moveside ag

ROLLATOR-REST®

RR/BS/01 **(TYPE/MODEL/SERIES)**

Original Operating Manual (English)

«Comfort and safety for your passengers with a rollator!»

Imprint

Moveside AG
Technoparkstrasse 1
CH-8005 Zürich

rollator–rest

Table of Content

SAFETY INSTRUCTIONS **3**

GUARANTEE AND LIABILITY **4**

COMBUSTION RESISTANCE **4**

RESISTANCE **4**

ASSEMBLY **5**

- PLACEMENT 5
- SPACE (FLOOR) 6
- SPACE (WALL) 6
- PREPARATIONS INSIDE THE VEHICLES/ PRECAUTIONS 7
- ASSEMBLY 9

FUNCTION AND OPERATION **12**

- IDEA 12
- FUNCTIONALITY (DESCRIPTION OF THE UNIT) 12
- OPERATION 13

SAFE USE **13**

MAINTENANCE **14**

CLEANING INSTRUCTIONS **14**

INSTALLATION DECLARATION **16**

SAFETY INSTRUCTIONS

- The operating instructions must be read carefully before assembly and first use. Keep the instructions in an accessible place for the qualified personnel. If the rollator-rest is passed on to a third party, the instructions must be passed on as well.
- The rollator safety unit may only be installed, maintained, and repaired by qualified personnel. Respective country-specific regulations and installation instructions of the vehicle manufacturer must be taken into consideration.
- Repairs are reserved for personnel trained by Moveside AG; particular care must be taken when handling the spiral spring.
- The functionality of your rollator safety unit should be maintained through care and regular functional checks. (See maintenance).
- The right to make changes in the interest of technical progress is reserved and might result in deviations to this manual.
- **Only original retrofit and spare parts supplied by Moveside AG shall be used. The use of any non-original parts will void the guarantee. Any change to the original condition of the rollator safety unit** may invalidate the tested condition of the rollator-rest. Functions can be impaired, which can affect safety. For this reason, any **structural modification** of the rollator-rest **must first be approved by Moveside AG**.
- Screw connections between the vehicle and the rollator-rest **must be checked regularly for tightness**. A wobbling of the rollator-rest can **indicate loose screws or other defects**.
- When noticing any irregularities in the functions of the rollator-rest, a **specialist workshop should immediately be consulted** to find and repair the cause.
- Make sure that **no objects or liquids get inside** the rollator-rest.

GUARANTEE AND LIABILITY

Moveside AG does not take any guarantee or liability for damages resulting from improper assembly, use and repair.

COMBUSTION RESISTANCE

The belt for securing the rollator and the user fulfils the requirements according to ECE regulation 118

- of section 6.2.1 and
- of section 6.2.3.

The results are taken from the test report numbers 21/0621 and 21/0622 of Currenta GmbH & Co. OHG dated 28.04.2021.

RESISTANCE

Static tests were carried out to check the resistance of the rollator support and it was shown that the Moveside AG rollator support can absorb the forces in the longitudinal and transverse directions that result from the specified acceleration coefficients of the guideline DIN EN 12195-1:2021-01. Thus, the rollator rest can be assessed as equivalent to a sideways facing seat according to regulation ECE-R107.

The results are taken from the report 'Assessment of occupant protection and restraint effect of the rollator safety unit Rollator-Rest of Moveside AG for public buses' of 17.12.2021 by DTC Dynamic Test Center AG.

ASSEMBLY

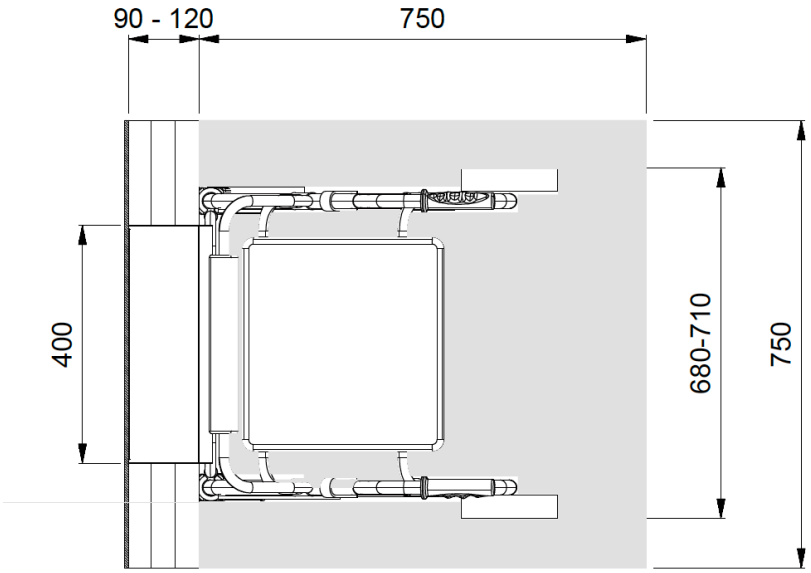
Placement

The rollator-rest is usually placed on a side wall, ideally close to a service door with levelled access or low entrance.

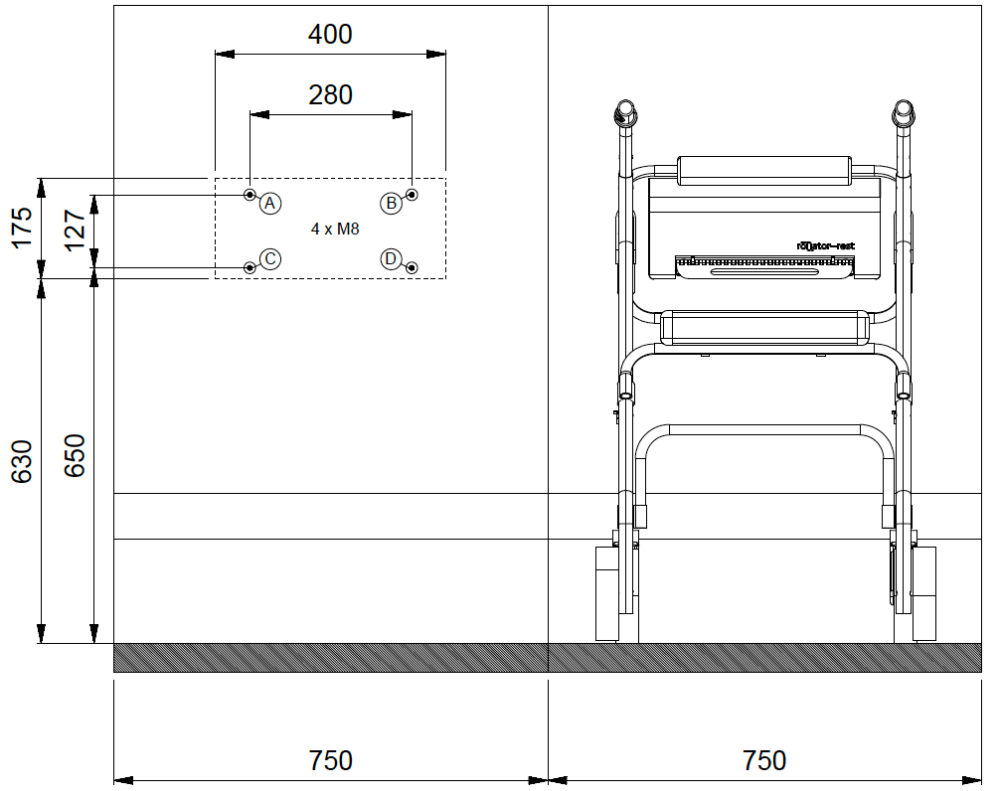
The rollator-rest can be used either at a right angle to (see picture) or against the direction of travel.

Space (Floor)

Rollators, which are used in public spaces are on average approx. 620 mm (some even up to 710 mm) wide. The average length is around 680 mm (< 750 mm).



Space (Wall)



Preparations inside the vehicles/ Precautions

Anchorage points for rollator-rest

There should be four anchorage points for M8 hexagon screws with flange (EN1665) of strength class 8.8 on the body or in the frame (see picture above).

The lower anchorage points C & D are each to be designed to take a force of

- maximum 2'000 N in transverse direction of the bus and
- maximum 700 N in the longitudinal direction of the bus.

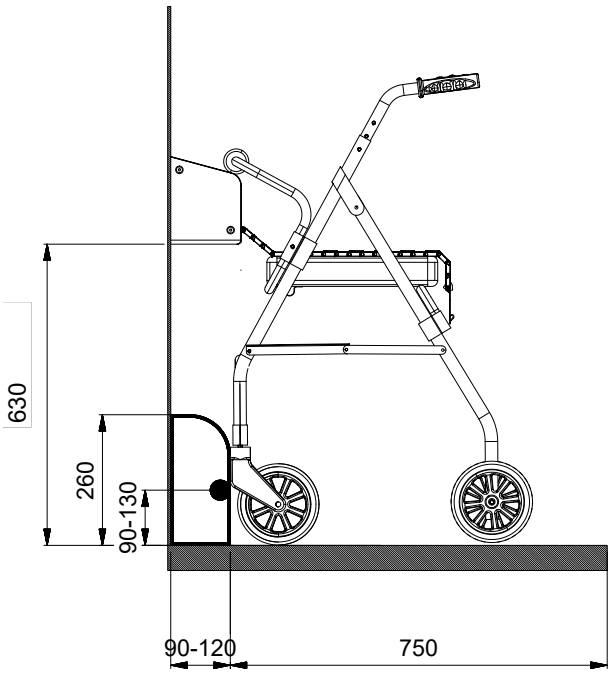
The upper anchorage points A & B are each to be provided for the force absorption of

- maximum 1'000 N in transverse direction of the bus and
- maximum 350 N in the longitudinal direction of the bus.

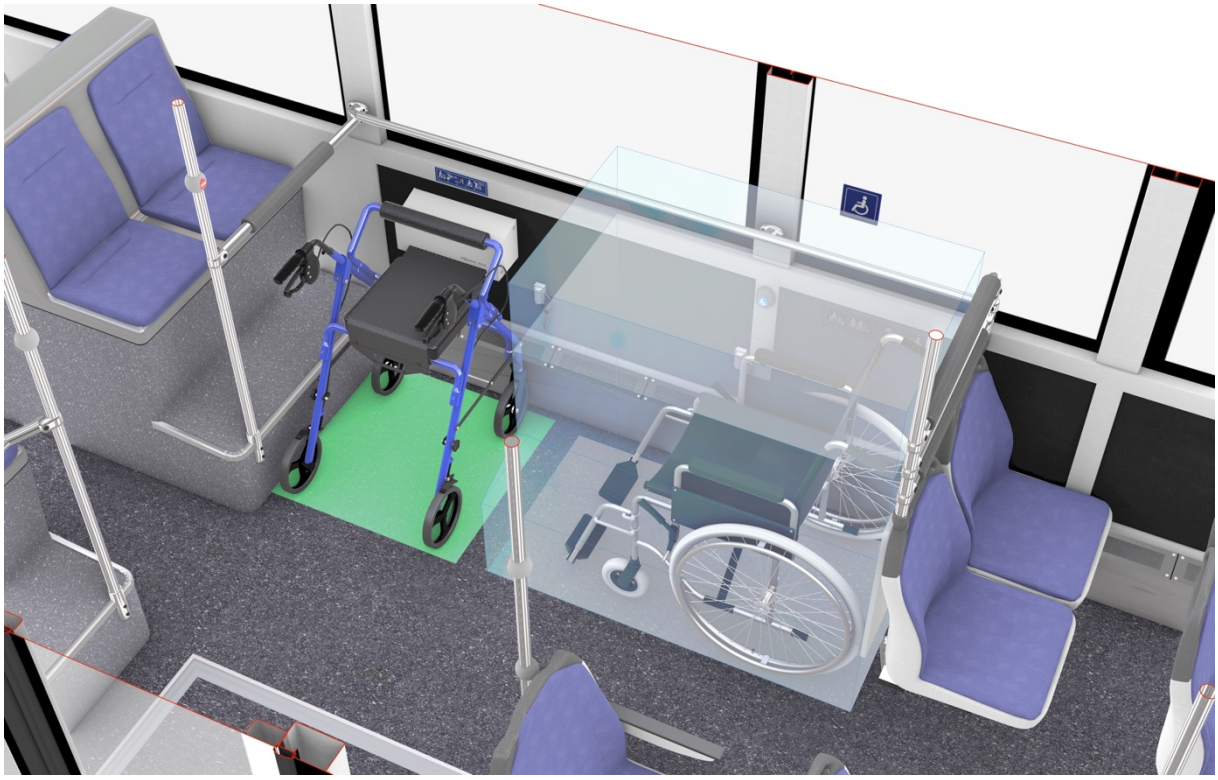
The anchorages are to be designed in such a way that there is a gap as small as possible between the housing of the rollator-rest and the counter-thread.

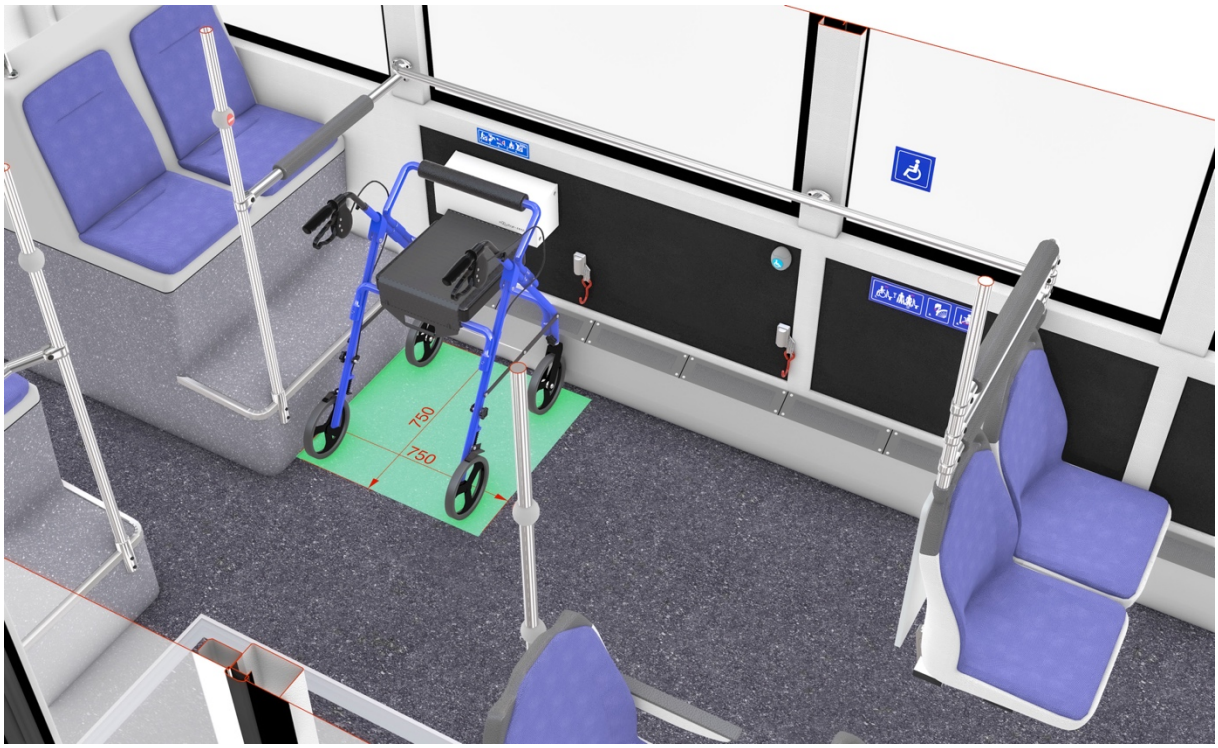
Mounting bar for rollator

The surface of the mounting bar is used for correct positioning and absorbs the thrust forces exerted by the rollator wheels when accelerating in the direction of the mounting bar. It can be designed as a heating channel, bar or base. The bar should cover an area of 80 - 140 mm in height from the floor and ensure a distance to the wall (anchoring surface of the rollator-rest) of 90 - 120 mm.



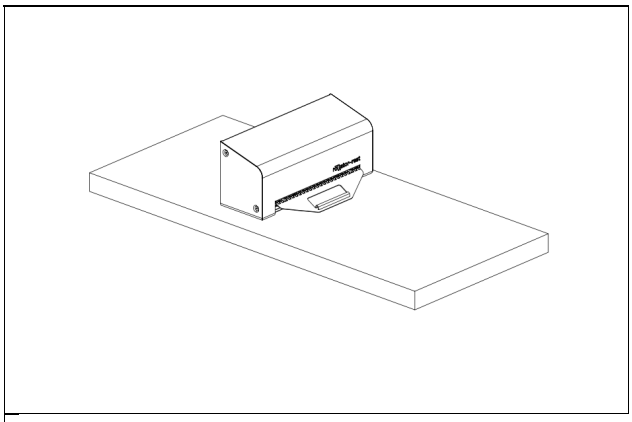
Space conditions with wheelchair according to UN-ECE R107





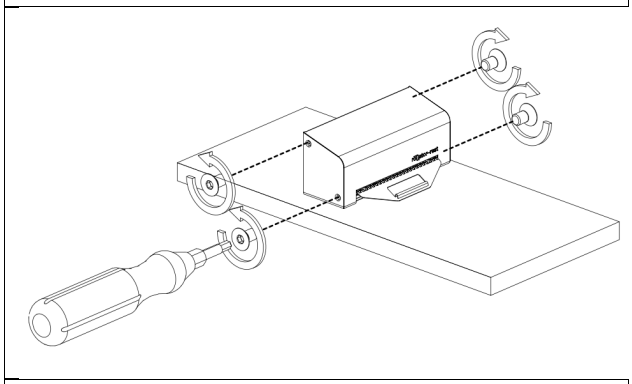
Assembly

The rollator-rest is connected with the anchorage points by M8 hexagon screws with flange (EN1665) of strength class 8.8.

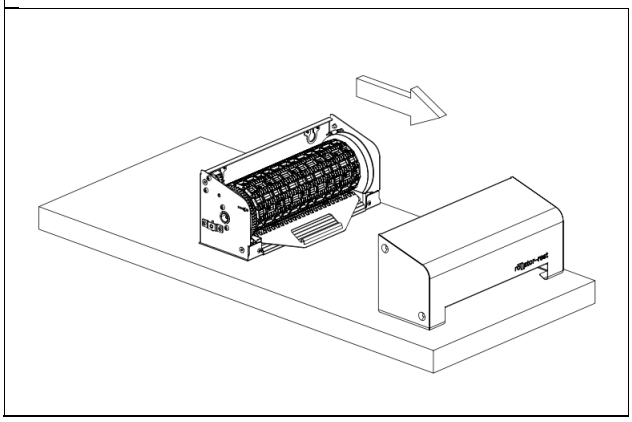


1. Unpack rollator-rest.

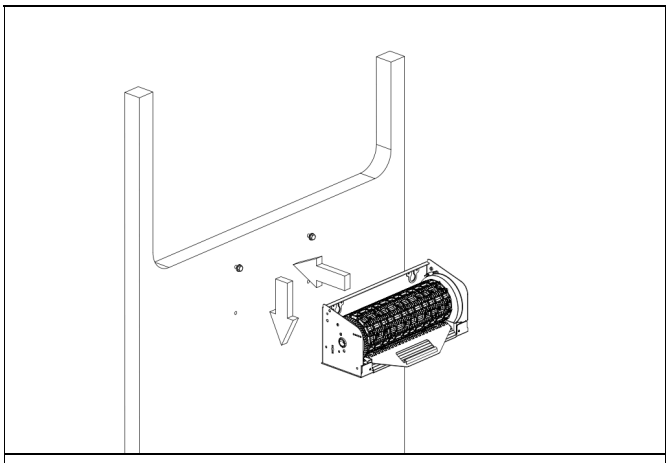
2. Prepare the following tools:
- Allen key 4mm
- Open-end or ring spanner 13mm (torque spanner)
- Threadlocker medium strength (e.g. LOCTITE™)
- Phillips screwdriver size 2



3. First loosen the screws of the cover with the Allen key.

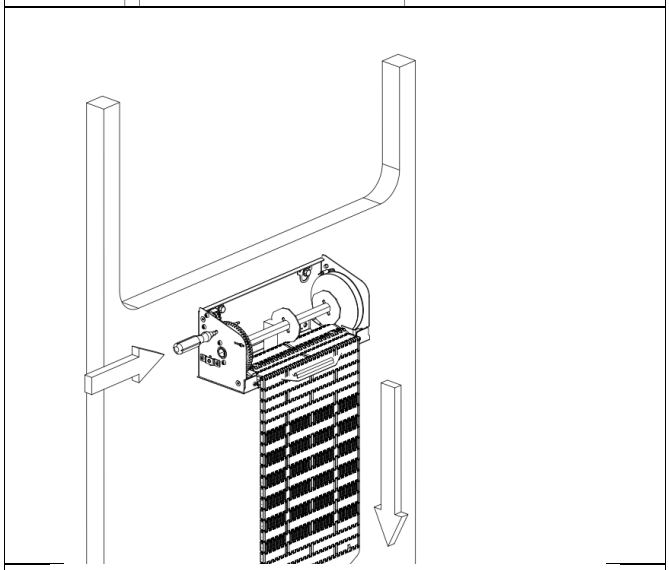


4. Remove the cover of the rollator-rest.



5. Apply the threadlocker all over the screws.

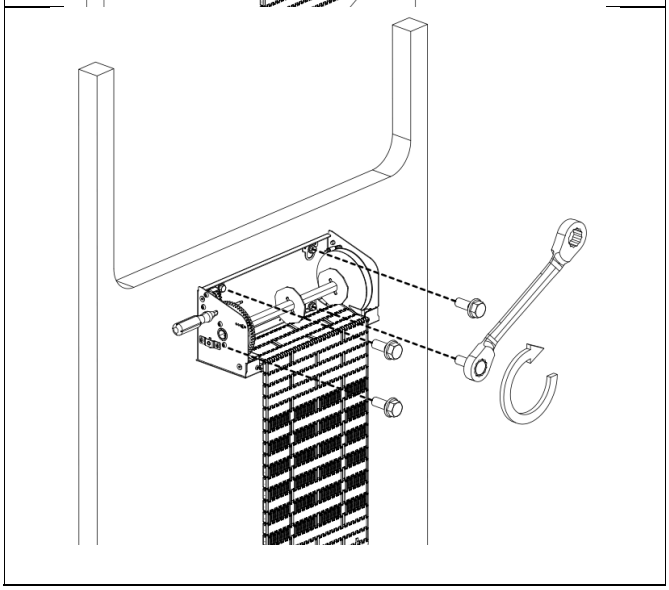
6. Screw the screws into anchorage points A & B. Leave a gap (free thread) of approx. 10 mm.



7. Hook the rollator-rest into the upper keyholes.

8. Make sure that the screw heads are inserted in the upper holes.

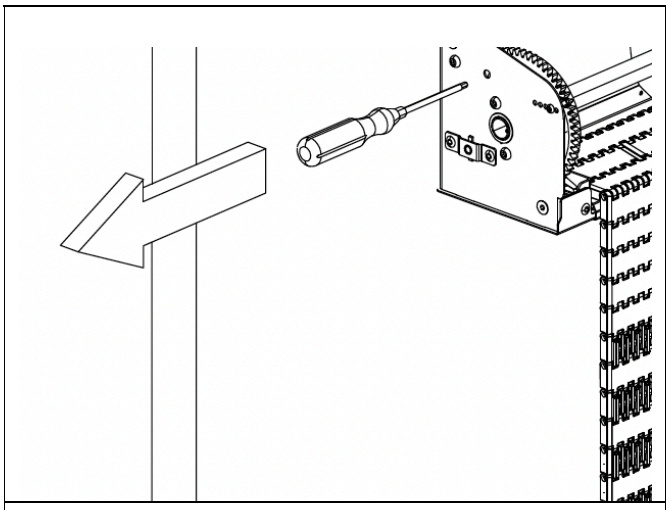
   Pull out the belt and lock it in place with a screwdriver.



9. Insert and tighten the two lower screws (again, fit washers and apply thread locker).

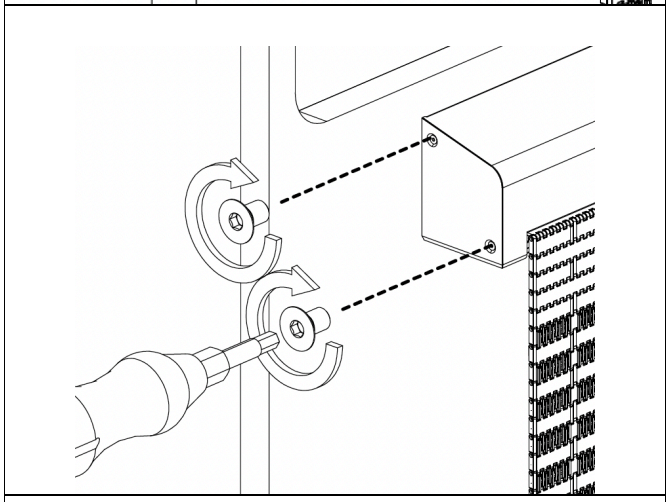
10. Tighten the upper two screws.

11. Tighten all four screws with a torque of 24 Nm.



12. Remove the Allen screwdriver. – The belt will automatically retract slowly.

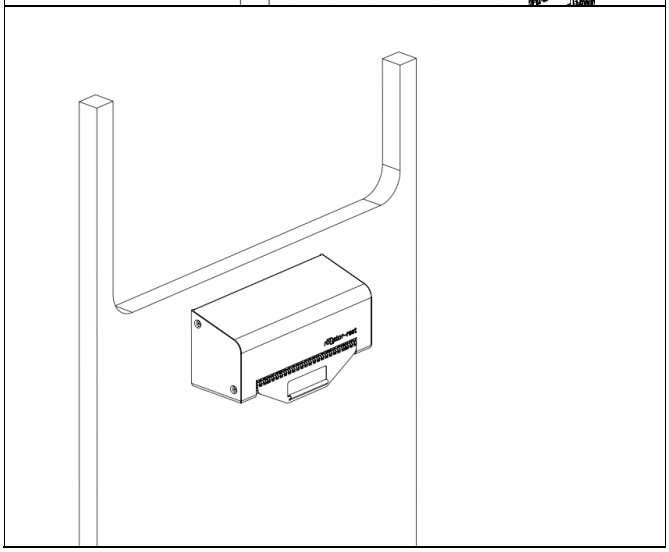
13. Check the function by pulling the belt out as far as possible. It should retract automatically after approx. 14 - 22 seconds.



14. To put on the cover: pull out the mat approx. 5 cm (so that the end stops come to rest outside the housing).

15. Refit the four Allen screws.

16. Place the sticker with the picto-grams for correct operation in a clearly visible place near the rollator-rest.



Your rollator-rest is installed and ready for use. We wish you a safe and pleasant trip!

FUNCTION AND OPERATION

Idea

The safe transport of people with rollators in vehicles of regional and local public transport is not solved yet in a satisfactory manner. The current technical and operational concepts are not very convincing either.

This situation is due to two central problem areas:

- People with a rollator have limited mobility and are therefore hardly able to move around in a vehicle, to stand and to hold onto something at the same time.
- The rollator does not offer a safe place to sit in a vehicle (with dynamic driving forces) and poses a risk to other passengers if it is not properly secured.

For this reason, in the current operational concepts, people with rollators are required to secure the rollator first and then find a seat nearby. The driver should ensure that all people are sitting or holding on to something before departure. However, in practice, both of these aspects represent considerable challenges for all parties involved and are therefore rarely practiced correctly.

This leads to rollator users endangering not only themselves but also all the other passengers. Such accidents are known to happen.

The idea was to develop a product, called Rollator Safety Unit (RSU), with which the rollator users can travel as safely sitting on their aid as sitting on a normal passenger seat.

Functionality (description of the unit)

The rollator rest is based on the principle of connecting the rollator user incl. rollator with the vehicle. This secure connection is created by a friction fit: The connecting material, i.e., the mat (belt), is tucked between rollator seat and the user’s bottom.

Operation

The following instructions or an adapted form of them, which contain at least points 2, 3 and 5, must be clearly visible on or directly next to the appliance.

1. Manoeuvre the rollator up to the area in the middle under the rollator-rest.
2. Apply the brakes.
3. Pull out the belt over the rollator seat as far as it will go.
4. Take a seat on the rollator seat with the belt placed over it.
5. Hold on to the handrail on the side.
6. Stand up, release the brakes, and leave the vehicle. The belt will retract by itself.

SAFE USE

There are many different rollators. Nevertheless, the construction and the size should comply with ISO 11199-2.

The rollator-rest can basically be used by all rollators covered by the above-mentioned ISO standard if they have a seat surface and a parking brake.

The use of rollators with seat surfaces that are above 640 mm and/or below 510 mm may be restricted (very rare cases).

The rollator should be adapted to the person using it, i.e. the feet must rest on the ground when seated. The maximum permissible weight of the person including the rollator is 160 kg.

If the rollator-rest is not directly adjoined to a restraint device in the direction of travel (support bar), the person using the rollator should hold on to the adjoined support bar.

The rollator-rest is not suitable for securing other equipment, such as wheelchairs, bicycles, luggage, etc.

MAINTENANCE

The unit is basically maintenance-free. Nevertheless, the following two points should be checked on a monthly base:

- the tightness of the screws and
- the delay mechanism should be checked for the minimum time of 15 seconds. In case of problems, contact the Moveside AG sales partner of your country.

The belt and the draw-in plates should be checked for dirt and cleaned if necessary.

CLEANING INSTRUCTIONS

Please note that the most efficient way to clean the belt is from top to bottom (hanging) and centre to outside.

1. **Dry Cleaning (regularly)**

   Remove coarse dirt from the belt. Make sure that the guide rails are also cleaned from dirt.

   The further steps are only necessary in case of heavy contamination and are only possible in the workshop. If necessary, the housing must be opened. Please refer to the assembly instructions.

2. **Rinse**

   Rinse the belt with warm water (approx. 50°C).

3. **Apply the cleaning agent**

Apply the appropriate cleaning agent to the belt. Leave the detergent on for 10-15 minutes but make sure that it does not dry as this can cause a chemical bond which is then harder to remove.

4. **Rinse and inspect**

Thoroughly rinse the belt with water (approx. 50°C). Inspect the belt. Use your senses to do this: Look, smell, and touch. Be especially careful when using strong cleaning agents.

5. **pH-value test**

Inspect the belt again and make sure that all residues of the chemical cleaning agent have been removed. To ensure this, use a pH strip (litmus paper) to check that all residues of the alkaline solution have been removed. Let the belt dry.

INSTALLATION DECLARATION

EC Installation Declaration

*in the sense of the EC Machinery Directive 2006/42/EC, Annex **II B***

Moveside AG, Technoparkstrasse 1, 8005 Zürich, Schweiz

We hereby declare that the following partly completed machine

Type:	Rollator-Rest® (RR)
Model:	Bus (BS)
Series:	01
Year	2022
Function:	To secure rollator users together with their rollator in public transport vehicles in accordance with the United Nations, Economic Commission for Europe ECE/TRANS/WP.29/78/Rev.6, Consolidated Resolution on the Construction of Vehicles (R.E.3), 11 July 2017 for Category M2, Class A and Category M3, Class I and II

complies with the essential requirements of the relevant provisions listed below, insofar as applicable to the scope supplied by us:

1. EU-Policies:
   - Machinery Policies in the version 2006/42/EG
   - ECE Regulation 118 of sections 6.2.1 and 6.2.3
   - Regulation No. 107 UNECE Rev. 8
2. Applied and harmonised EN standards:
   - DIN EN 12195-1:2021-01
3. The special technical documentation according to Annex VII- Part B and the installation instructions according to Annex VI of Directive 2006/42/EC have been prepared.
4. Additional Information:
   The incomplete machine may only be used by users who, together with the rollator and luggage, have a maximum total weight of 160 kg.

Authorised representative of Moveside AG
for the compilation of all technical documentation: Pascal Lippmann, Managing Director

Zürich, 17.02.2022