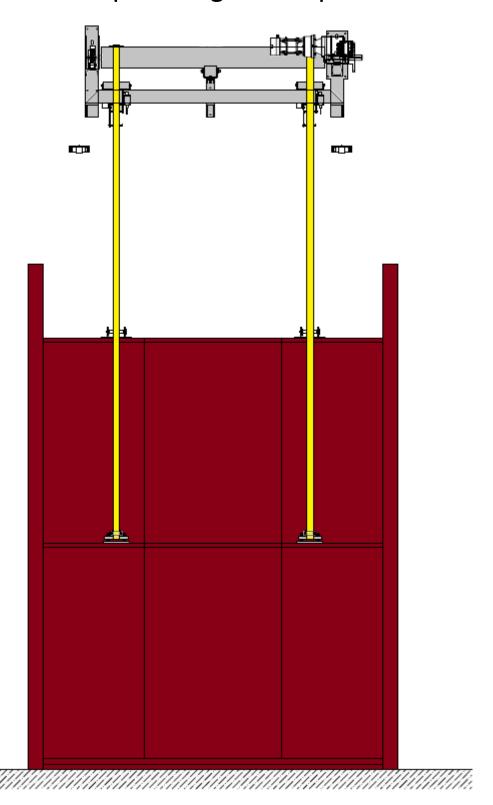


FIRE AND SMOKE BARRIER

# "APOLLO" Telescopic Lifting Door 2-part



### JANSEN TORE GMBH & CO. KG

Am Wattberg 51 | 26903 Surwold | Germany TEL: +49 4965 8988 0 | FAX: +49 4965 8988 88 |

EMAIL: <a href="mailto:linfo@jansentore.com">lnfo@jansentore.com</a> | Web: <a href="https://www.jansentore.com">www.jansentore.com</a> | Web: <a href="https://www.jansen



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# 2 Safety instructions

### 2.1 Symbols



An immediate risk to life and health. Failure to follow these instructions may result in severe harm to the user's health, up to and including life-threatening injuries.



Important instructions regarding proper use of the closure. Failure to follow these instructions may result in malfunctions and/or failure.



Manufacturer's liability arising from errors or omissions on the part of the operator or user excluded.

### 2.2 Safety instructions



The safety instructions in this document must be obeyed without fail. The wiring diagrams supplied with every control system must be followed. The operating instructions must be taken note of before the control system is used for the first time.



The qualified personnel must be able to assess the work, identify possible safety hazards and take appropriate safety precautions. Personal protective equipment (PPE) must be used. Work areas must be cordoned off where necessary. Work of any sort may only be carried out with the control system disconnected from the power supply.

### 2.3 Technically correct installation

In order to ensure operational safety and risk-free installation, the user must comply with the points specified in these installation instructions.



All components connected to the system must conform to the approval and/or test report. The use of components that do not meet these requirements is prohibited. Only use original spare parts and approved accessories.



### 2.4 Safety precautions for installation



Cordon off the work area before installation work commences. Please remember your personal protective equipment, if required.

Danger of death during installation of fire and smoke doors. All components and elements must always be secured against toppling, tipping, falling and crushing before and during installation.

Only use qualified and trained personnel for installation and maintenance. Only have electrical work carried out by qualified professionals who have received training in accordance with current regulations.

Do not make modifications in the form of additions and alterations that could compromise safety.

Eliminate heat-, gas-, dust-, steam-, smoke-, fire- and explosion-related risks during welding, flame cutting and grinding.

Take care that building materials that foam as a result of heat being applied do not react during welding and so become ineffective.

The safety and accident prevention regulations for the specific application must be complied with during installation, commissioning, testing, maintenance and dismantling of the "APOLLO" Telescopic Lifting Door 2-part.















# 2.5 Installer's qualifications

To ensure that the "APOLLO" Telescopic Lifting Door 2-part is installed correctly, only **installers trained by the manufacturer** may be used. Depending on local official regulations, electrical components may only be connected by licensed specialist companies or specially trained personnel.

### 2.6 Safety instructions for operation



Keep the "APOLLO" Telescopic Lifting Door 2-part's movement zone clear at all times. Make sure that no one, especially children or objects, is in the movement zone during operation of the "APOLLO" Telescopic Lifting Door 2-part. In the event of incorrect use, damage or a dangerous operational state, switch the "APOLLO" Telescopic Lifting Door 2-part off and, if necessary, make secure.

Arrange without delay for proper repair, which may only be carried out by qualified personnel.



### 2.7 Transport instructions



The door elements must always be transported upright. The surfaces and coatings, together with all components, must be adequately protected from damage. Any damage must be reported to the manufacturer immediately and may result in loss of the declared performances.

## 2.8 Guidance and information

We are delighted that you have chosen one of our quality products. The following instructions are divided into a text section and a drawing section. Please read and follow these instructions. They contain important information on the product. In particular, please obey the safety instructions and warnings. We recommend that you keep these instructions in a safe place.

This document employs the terms door, fire and/or smoke door and sliding door in place of the product name "APOLLO" Telescopic Lifting Door 2-part.

The text and drawings in these instructions have been produced with the greatest possible care. For reasons of clarity, it is not possible to provide full details for all the variants or describe all conceivable installation, operation or maintenance cases. The text and drawings published in these instructions only serve as examples.

No responsibility is taken for completeness, which shall not constitute grounds for complaint. Subject to technical changes.

If, however, you require further information or if problems arise that are not covered in sufficient detail in the operating instructions, you may request the necessary information directly from the manufacturer. Contact details can be found on the first page.



### 3 Installation instructions

### 3.1 Scope

These installation instructions apply to the following door types:

- \_ El<sub>2</sub> 90 C "APOLLO" Telescopic Lifting Door 2-part
- El<sub>2</sub> 90 C2 "APOLLO" Telescopic Lifting Door 2-part
- El<sub>2</sub> 90 C2 S<sub>a</sub> "APOLLO" Telescopic Lifting Door 2-part

#### 3.1.1 Intended use

An "APOLLO" Telescopic Lifting Door 2-part inclusive of all parts (e.g. frame, guides, etc.) is intended, when installed and closed, to prevent the passage of fire and/or smoke through openings in walls.

Intended use also includes the following points:

- Obey operating and maintenance instructions.
- Obey inspection and maintenance requirements.
- Only operate the "APOLLO" Telescopic Lifting Door 2-part in a completely safe condition.
- Have repairs and maintenance on the "APOLLO" Telescopic Lifting Door 2-part carried out by the manufacturer or specialist firms only.
- Comply with the relevant national regulations and approvals.

#### 3.1.2 Non-intended use

The "APOLLO" Telescopic Lifting Door 2-part is not suitable for the following use:

- As an external door (only under certain conditions and in consultation with the manufacturer)
- As a cold room door
- In wet areas (car washes, etc.)

Neither the manufacturer nor the supplier is liable for damage resulting from non-intended use. The user bears the sole risk. Such damage will result in loss of the declared performance.

### 3.1.3 Changes to the product

Changes made to the "APOLLO" Lifting Door unilaterally will result in immediate loss of the performance designated and/or declared by the manufacturer. Changes may only be made following consultation with and approval by the manufacturer.



## 3.1.4 Spare parts and accessories

We expressly point out that only **original spare parts** made by Jansen Tore for the product may be used. The replacement of parts with third-party components will automatically result in loss of the product's designated performance characteristics.

The contact details for our service centre are as follows:

Tel: +49 (0) 49 65 / 89 88 - 777 Email: <u>service@jansentore.com</u>

You can find your direct contact at

https://www.jansentore.com/home/ansprechpartner/finden-sie-ihren-ansprechpartner/

### 3.2 Permissible walls and wall thicknesses

### 3.2.1 El<sub>2</sub> 90 fire-resistant closures

For a fire-resistant "APOLLO" Telescopic Lifting Door 2-part with classification El<sub>2</sub> 90 the following minimum requirements must be met for the declared performance to be retained on site:

		Minimum wall	
Type	Permissible wall type and components - minimum requirements	thickness in	
		mm	
А	Fire-resistant masonry walls in accordance with DIN 1053-1, strength class min. 12,	≥175mm	
	mortar group ≥ II wall thickness	21/3	
В	Fire-resistant concrete wall in accordance with DIN 1045, min. strength class C12-	≥175 mm	
Ь	15	≥1/2	
	Fire-resistant walls made from aerated concrete, block or high-precision masonry		
6	units in accordance with DIN 4165, strength class 4, or walls made from reinforced	>17F mm	
	- horizontal or vertical - aerated concrete slabs, in so far as general building inspec-	≥175 mm	
	torate approval is available, strength class G4.4		
	Clad steel supports and/or girders in accordance with DIN 4102-4:2016-05 Table		
D	7.6 – with a minimum fire rating of F 90, designation (abbreviated)		
	F 90-A, in so far as they are attached over their full length or width to space-en-		
	closing components with at least the same fire rating.		

Non-conforming installation situations must be agreed with the manufacturer in order for the declared performance to be maintained, where applicable.



### 3.3 Permissible wall connections

The following instructions must be followed for wall connection of the "APOLLO" Telescopic Lifting Door 2-part:

- Gap, between seal of door construction and wall, from 1 mm to 9 mm: in this case the seal on the
  reveal side must be sealed to the wall using a non-shrink method.
- Gap, between profiles of door construction and wall, from 10 mm to 24 mm: these must be filled with mineral wool and then sealed using a non-shrink method.
- Gap, between profiles of door construction and wall, from 25 mm to 50 mm: these must be covered with fire-resistant plasterboard / Promatect H before the respective profiles are fitted and then sealed using a non-shrink method.
- NB: If the seal is in contact with the wall over its full length, sealing using a non-shrink method is not required.

### 3.4 Permissible fixtures

When using fixtures, the manufacturer's installation instructions must always be followed and given priority. Disregarding these instructions will result in loss of the declared performance.

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2		
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### 3.4.1 Attachment of side guiding rails

Wall type	Fixture	Min. load-bearing capacity [F <sub>rk</sub> ]
В	Bolt anchor / through bolt	≥ 1.5 kN
A, B, C	Plastic plug	≥ 1.5 kN
A, B, C	Threaded rod M8 / M10	Strength class ≥ 4.6
А, В	Grout	≥ 1.5 kN, strength class ≥ 4.6
D	Screw installation M8	Strength class ≥ 8.8

### 3.4.2 Attachment of lintel labyrinth

Wall type	Fixture	Min. load-bearing capacity [F <sub>rk</sub> ]
В	Bolt anchor / through bolt	≥ 8.5 kN



A, B, C*	Threaded rod M8 / M10	Strength class ≥ 4.6
A, B*	Grout	≥ 8.5 kN, strength class ≥ 4.6
D	Screw installation M8	Strength class ≥ 8.8

<sup>\*</sup>Always concrete in lintel area



### 3.5 Permissible clearances

Floor gaps can occur when the "APOLLO" Telescopic Lifting Door 2-part is installed. According to point 7.3 of DIN EN 1634-1, the test standard for fire and smoke barriers, a general gap of max. 24 mm is permitted at the threshold.

### 3.6 Permissible floor

The floor must always be at least B1 not easily flammable in accordance with DIN 4102-1.

# 4 Fitting instructions

## 4.1 Fitting symbols and abbreviations

The following symbols and abbreviations are used in the fitting instructions:

Symbol / Ab- breviation	Meaning
	Components marked with the symbol must be aligned/fitted horizontally
	Align/fit vertically
FF	Finished floor level
СН	Clear height
CW	Clear width

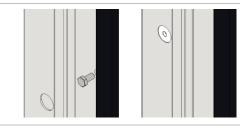
## 4.2 Instructions before fitting starts

Before actual fitting of the door can start, we recommend that you carry out the following steps in order to ensure that everything goes smoothly:

- 1. Read through the full installation instructions
- 2. Identify door's stop side
- 3. Check the ordered dimensions of the door against the structural reality.
- 4. It is recommended that you carry out fitting in the precise order set out below or discrepancies may occur. The manufacturer is not liable for any installation errors.

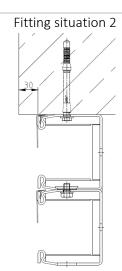


# 4.3 Fitting the side guiding rails



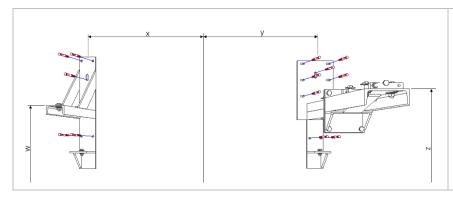
 Separate guiding rails. Undo hexagon bolt M10x13

Fitting situation 1



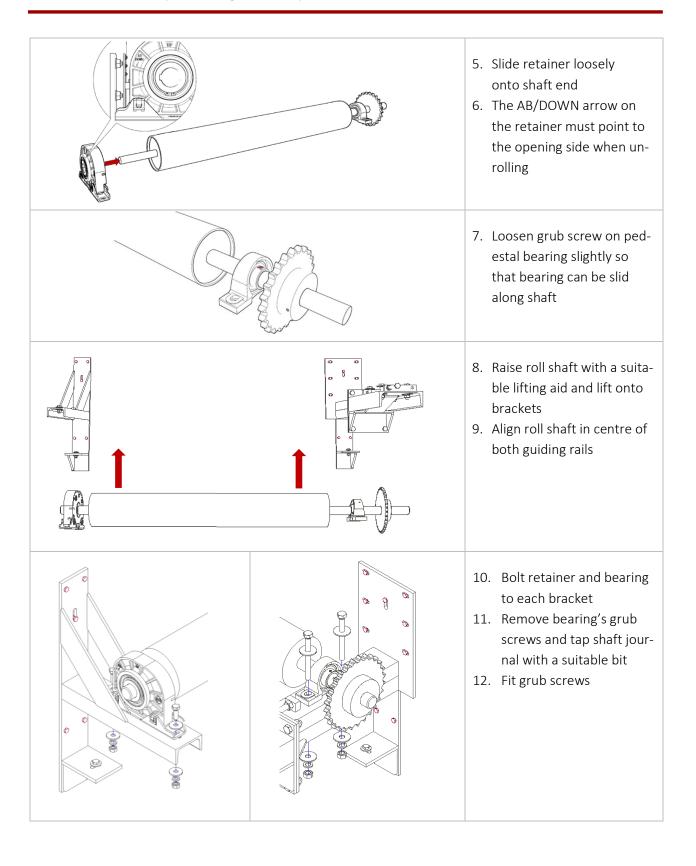
- 1. If there are irregularities:
  - a. Align reference marker at highest point
  - b. Take outermost point at lintel (shim guide rails if necessary)
- 2. Align wall-side guiding rail vertically
- 3. Secure guiding rail with clamp
- 4. In fitting situation 2: min. 30 mm from edge
- 5. Pre-drill every 710 mm and attach wall-side guiding rail (tighten top dowel, remaining dowels later)
- 6. Attach next lead-in to wall-side lead-in every 710 mm with hexagon bolt M10x13

# 4.4 Fitting the drive unit

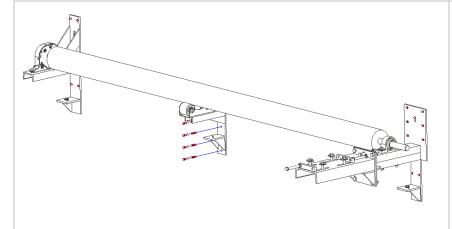


- 2. Mark centre of opening between guiding rails
- Dimensions W-Z of respective bracket must be taken from order-specific drawing
- 4. Align brackets and fix in place



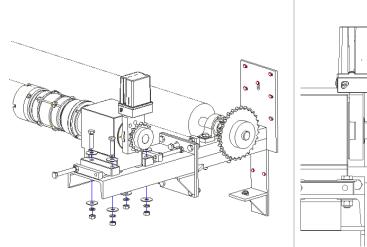




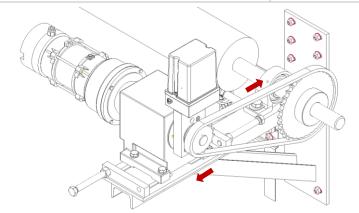


#### **OPTION:**

- 13. A pipe support must be fitted above a certain size
- 14. Fit pipe support in such a way that roll shaft is supported cleanly over the pulleys

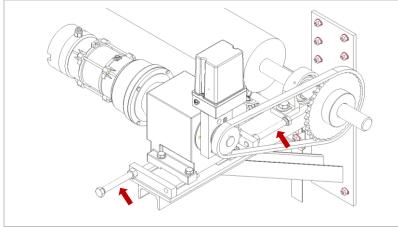


- 15. Place motor on bracket and fit loosely in centre of elongated holes
- 16. Position sprockets in alignment
- 17. Remove sprocket's grub screws on roll shaft and tap shaft journal with a suitable bit
- 18. Fit grub screws
- 19. Cut chain to length

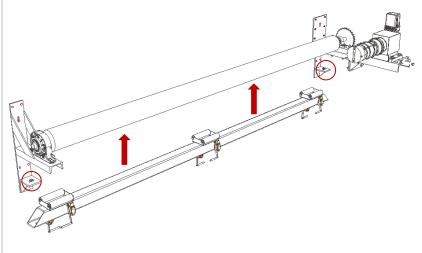


- 20. Slide motor towards wall
- 21. Put chain on loosely
- 22. Tighten by moving motor along elongated hole



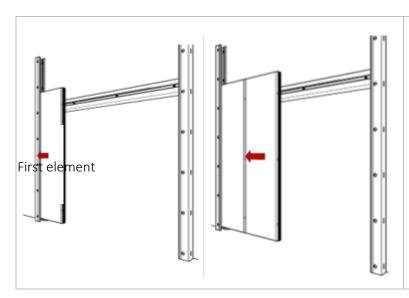


- 23. Using the individual tensioning devices, tension the chain in such a way that the lower run can be pressed in by the thickness of the chain
- 24. Bolt motor in place



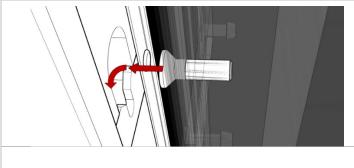
- 25. Lift cross member onto bracket with a suitable lifting aid and fix in place
- 26. If the door has a pipe support, the self-tapping screw must be drilled into the cross member

# 4.5 Fitting the wall leaf

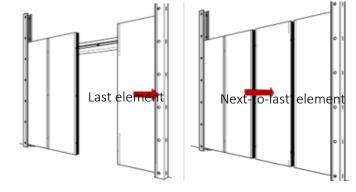


- 27. Insert first door element of wallside leaf in guiding rail as far as stop. Start on left with highest number
- 28. Hook in further door elements of first leaf (apart from last two) using push-fit system

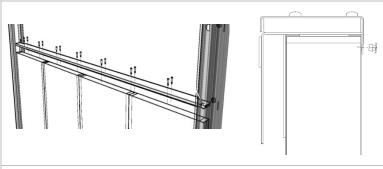




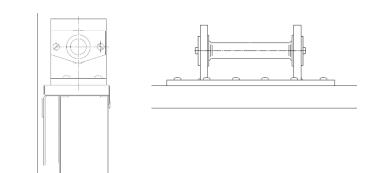
- 29. The elements are connected to each other using a push-fit system
- 30. The elements are hooked into the next element one after the other from the top



- 31. Insert last door element on right in guiding rail as far as stop
- 32. Edge next-to-last door element in between and connect on both sides using push-fit system

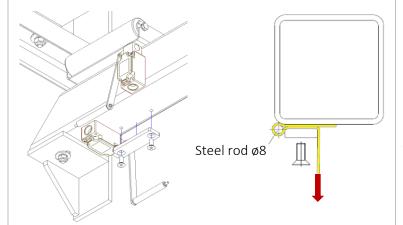


- 33. Place door leaf labyrinth flush on elements
- 34. Bolt and rivet in all available holes (\(\phi4.8x32\) self-tapping screw) (\(\phi4x10\) blind rivet)

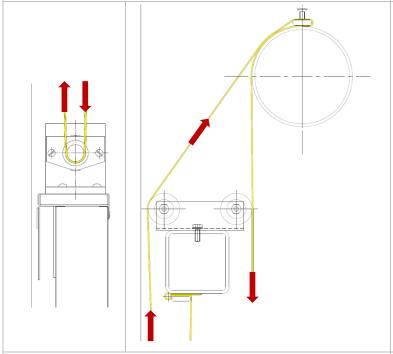


- 35. Fit turn bracket at pre-drilled points on door leaf labyrinth with 12 self-tapping screws
- 36. Repeat for remaining turn brackets

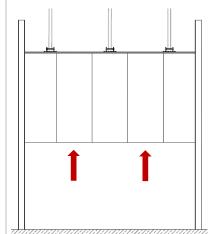


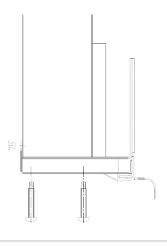


- 37. Detach cross member's clamping plate
- 38. Place belt around ø8 steel rod (see illustration)
- 39. Fix clamping plate back in place using available holes
- 40. Guide belt to wall leaf's turn



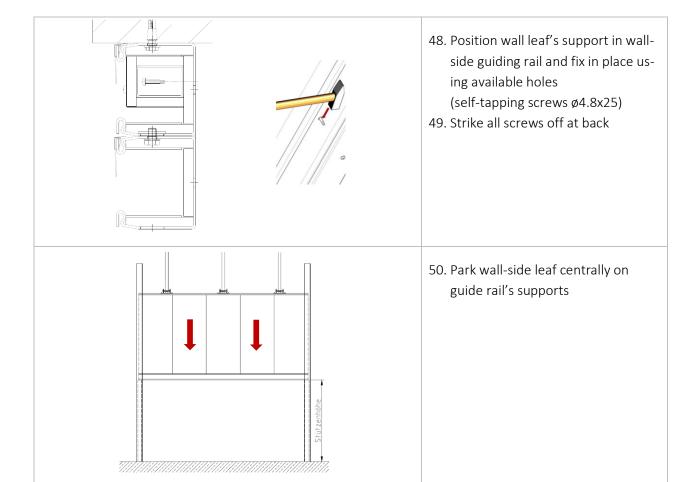
- 41. Place belt around turn and guide back up to roll shaft (see illustration)
- 42. Undo bolts in clamping plate on shaft
- 43. Wind belt once around clamping plate
- 44. Align all belts vertically and tighten uniformly
- 45. Do up bolts in clamping plate on roll shaft



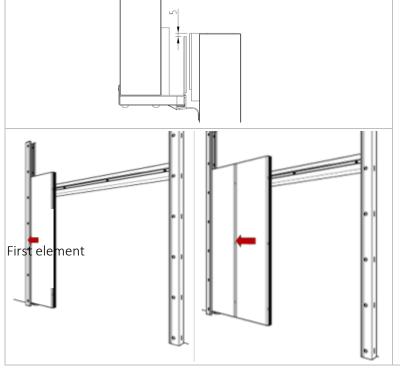


- 46. Raise door leaf
- 47. Centre bottom labyrinth profile in relation to door leaf and fix in place using pre-drilled holes (self-tapping screw ø4.8x32) (blind rivet ø4x10)



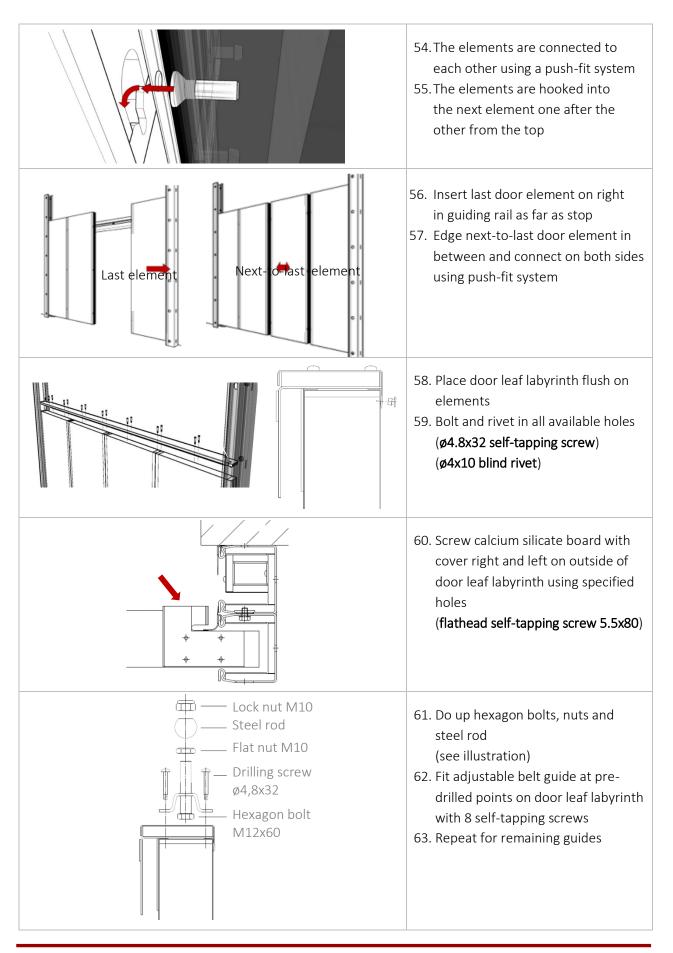


# 4.6 Fitting the floor leaf

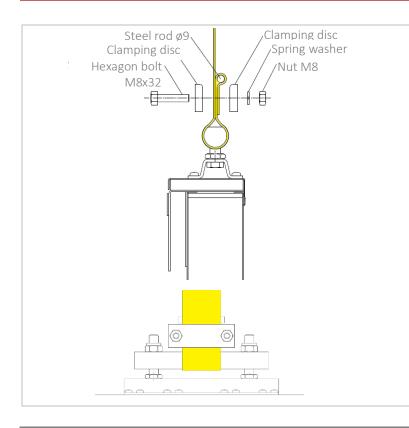


- 51. Elements must be shimmed so that the bottom door leaf is approx. 5 mm higher than the labyrinth profile
- 52. Insert first door element of bottom leaf in guiding rail as far as stop. Start on left with highest number
- 53. Hook in further door elements of bottom leaf (apart from last two) using push-fit system





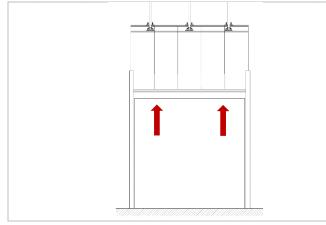




- 64. Place belt from wall leaf once around belt guide's steel rod and loop at end
- 65. Pull ø9 steel rod through loop
- 66. Secure belt with clamping discs
- 67. The adjustable belt guide makes it possible to readjust the belt height
- 68. The door's individual belt pathways must line up exactly

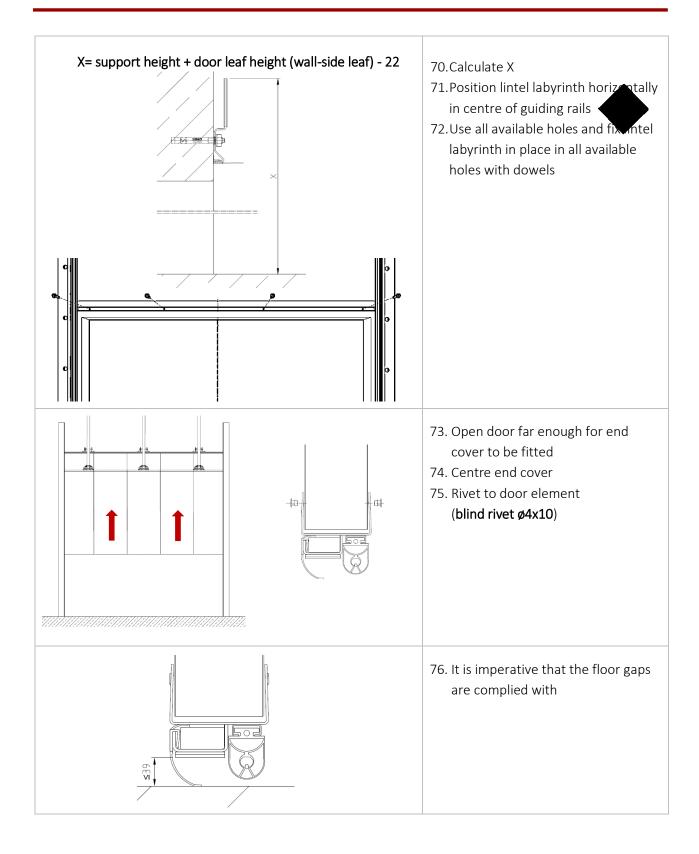
# 4.7 Fitting the lintel labyrinth and end cover

Carry out steps 68-71 only if lintel labyrinth has not yet been fitted



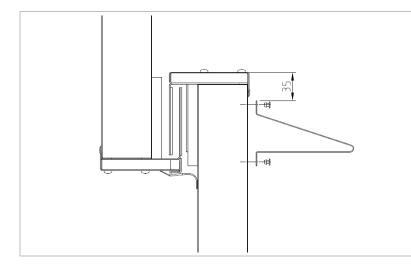
69. Open door far enough for lintel labyrinth to be fitted without difficulty







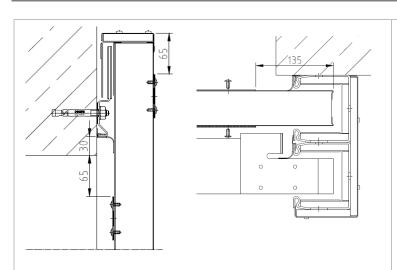
# 4.8 OPTION: Mounting the stiffening profile



#### OPTION:

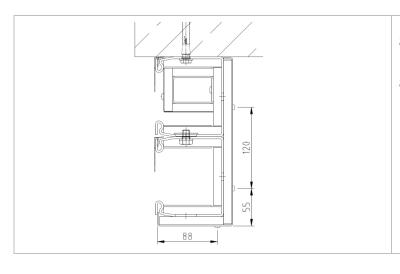
- 77. Fit stiffening profile centrally below floor leaf's protective cover.
- 78. Fit profile horizontally approx. 35 mm offset from door haf labyrinth.
- 79. **Steel rivets ø4.8x10** in holes on outside, **aluminium rivets ø4.8x10** in all other holes.

# 4.9 Fitting the cleats



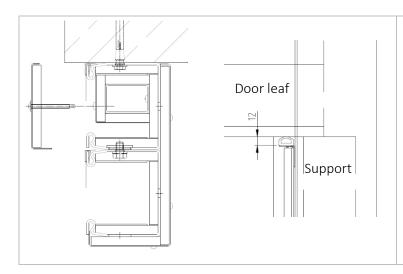
- 80. Align cleats horizontally
- 81. Comply with dimensions (see illustrations)
- 82. Rivet in all holes (flathead self-tapping screw ø4.2x13)

# 4.10 Fitting the casing



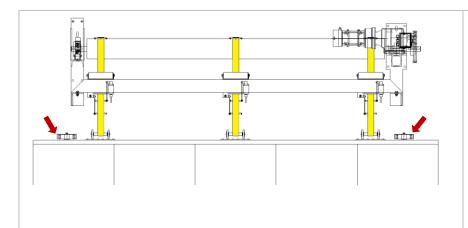
- 83. Position casing as shown in illustration
- 84. Screw together 100 mm from top every 600 mm with **Ø4.8x45 self-tap-ping screws**



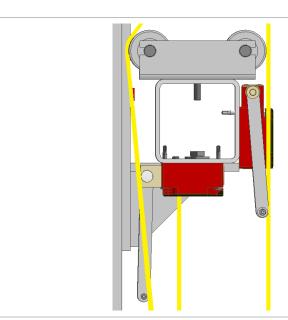


- 85. The guiding rail is additionally clad in the area of the support
- 86. Put cover strip up against wall-side guiding rail (short side to wall)
- 87. Leave a gap of 12 mm between wall leaf's bottom door leaf labyrinth and cover strip's mounting bracket
- 88. Fix cover strip in place

# 4.11 Fitting the cushioned end stops and adjusting the monitoring switches



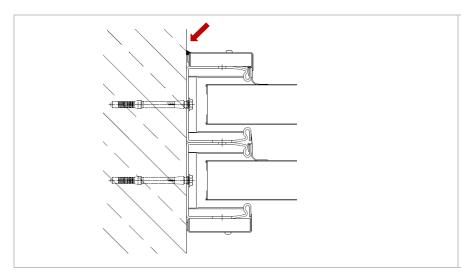
- 89. Move door leaf to approx. 10-20 mm above clear opening
- 90. Place cushioned end stop at top of door leaf labyrinth
- 91. Position and fit cushioned end stop centrally between end of door leaf and last belt guide



- 92. Adjust monitoring switches, with door open, so that they press on belt (see illustration)
- 93. Check functioning of switch by triggering manually

# 4.12 Sealing (doors with S<sub>a</sub> or S<sub>200</sub> requirement)





94. In the case of flush fitting, the lead-in profile casing must be sealed to the wall over its full length using a non-shrink method.

# 4.13 Fitting the electrical components

Directions for fitting the electrical components can be found in the respective manufacturer's installation instructions.

## 4.14 Function test

### 4.14.1 Opening and closing process



People, body parts or objects can be trapped by the door elements when the "APOLLO" Telescopic Lifting Door 2-part is opening and closing.

- 1. Make sure that there are no people or objects in the "APOLLO" Telescopic Lifting Door 2-part's movement zone.
- 2. Check whether the "APOLLO" Telescopic Lifting Door 2-part can be fully opened and closed without difficulty and check the end positions
- 3. Check the smoke detector and safety contact strip for correct functioning

### 4.14.2 Test report

The test report must be completed in full by the expert during commissioning.



### 4.14.3 Information sign

- 1. Mount the "Fire Barrier" information signs on both sides of the door in such a way that they are clearly visible when the door is open.
- 2. Affix the rating plate in the immediate vicinity of the opening.
- 3. Affix the inspection sticker in the space provided on the rating plate in such a way that the test month is below the arrow. Delete the year dates below that do not apply.

# 5 Information regarding maintenance

The safety requirements for power-operated windows, doors and gates are laid down in the current EU standards, national standards and the "Guidelines for Power-Operated Windows, Doors and Gates". These guidelines supplement section 9, 10 and 11 of the current Workplaces Ordinance, and section 28 and 29 of the "General Regulations" relating to accident prevention (VBG1). ASR A 1.7 applies to industrial and commercial use as a matter of principle.

### 5.1.1 Annual maintenance

Statutory maintenance for power-operated doors (in accordance with ASR 1.7) must be performed annually by a competent specialist door company. To prevent damage to the drive technology and door mechanism, the drives and wearing parts (belts, element dogs, bolts, etc.) should be checked and maintained regularly by qualified technicians.

The checks carried out must be documented. This can take the form of entries in a test log or an attached test report, for example. A test seal specifying the next check must also be affixed to the installation where it can be read with ease. Maintenance must not be regarded as equivalent to accident prevention regulation testing.

It is advisable to take out a service contract with the manufacturer, the installer or an establishment with comparable expertise and experience to ensure the upkeep of the installation.

### 5.1.2 Monthly function testing by operator

According to the guidelines for hold-open systems and requirements in the state-specific Technical Building Regulations, testing of all devices for proper and problem-free interaction and maintenance of the hold-open system must be carried out at least once a year by a competent person. The hold-open system must be kept in working order by the operator at all times and tested at least once a month for correct functioning. This must be documented.

If the "APOLLO" Telescopic Lifting Door 2-part suffers malfunctions or damage during operation, you must immediately engage a specialist company to inspect and/or repair it.

The owner or their representative is responsible for service and maintenance of the "APOLLO" Telescopic Lifting Door 2-part. Any failure in this respect will result in loss of the declared performance.



To ensure the proper functioning of the "APOLLO" Telescopic Lifting Door 2-part, you must carry out and document technically correct maintenance at regular intervals. The guidelines for the inspection and replacement of components can be found in the inspection plan and the operating, maintenance and care instructions.

#### 5.1.3 Cleaning and care

Please note that pressure washers and highly acidic or caustic solutions will damage the surface of the door elements and cause damage to the door system. Such cleaning methods must not be used. Any failure in this respect will result in loss of the product's declared performance.

Only use cleaning materials that have been identified as suitable by the manufacturer. Refrain from vigorous rubbing on the surface.

In order to reduce exposure to corrosion, affected components must be thoroughly cleaned on a regular basis.

#### 5.1.4 Galvanised surfaces

To ensure that galvanised surfaces are looked after properly, the "APOLLO" Telescopic Lifting Door 2-part must be cleaned in accordance with the RAL-GZ 632 or SZFF 61.01 regulations at least once a year, and more frequently where there is more severe environmental pollution.

Only use clean cold or lukewarm water and soft, non-abrasive cloths, rags or industrial cotton wool for cleaning. If necessary, stubborn dirt can be removed by adding small quantities of a neutral cleaning agent.

### 5.1.5 Painted surfaces

Cleaning implements that contain metal will leave rusting particles of tramp iron on the stainless steel rust-proof surface, which may lead to corrosion damage. Never use scouring sponges that contain metal, wire wool or wire brushes. Unsuitable cleaning agents can attack and damage the stainless steel rustproof surface. Never use products that contain chloride, especially those containing hydrochloric acid, bleach or silver polish. Clean rustproof surfaces with a damp cloth or leather.



# 5 Dismantling and disposal

Generally speaking, the "APOLLO" Telescopic Lifting Door 2-part is dismantled in reverse order.



All components and elements must always be secured against toppling, tipping, falling and crushing before and during installation.

The door must be fully disconnected from the power supply before dismantling.

The safety and accident prevention regulations that apply to the specific application must be complied with during dismantling.















To ensure proper disposal, the "APOLLO" Telescopic Lifting Door 2-part must be separated into its individual components following dismantling and disposed of in accordance with local official regulations.