

# Tempwall Autostow Mounting Instruction v1.1



Type: Tempwall Autostow

Date: 18.08.2020

Version: 1.1

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Document history

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## 1 INTRODUCTION

#### 1.1 PREFACE

This operating manual is an essential aid for the correct and safe use of the insulation partition walls.

This manual contains important information for reliable, proper and efficient use of the insulating partitions. Adherence to the manual helps to avoid dangers, reduce repair costs and downtime and increase the reliability and the lifetime of insulating walls.

The instructions must be available to the operating personnel at all times. Any person who is authorized to use the insulating walls reads the operating instructions before use and then applies them accordingly.

#### 1.2 COMMON INFORMATION

Do not expose the Tempwall Autostow to outside weather conditions, extreme temperatures and direct sunlight.

Any change to the product makes the CE marking invalid. Please contact the manufacturer, if a modification of the product is necessary.

Loadlok reserves the right, if not being met to the requirements, to withdraw the guarantee of their product partially or entirely.

At the end of the lifecycle:

The end user can deliver the multi temp product to Loadlok. Loadlok provides environmentally sound disposal of their product and recycles parts if these are fit for reuse.

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#### 1.3 NOTES TO THE OPERATOR

This manual is an essential part of the insulating walls. The customer shall ensure that the operator adheres these instructions. Please check our website www.loadlok.com for additional information such as user manuals. Or scan the QR code to find us on YouTube:



Note that in addition to the instructions, the laws of the country of the place of use are applicable and approved rules for accident prevention alongside with approved technical regulations for safe and professional work shall apply.

Any change to the product makes the CE marking invalid. Please contact the manufacturer, if a modification of the product is necessary.

The Tempwall Autostow is not a load securing device!

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## 1.4 READING INSTRUCTIONS



#### WARNING:

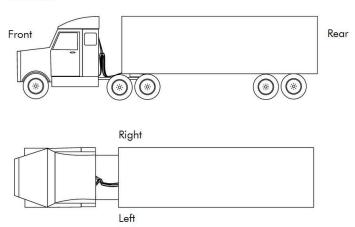
This is a warning of a potentially hazardous situation, resulting in moderate or minor injury and / or property damage if the appropriate instruction is not followed exactly.



#### ATTENTION:

This is a reference to useful information for the safe and effective use.

#### Orientation



#### 1.5 LIST WITH ABBREVIATIONS

Frigowall track J-formed rail with locking holes to guide the Tempwall Autostow into the trailer. (Type 3062)

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## 2 SAFETY

#### 2.1 SIGNS ON THE PRODUCT



ID. nr: TW60-0203

MANUFACTURED BY:

**DISTRIBUTED BY:** 





Type designation sign

Common information of the Tempwall Autostow



Dient NICHT zur Ladungssicherung! Do **NOT** use for load securing!

Warning sign

Do not use the Tempwall Autostow as a load securing device!



**ACHTUNG** 

Warning sign

The balancer is a spring activated device.

#### 2.2 SIGNS IN THE MANUAL



## **WARNING:**

This is a warning of a risk of danger, with the possible consequence serious injury or death if the designated instruction is not exactly is followed.



#### **WARNING:**

This is a warning of a potentially hazardous situation, resulting in moderate or minor injury and / or property damage if the appropriate instruction is not followed exactly.



#### ATTENTION:

This is a reference to useful information for the safe and effective use.

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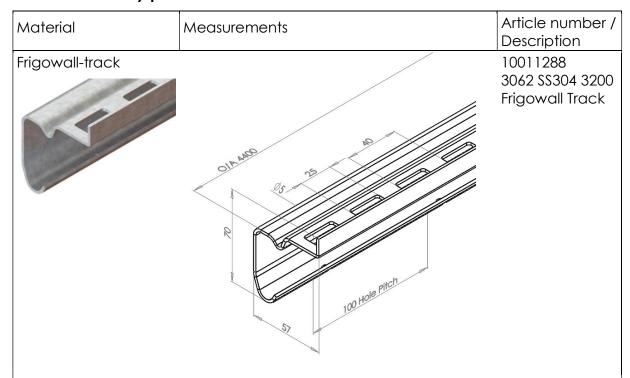
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# 3 MOUNTING THE FRIGOWALL TRACK

#### 3.1 PARTS NEEDED

## 3.1.1 Mandatory parts



Alternative article numbers with descriptions:

10011291 10009470

3062 PRE GALV 4400 Frigowall Track 3062 SS304 3200 CS Frigowall Track

10011289 10011290

3062 SS304 4400 Frigowall Track 3062 SS430 3200 Frigowall Track

10010708

3061 PG 3200 Frigowall Track

Rubber end stop 11060164



Rubber endstop extra hole

Notes: To be fitted on all ends. Is not accompanied with fasteners.

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# 3.1.2 Optional parts

Material	Measurements	Article number / Description
Steel stopper right side	<u> </u>	14003348
50		Steel stopper rightside for Bulkheads
Notes: Is delivered with	out fasteners	
Steel stopper left side		14003346
		Steel stopper leftside for Bulkheads
Notes: Is delivered with	out fasteners	
Steel stopper right side		14003349
U		Steel stopper rightside for Bulkheads
Notes: Is delivered with	out fasteners	
Steel stopper left side		14003347
		Steel stopper leftside for Bulkheads
Notes: Is delivered with	out fasteners	

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Material	Measurements	Article number / Description
Roller wheels on c	a short axle	12009541
		Roller wheels axle 48mm
Notes:		
Roller wheels on c	a long axle	12009540
		Roller wheels axle 119mm MK1
Notes:		
Air return vent		11060262
		Air return kit Tempwall
Notes: Opening c	losed with a tarpaulin sheet with velc	cro
Air return vent		12010099
Butterfly air return  Notes: Opening closed with a butterfly valve		Butterfly air return

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Material	Measurements	Article number / Description
Ventilator with the	nermostat	11060320
Ventilator with thermostat		Tempwall80 12V Fan cable switch.
Notes: Spiral cable is included		

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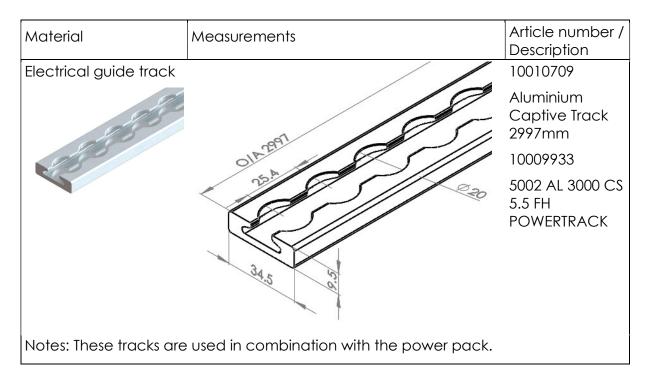
# 3.1.3 Consumables

Measurements	Article number / Description
	12009573
	PVC safestrip super polar
	12009428
	Stainless steel sliding contact
	e connecting rod
	12010053
	Power Supply Kit Multitemp 25+1
	(25 isolators + 1 sliding connector)
	Measurements  The controlled fan is built-in by Loadlok the swill be electrically insulated.

Notes: If the temperature controlled fan is built in by Loadlok the connecting rod between the balancers will be electrically insulated.

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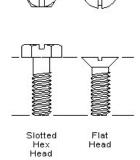
## 3.1.4 Parts to be supplied by yourself

Material	Measurements	Article number / Description
Rivets	Max 5 mm diameter	N.A.

Notes: The length of the rivet is subject to the composition of the insulation wall of the trailer.

This article is not in the delivery program of LoadLok.

Screw bolt Max 5 mm diameter N.A.



Notes: The length of the screw is subject to the composition of the insulation wall of the trailer.

Flathead optional: holes counter sunk for flush mounting. If this is a preference for mounting the Frigowall track, the mounting holes can be made counter sunk.

This article is not in the delivery program of LoadLok.

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# 3.2 TOOLS NEEDED

Blind rivet pliers



Wrench



Spirit level tool



Allen key



Measuring tape



Extended wrench 24mm hex 1/2 inch SAP 20000812



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Pipe wrench



Socket wrench



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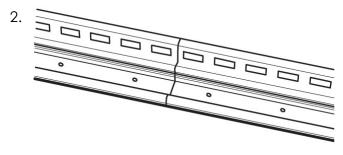
# **4 MOUNTING THE TRACK**



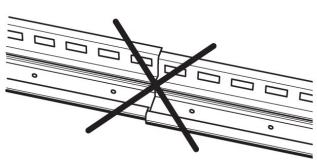
#### ATTENTION:

The procedure as described here must be performed twice, once on the left hand side and once on the right hand side of the trailer.

1. Measure the effective length of track to be used.



For smooth running of the balancer trolley wheels over several tracks LoadLok advises to weld the tracks in the joining point in such way the balancer or trolley wheels never can interfere with the weld.



Make sure that the end edges of the rails are straight, so that the wheels of the vehicle can run continuous smoothly.

3. If the Frigowall-track is to be shortened, please leave enough material length in order to fasten the rubber end-stop with its steel cover plate.

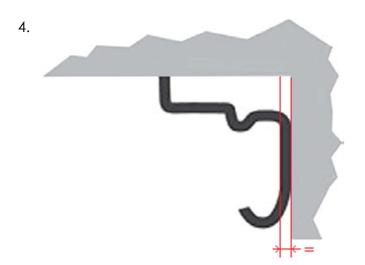


#### ATTENTION:

Loadlok advises to use adhesive between the Frigowall track and side walls which is fit for this purpose.

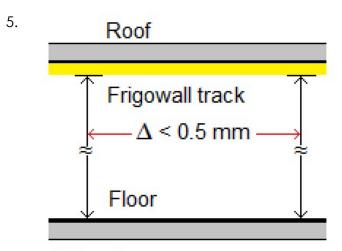
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Insert the guide rails in the outer left or right side of your vehicle.

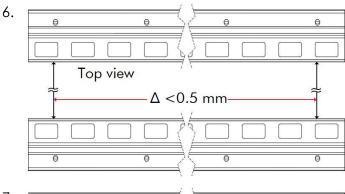
Install the rails vertical (both to the wall and also to the ceiling).



Measure the distance from the floor to the Frigowall track on both ends of the track.

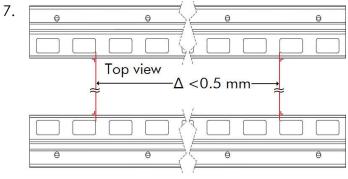
The difference must be less than 0.5 mm as is shown in figure.





Measure the distance between the tracks in the vehicle, like is shown in the figure.

The difference must be less than 0.5 mm.



The locking holes **must** be parallel.

The difference must be less than 0.5 mm.

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#### ATTENTION:

Maintain the Frigowall-track on level! The tolerance for smooth running is < 0.5 mm!

8. Use **all** mounting holes with a rivet or a screw bolt.



#### ATTENTION:

When using rivets:

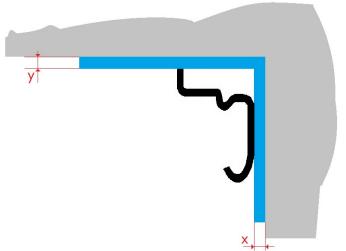
Please fasten the Frigowall track to a minimum length of 750 mm with bolts for maintenance purposes of the Frigowall door. These sections must be opposite to each other!



#### ATTENTION:

Wait until the adhesive is fully hardened. Only then proceed with rolling the Tempwall Autostow assembly into the track.

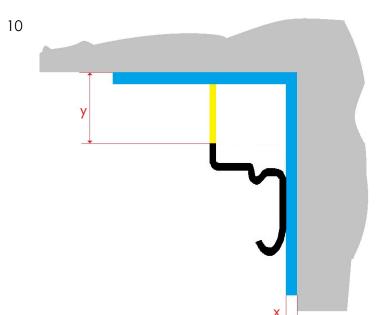
9. In the case the trailer is reinforced in the edges with corner profiles:



The corner profile is shown in blue colour.

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LoadLok advices to fill the gap between the roof and the Frigowall-track. (shown in the figure in yellow)



#### ATTENTION:

The X and Y values are vital when ordering the Tempwall Autostow!



#### ATTENTION:

Note that the locking holes must remain free of obstacles

11 Mount the end stops at the bulkhead side (front) of the track. (As is shown on position 11 or 12)

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12

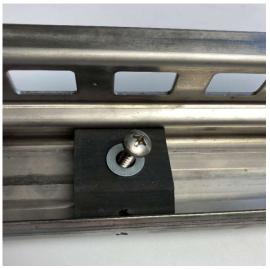


Mount / attach the end stop.

Possibilities are to use a M5 x 30 bolt and use the drain hole, a M8 bolt with thread or a big screw. Choose the option that suits your needs best.

Mounting materials are not included.



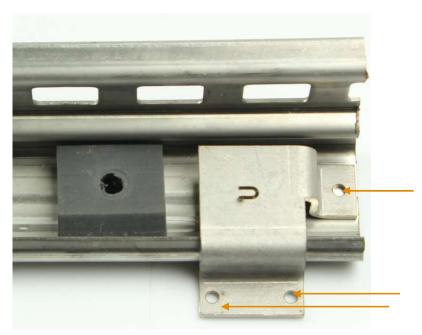


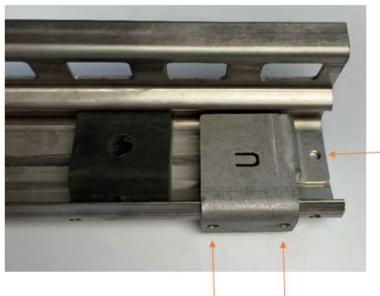
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13 Optional mounting of the steel stopper as shown in the figure. The hole in the Frigowall track must be drilled.

In total 3 holes must be drilled!





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# 5 INSTALLATION OF THE TEMPWALL AUTOSTOW IN THE VEHICLE



#### **WARNING:**

Ensure that the vehicle is positioned on a horizontal plane before continuing with the installation!



#### **WARNING:**

Severe injuries are possible due to the falling wall. Use a lashing strap to secure the wall on the forks of the forklift to avoid falling.



#### ATTENTION:

Cover the lifting equipment as a precaution with soft material, in order to prevent damaging the Tempwall Autostow.

1. Secure the Tempwall Autostow with a lashing strap on the forks of the forklift to avoid falling.

2.



Lift the complete
Tempwall Autostow
with a forklift with
extended forks (min.
1.85 m long) or other
lifting tools (e.g. scissor
lift).

In the picture you see the Frigowall but mounting is similar.



#### ATTENTION:

The center of gravity of the Tempwall Autostow is on the balancing device.



#### **WARNING:**

Severe injuries are possible due to a falling wall. Use a lashing strap to secure the wall on the forks of the forklift to avoid falling.

3. Carefully lift the Tempwall Autostow against the opening of the mounted guide rails and insert the wheels of the trolleys into the rail.

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#### ATTENTION:

The center of gravity of the Tempwall Autostow is on the balancing device!

4. Slide the Tempwall Autostow as far into the vehicle as possible so that the Tempwall Autostow cannot roll out of the **unsecured** rails.





Override the brake with a screwdriver on both sides.

6. Push the Tempwall Autostow at least so far in the trailer that the locking finger is in a brake hole.



#### **WARNING:**

Severe injuries are possible due to a falling wall. Remove the override and assure that the locking finger is in a break hole!



#### ATTENTION:

The wheels are freely movable sideways up to 10mm to compensate for differences in vehicle width.

7. Mount the end stops at the rear doors side (rear) of the track. (As is shown on position 8 or 9)

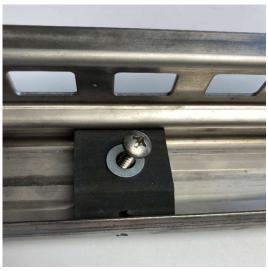
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8.







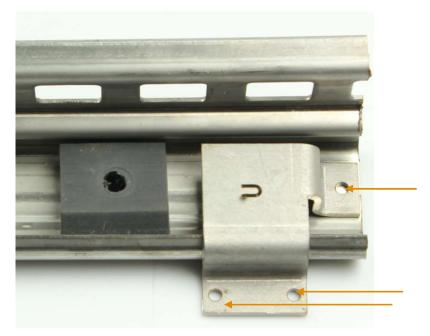
Mount / attach the end stop.

Possibilities are to use a M5 x 30 bolt and use the drain hole, a M8 bolt with thread or a big screw. Choose the option that suits your needs best. Mounting materials are not included.

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9. Optional mounting of the steel stopper as shown in the figure. The hole in the Frigowall track must be drilled.
In total 3 holes must be drilled!





10

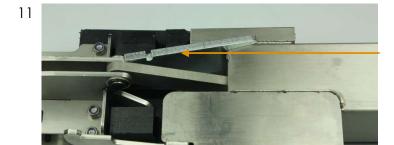


ATTENTION:

Repeat step 7 also for the other side of the trailer!

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The wall is secured to the balancing device by a transport safety device.



Carefully pull the wall a bit down at an angle of 45° using a belt.



Close the Tempwall Autostow a little bit.

Remove the transport safety device from **each** balancer.



Please dispose the transport safety device in an environmentally responsible manner.

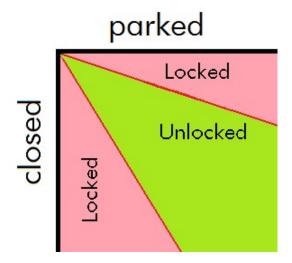
15 Put the Tempwall Autostow in horizontal position again.

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Carefully pull the wall down at an angle of 45° using a belt.



When the
Tempwall Autostow is
in an angle within the
green area the
Tempwall Autostow
can be moved freely
along the Frigowall
track.



17 Set the Tempwall Autostow in vertical position. (here a 1/3 width with 1 wing showed)



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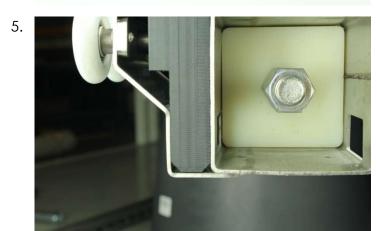
# 6 CHECK THE FUNCTIONALITY OF TEMPWALL AUTOSTOW

#### 6.1 ADJUST SPRING TENSION

- 1. Open the Tempwall Autostow now to approx. 45°.
- 2. Push Tempwall Autostow up to the roof.
- 3. If the Tempwall Autostow is not resting in a **parallel** position then:



Remove the plastic cap on the back of the balancing device.



The bolt which holds the spring is visible.

The spring tension is NOT SET when the door is delivered.



Measure the depth of the each balancer.

Make sure each balancer has exact same distance which means same spring tension.

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7.



Use an extended tube wrench (24 mm).

This tool is available at Loadlok (SAP nr 20000812).





#### **WARNING:**

Do **not** use an electric or pneumatic tool!

8. Maximum of 10 mm per side.



#### ATTENTION:

When the nuts are tightened too far, the mechanism may be damaged!

- 9. Check if the Tempwall Autostow does go smoothly when opening. If the Tempwall Autostow "bangs" against the roof the tension is too tight. Loosen the bolts slightly.
- 10 Repeat steps 6 to 9, until the Tempwall Autostow opens smoothly.
- 11 Attach the plastic cap at the rear of the balancing device on both sides.

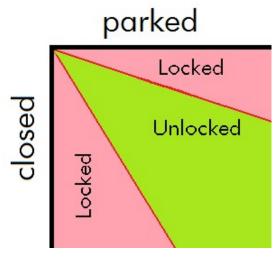
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#### **6.2 CHECK THE BRAKE FUNCTIONALITY**

1.

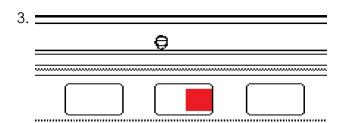


This picture shows the side view of the working area of the Tempwall Autostow.

The green colour in which the Tempwall Autostow is unlocked and can be moved freely along the guide rails.

The red areas show where the Tempwall Autostow is locked. This area is about 20° from the horizontal and the vertical.

2. Lift the Tempwall Autostow into such an angle that it is in the area which is coloured red.



The brake locks must be positioned in the middle of the brake hole (as shown in red).

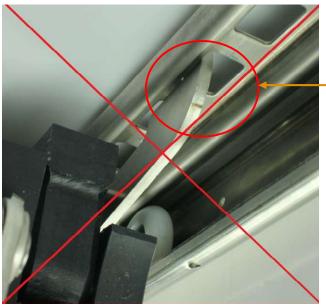


Correct position of the brake in the Frigowall track.

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Incorrect position of the brake in the Frigowall track.

4. If this is not the case bend the brake lock until it does!

5.



#### WARNING:

Check both sides!



#### WARNING:

If the functionality of the breaking locks cannot be assured:

- Contact Loadlok immediately!
- Do not release the vehicle until fault rectified!

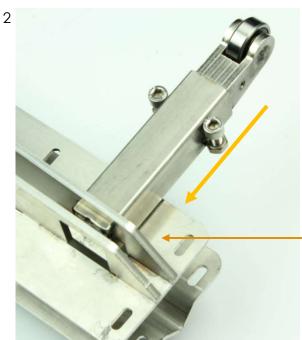
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# 6.3 PARKING ASSISTANT (OPTIONAL)



If the Frigowall will be longer stored on the roof, Loadlok offers a parking assistant which is easy to be attached on the balancer.



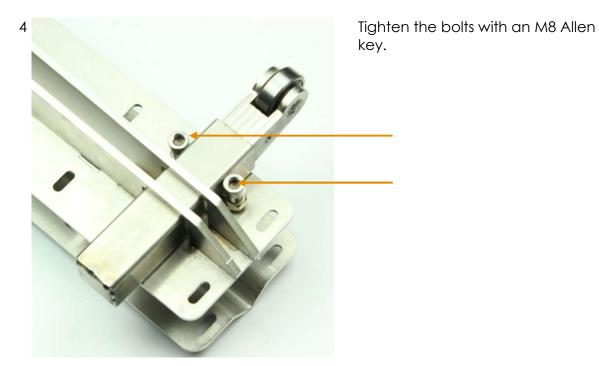
Insert the parking assistant in the predefined hole.



Adjust the wheel so that it rests in the Frigowall track as shown in the picture.

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Please note that access to the balancer is required. The park assistant can only be mounted when the bulkhead is not mounted yet, or if the bulkhead can be moved far enough to the back of the vehicle so it can be accessed,

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#### 6.4 CONNECTING THE BUILT-IN FAN

#### 6.4.1 Without the power supply kit



This slider is mounted by LoadLok, if a fan is built in the Tempwall Autostow. The power to the fan is to be supplied via the Frigowall track.

In this case connect:

- Left side to the power supply, the cable is coloured red.
- Right side to the trailers earth, the cable is coloured black.



#### **WARNING:**

In the case of:

• Possibility of short circuit

Use the power supply kit!

Make sure the power supply is secured with a 10A fuse.

# 6.4.2 With the power supply kit



WARNING:

In the case of:

• Possibility of short circuit

Use the power supply kit!



This slider must be mounted on the balancer after the Frigowall door is set in its place according the instructions in paragraph "Mounting the track".

In this case connect:

- Left side to the power supply, the cable is coloured red.
- Right side to the trailers earth, the cable is coloured black.

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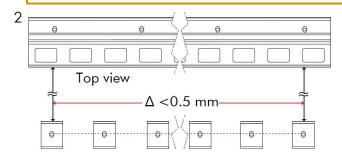


#### WARNING:

In the case of:

• Possibility of short circuit

Use the power supply kit!



Mount the isolator strips parallel to the Frigowall track.

- 3 Every 500 mm an isolator bracket is to be mounted with the tolerance shown in step 2.
- 4 Slide the aluminum track into the isolator brackets. Make sure that every joint is electrically connected.



#### ATTENTION:

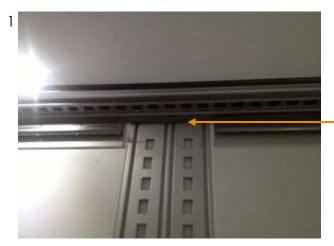
Check if there is a short circuit before continuing with the installation activities!

- 5 Connect the power supply to the aluminum rail.
- 6 Connect the earthing to the right side.
- 7 Make sure the power supply is secured with a 10A fuse.

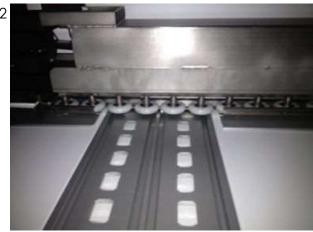
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#### 6.5 DOUBLE DECKING SYSTEMS AND TEMPWALL AUTOSTOW



In order to minimize the height loss, the double deck rail ends within the Frigowall track.
This is shown in the figure here.



The wheels on the balancer are extended as show in this figure. Loadlok builds these type of balancers when ordering the double decking systems.

3 As both pictures are showing the end result, the built in of the Frigowall track has to be performed as described in the paragraph "Mounting the track".



#### ATTENTION:

The notch in the Frigowall track where the double deck rail has to be mounted should be a minimum of 4 mm (2 mm on each side) wider as the chosen double deck track.



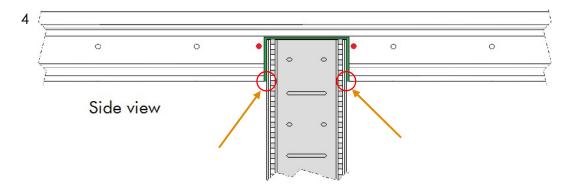
#### WARNING:

The Frigowall track loses some rigidity when notches are present.

Despite this loss of rigidity, keep the tolerances smaller than 0,5 mm!

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This picture shows a schematic view of how to build the double deck system (vertical track recessed) into the Frigowall track (horizontal track).

The tolerance should be a minimum of 2mm at each side (green colour).

Drill extra mounting holes in the Frigowall track (red dots), if required.



#### ATTENTION:

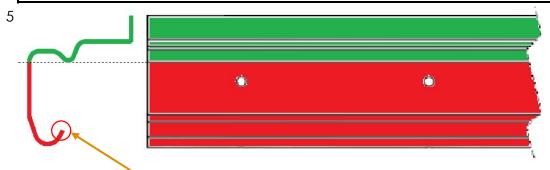
Loadlok advises to bend the Frigowall track open a bit, for a better guidance of the balancer wheels!

Sections are marked with a red circle in the picture above and in the following picture



#### ATTENTION:

If the double deck rail cannot be recessed then Loadlok advises to not cut out the Frigowall track!



The maximum cutout (intersection) as side and front view



#### WARNING:

When creating room for the double deck guidance tracks, keep in mind the tolerances for the guidance and locking systems!

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# 7 MAINTENANCE

Maintenance table			
Manifestation of the failure	Possible cause or procedure to detect the failure	Solution	Performed by (unskilled till certified)
Leaking cold PVC-seal has wear	Icing on the sidewall is evident	Replace or repair seal of the Tempwall Manual Lift in the same way as encountered.	Mechanic
The Tempwall Autostow is not easily going in to a horizontal or vertical position	Spring tension is not correct	Adjust the spring tension according paragraph "Adjust spring tension"	Mechanic
The brake fingers are not locking in the center of the brake hole		Adjust the brake fingers according paragraph "Check the brake functionality"	Mechanic

If the Tempwall Autostow is inspected on a regular basis on above mentioned inspection points the product lasts a vehicle lifetime.

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# **8 DOCUMENT INFORMATION**

Principal	Contractor	Digital file name
LoadLok International		Tempwall Autostow Mounting Instruction v1.1 August 2020

Remarks, corrections or suggestions are welcomed by the technical department.

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