached to the struts. A shelf unit needs a minimum of two struts. Separate struts can be also used without the shelf units for load securing.

Shelf units serve for the accommodation of cargo. They are available in different depths and widths and as L-profile or U-profile. Sections can be created with the help of dividers.

The shelf units are fixed to the plungers in the desired height.

## Component List

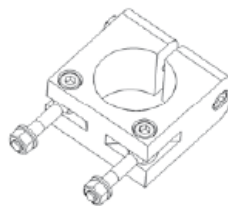
Pos.1 Spacer tube



Pos.2 Velcro mat



Pos.3 Multifunctional adapters



Pos.4 Adaptor unit



Pos.5 Cross bar



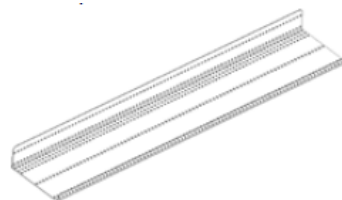
Pos.6 Self-adhesive fleece



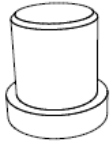
Pos.7 Triangular girder



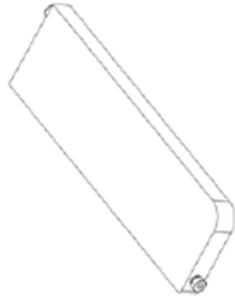
Pos.8 Perforated metal plate



Pos.9 Floor plug in



Pos.10 Divider



Pos.12 Cover sheet



**Optional Accessories** (not included in scope of delivery)

Safety strap



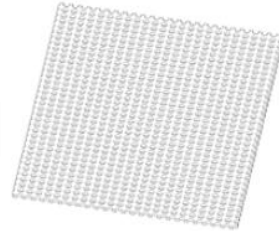
Karabiner



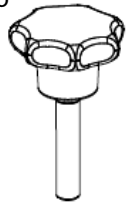
Pos.11 Brace support



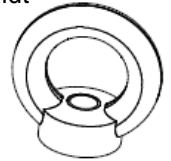
Anti-slip mat



Star grip

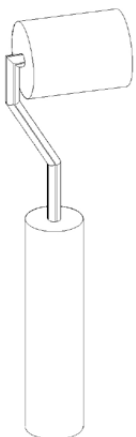


Ring nut



**Required Tools:**

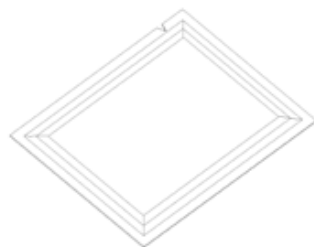
Pos. 1 Hand roller



Pos.13 Pen



Pos.15 Cleaning tissues



Combination wrench  
SW 13



Hexagon socket key  
SW 5 & SW 6



**All the necessary tools are included in the scope of delivery of a complete shelf**

## Notes:

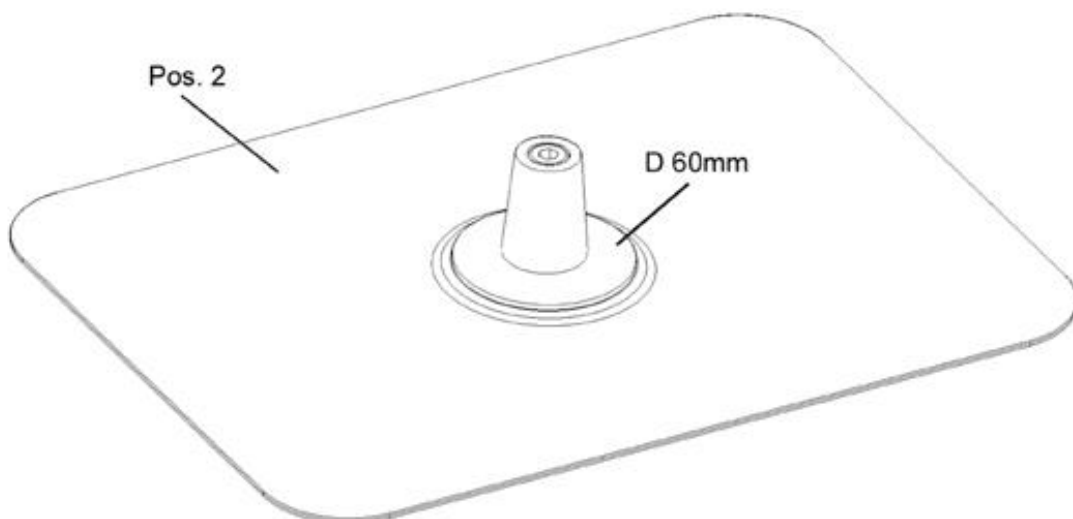
- 2 persons are needed for the installation of the shelf.
- The minimum temperature for the bonding of the fleece is +10°C.
- All screws, nuts and washers are already positioned on the corresponding parts.
- A brace support at the separating wall of the vehicle is only necessary when the permitted total cargo of the **VanTainer®** mobil-shelf system will be increased from 120 kg to 150 kg.
- Triangulate girders 80595045 are for metal sheet profiles 310 and 410.
- Triangulate girders 80595044 are for metal sheet profiles 210.
- The shelf may be only installed by persons in good physical condition.
- If you have any questions, please contact **VanTainer®**.

## Preparation of the installation:

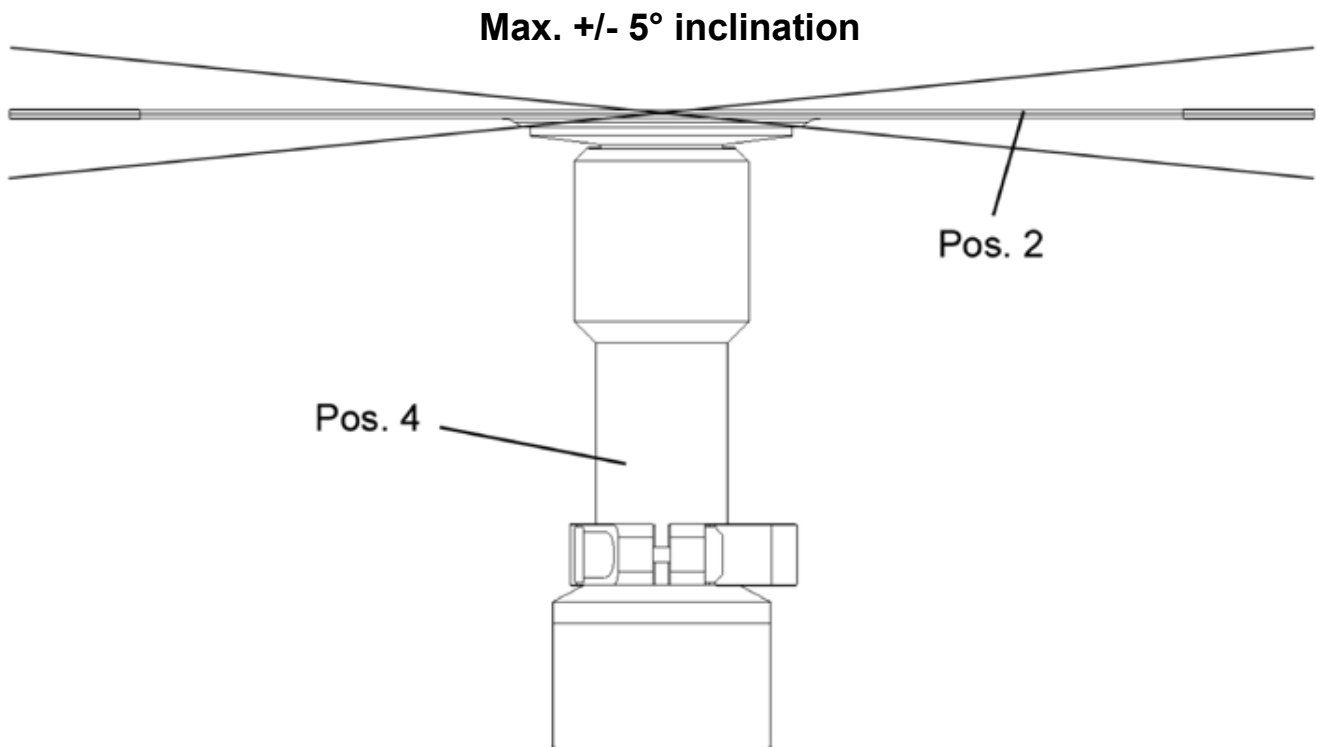
Choose an appropriate position for the plungers of the shelf and determine the distance of the spacing tubes (Pos.1).

The following points have to be considered:

- The locating surface of the adaptor (diameter 60mm) of the Velcro mat (Pos. 2), must lie smooth and flat to the floor or roof.



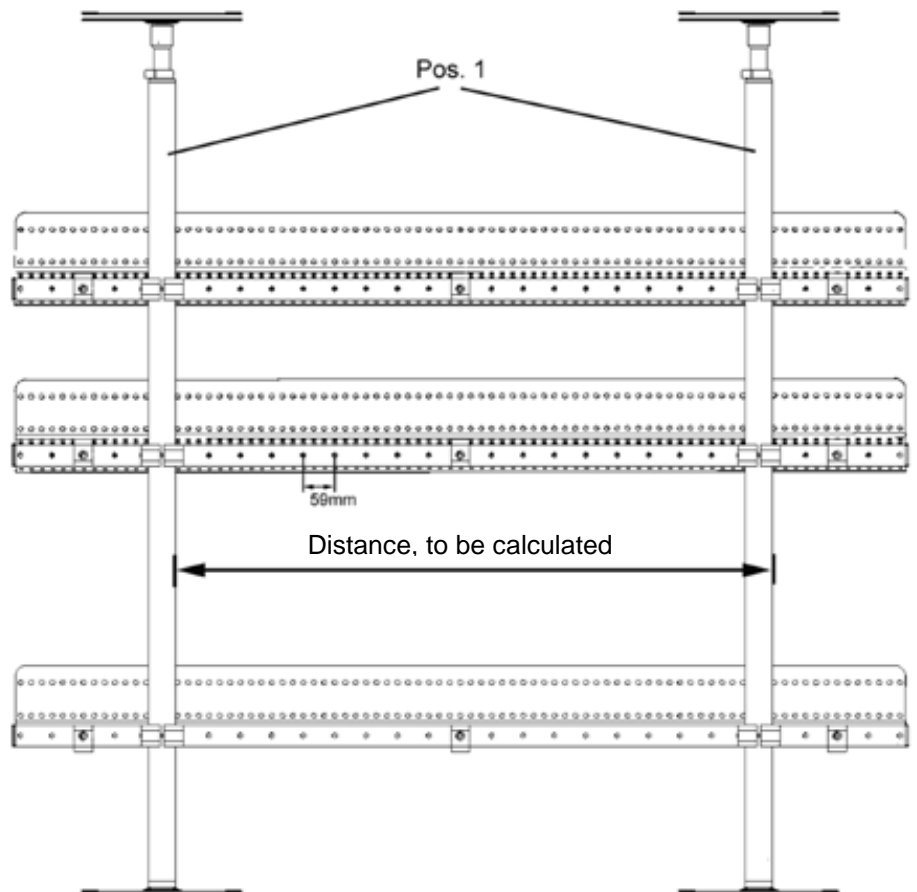
The inclination of the adaptor to the spacer tube must not exceed an angle of 5 degrees. (This results from the cone of the adaptor and the requirement that the bearing surface of the adaptor to lie **flat**).



The distance between the spacer tubes (Pos. 1) must be chosen in steps of 59mm

**(The center hole distance of the cross bars is 59mm).**

Here care must be taken to ensure balanced distances.

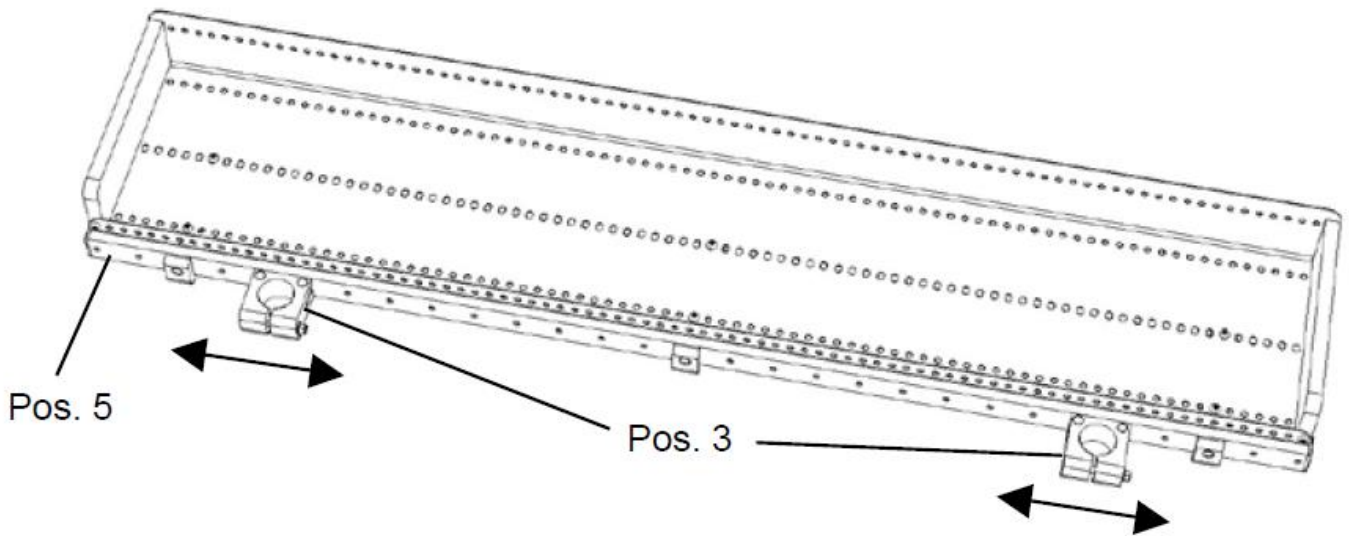


# Installation

## Installation step 1

Place the multi-functional adaptors (Pos. 3) by the cross bars (Pos. 5) of the shelf units in the appropriate position.

The correct position results from the calculated distance of the spacer tubes and the desired position of the shelf units in the vehicle. When the position of the multi-functional adaptors collides with the position of the triangulate girders, the triangulate girders have to be shifted (here care must be taken to ensure balanced distribution of the triangulate girders).

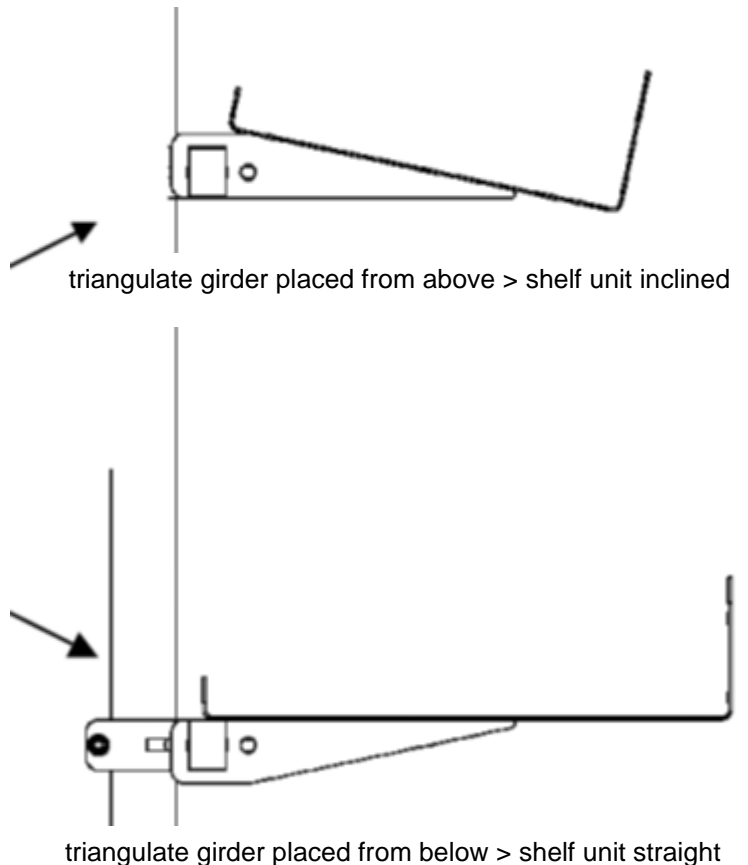


## Installation step 2

If required, install the perforated metal plate profiles of the shelf units in inclined position. (Delivered in straight position)

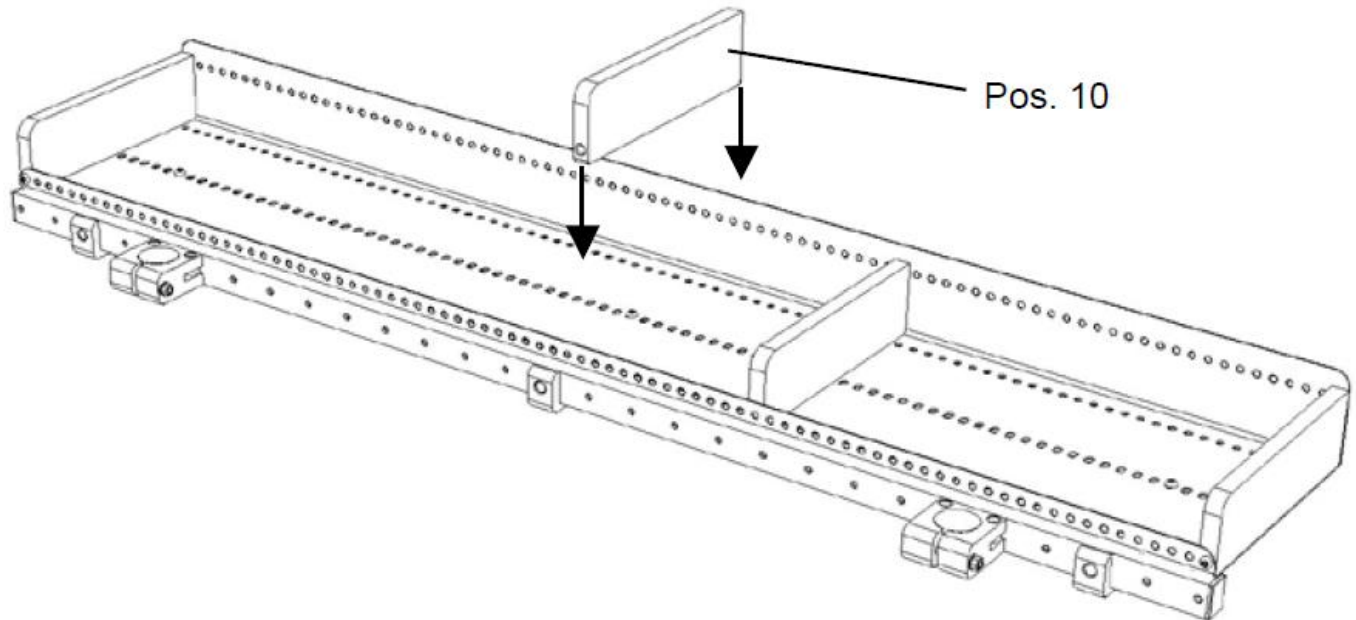
If the triangulate girders are placed from the bottom upon the cross bar, the perforated metal plate profiles form an angle of  $90^\circ$  to the spacer tubes.

If the triangulate girders (Pos. 7) are placed upon the cross bar from above, the perforated metal plate profiles (Pos. 8) form an angle of  $78^\circ$  to the space tubes.  
triangulate girder placed from above > shelf unit inclined  
triangulate girder placed from below > shelf unit straight



### Installation step 3

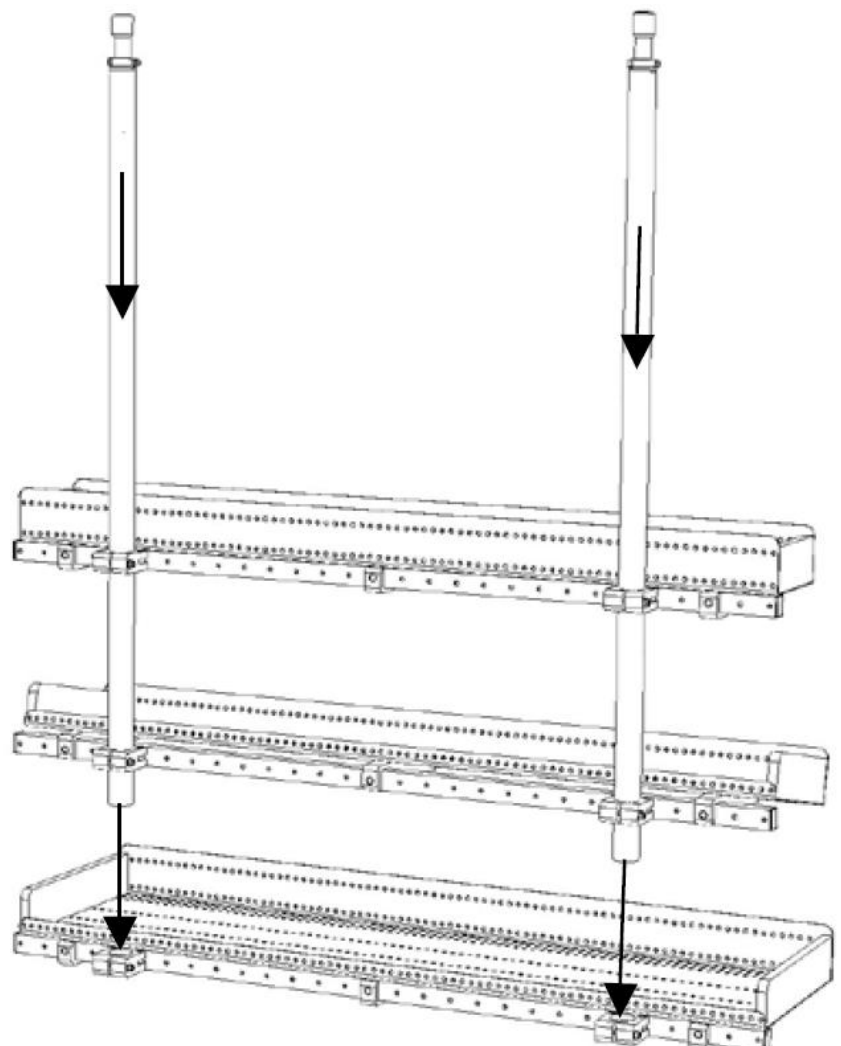
If required, screw together the desired number of dividers (Pos. 10) with the perforated metal plate profiles. (A minimum of two closing dividers at the ends of the perforated metal plate profiles are compulsory and enclosed in each shelf unit. Further dividers are optionally available as accessories)



### Installation step 4

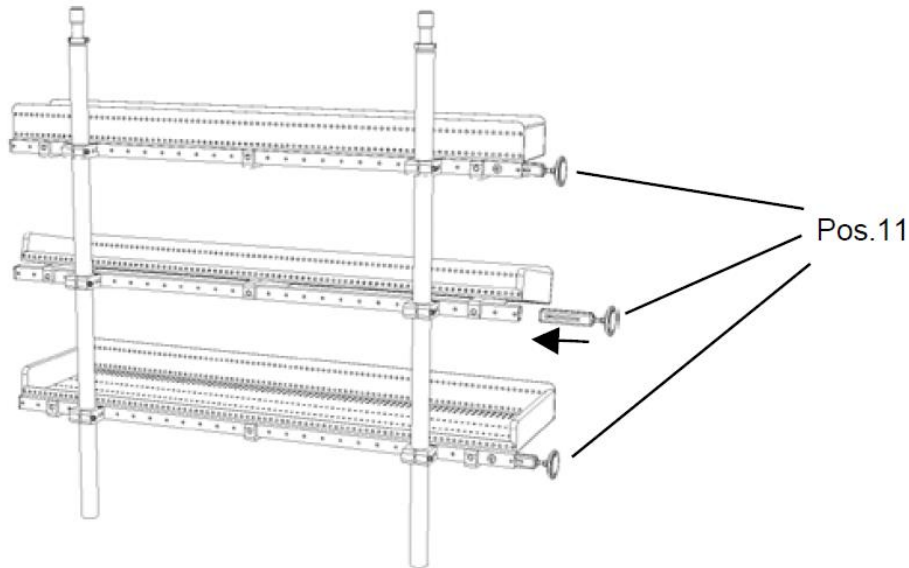
Push the plungers into the multi-functional adaptors of the shelf units.

(For this purpose, place the shelf units on the floor)



## Installation step 5

If required,\* plug the brace support (Pos.11) into the cross bars on the side which will be later oriented towards the separating wall of the vehicle.



## Installation step 6

Adjust the shelf units to the desired height and tighten all the screws (triangulate girders, multi-functional adaptors, cross bars, dividers)

- A brace support at the separating wall of the vehicle is necessary only if the permitted total cargo of the **VanTainer®** mobil-shelf system will be increased from 120 kg to 150 kg. This is optionally available as an accessory.

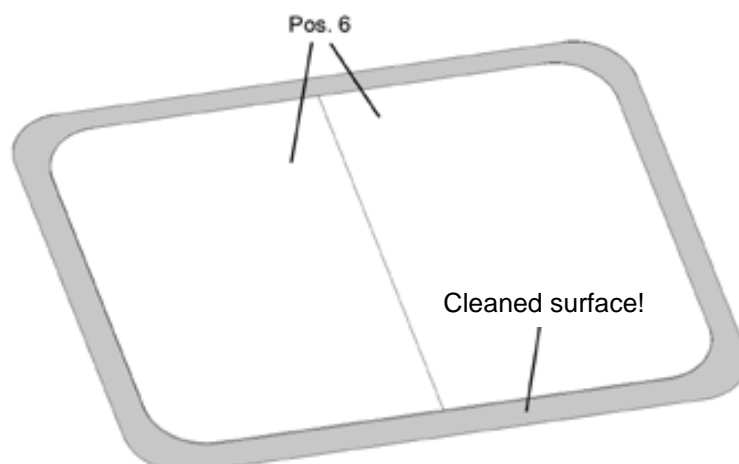
## Installation into the vehicle:

### Installation step 1

Put the shelf into the vehicle and check the position of the spacer tubes at the floor and roof.

### Installation step 2

Clear the floor and roof surfaces which the self-adhesive fleece (Pos. 6) will be attached to from fat, dust, moisture and silicone using the cleaning tissues (Pos. 15) enclosed in the shipment. The glued surfaces must have a firm structure, i.e. no carpets, ceiling linings, etc. (see also the preparation of the installation -> choose appropriate location ) cleaned surface!





### Installation step 3

Mark the exact position of the spacing tubes using the shelf and the provided water-soluble pen (Pos. 8).

### Installation step 4

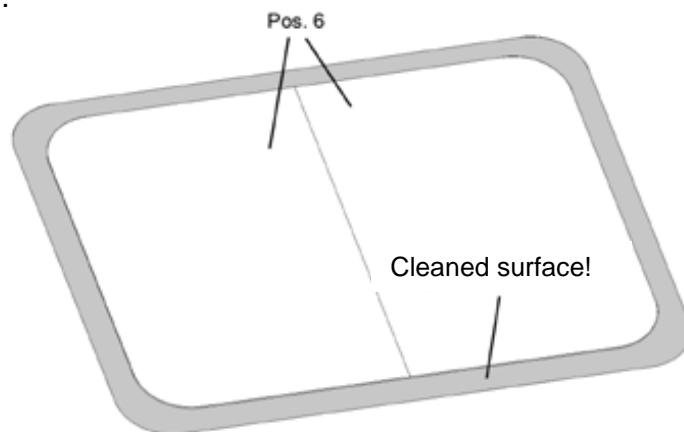
Glue onto the marked areas two mats of the self-adhesive Velcro fleece.

Please take care that the self-adhesive fleece is completely in contact with the form of the roof and the ground. If necessary, cut in the fleece with a knife so that it can completely contact the form of the vehicle. Press on with the supplied hand roller (Pos. 14) crosswise, firmly and over the entire surface

#### Note:

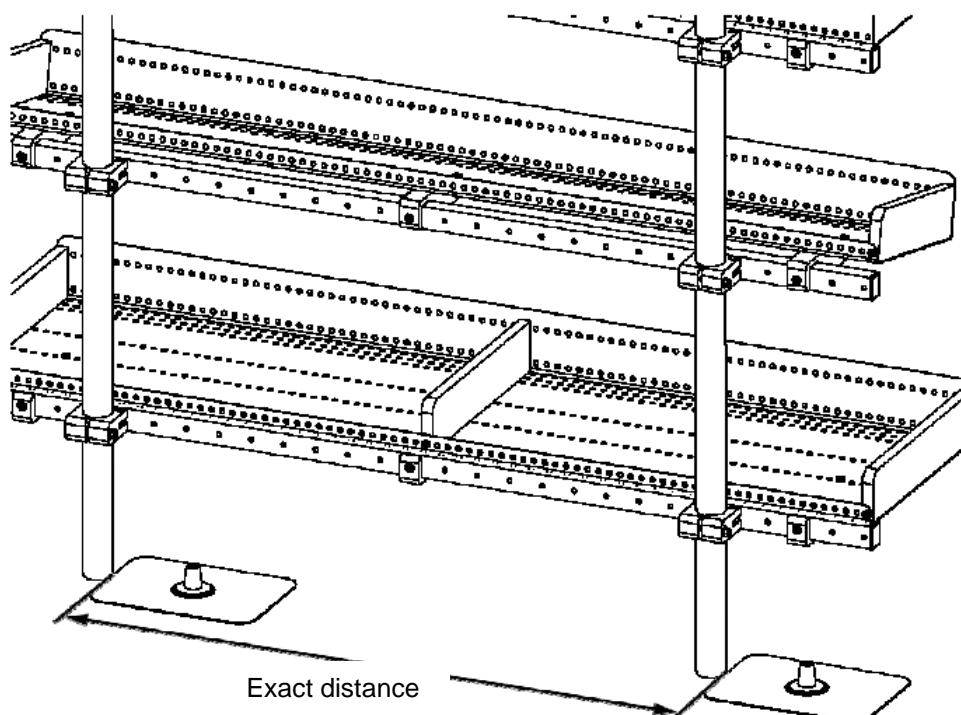
The minimum temperature for the gluing of the fleece is of +10°C.

The glue of the fleece doesn't stick to floors + roofs made of PP (polypropylene) and PE (polyethylene).



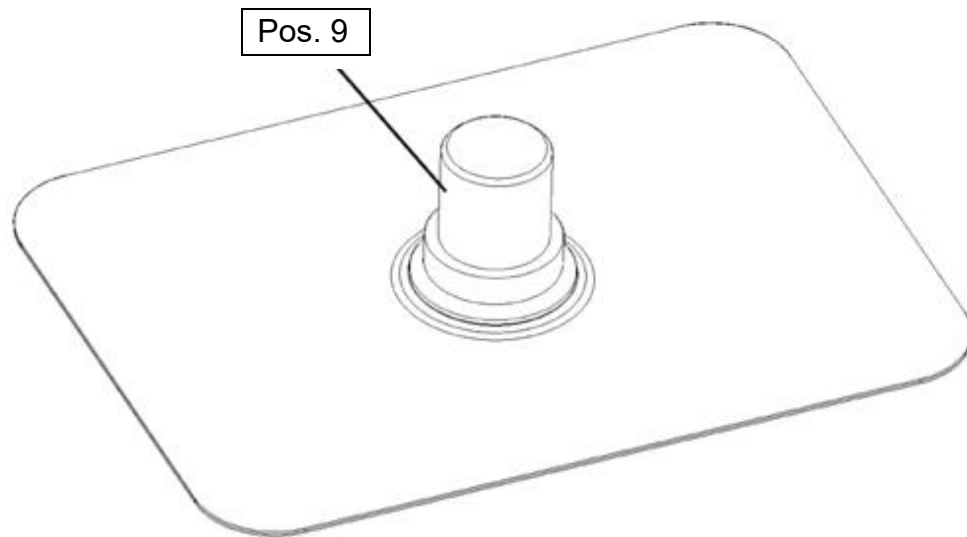
### Installation step 5

Put the Velcro mats fleece onto the ground at the distance of the spacer tubes (for determining the exact distance, the shelf can be used as an aid). Then press on the Velcro mats with the supplied hand roller crosswise, firmly and over the entire surface.



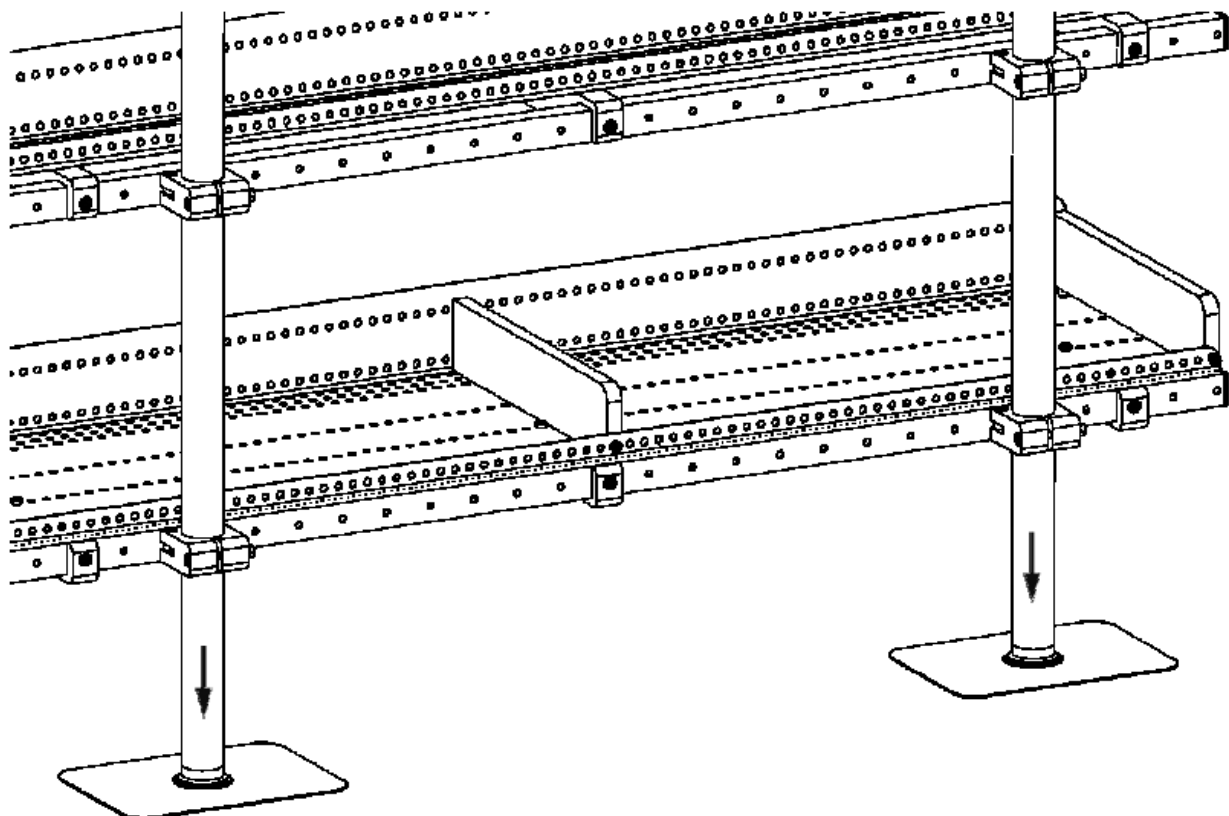
## Installation step 6

Plug the floor plug-in parts (Pos. 9) into the adaptors of the Velcro mats on the vehicle floor.



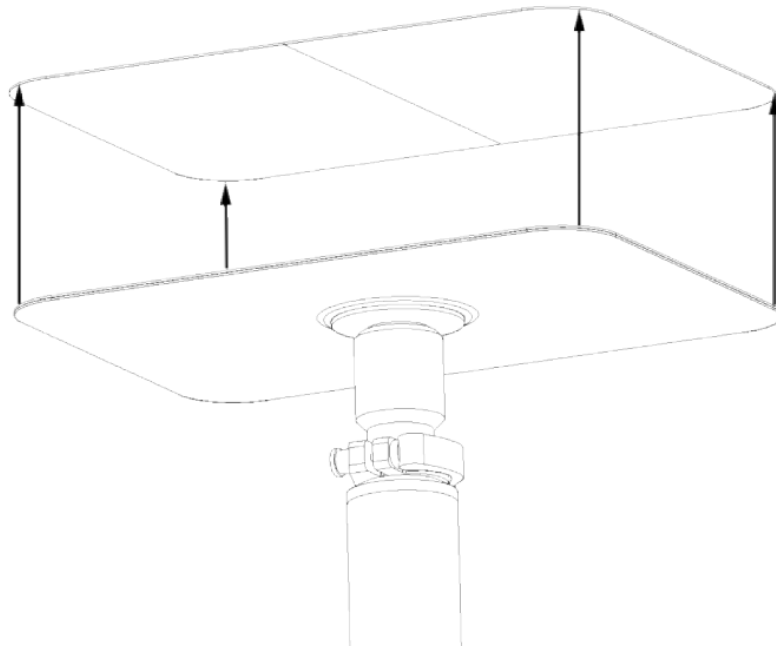
## Installation step 7

Lift the shelf into the vehicle and insert the spacer tubes of the shelf into the floor plug-in parts.



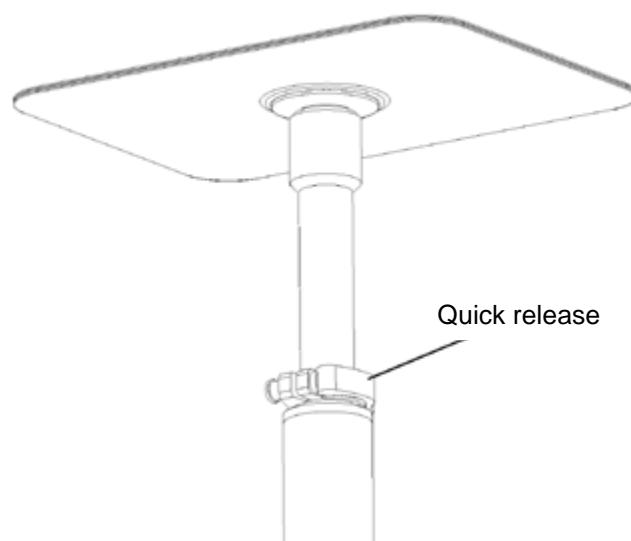
### Installation step 8

Plug the Velcro mats into the adaptor units and push the latter with the mats up to the fleece. Bring the adaptor units down again and press on the Velcro mats with the supplied hand roller crosswise, firmly and over the entire surface.



### Installation step 9

Move adaptor units to the adaptors, press in and fix using the quick release.



### Installation step 10

If required, adjust the perforated metal plate profiles by loosening the screws of the multifunctional adaptor, adapting to the desired height and tightening the screws again.

### Installation step 11

If any brace supports (Pos.11) have been incorporated, push these them forwards to the separating wall of the vehicle and fix them by tightening the screws.

**Done!**

## Notes:

- ⚠ Attention: When inserting and reinserting the shelf board, only undamaged components in flawless condition may be used. Especially the fleece which is bonded in the vehicle has to be controlled continuously for damage, dirt and loosening, as it is significant for the retention force of the shelf board. Here the fleeces on the ground and on the roof must be controlled alike.
- ⚠ Attention: Damaged, dirty or detached fleece must be replaced with new fleece. Inexpensive fleece-sets are available from **VanTainer®**.
- ⚠ Attention: When the shelf board and the Velcro mat are removed, the fleece which is cemented in the vehicle has to be protected with the cover sheet. This is part of the shipment.
- ⚠ Caution: If the vehicle has a ceiling lining or roof panelling, it is compulsory that this is removed prior to the assembly, in the areas where the fleece and the Velcro mat are applied (see assembly instruction).
- ⚠ Caution: If the vehicle does not have a tested separating wall dividing the cargo space from the passenger cabin, no assembly must be made.
- ⚠ Attention: Maximum cargo for a free-standing shelf is 120 kg.
- ⚠ Attention: Maximum cargo for a shelf, which is supported to the serial separating wall of the vehicle, is 150 kg.
- ⚠ Attention: Maximum cargo for a shelf unit is 50kg
- ⚠ Please check the stability of the shelf elements regularly, especially after any exceptional disturbance: for example an accident, shock, full braking, heavy duty, extreme temperatures etc.
- ⚠ The wheel load allocation and the load distribution plan of the vehicle have to be considered when the shelf board is loaded.
- ⚠ The bonded fleece material must not get in contact with solvents or subjected to extreme temperatures (extreme values: -20° / +120°).
- ⚠ The adhesive of the fleece does not clamp on floors and roofs made of PP (polypropylene) and PE (polyethylene).
- ⚠ When the lower shelf board is loaded and unloaded with heavy loads, correct posture is important in order to reduce personal injury.
- ⚠ Small parts and the self-adhesive fleece must be protected from children.