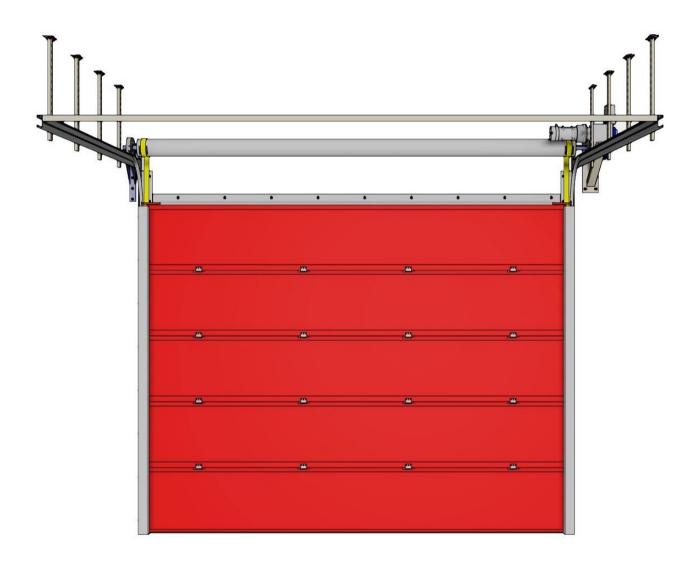


FIRE AND SMOKE BARRIER

"TITAN" Sectional Door



JANSEN TORE GMBH & CO. KG

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

EMAIL: lnfo@jansentore.com | Web: www.jansentore.com | Web: www.jansentore.com</



1	Con	tents	
1	Cont	tents	2
2		ty instructions	
_	2.1	Symbols	
	2.2	Safety instructions	
	2.2	Technically correct installation	
	2.3	Safety precautions for installation	
		, , , , , , , , , , , , , , , , , , ,	
	2.5	Installer's qualifications	
	2.6	Safety instructions for operation	
	2.7	Transport instructions	
_	2.8	Guidance and information	
3		allation instructions	
	3.1	Scope	
	3.1.1	Intended use	
	3.1.2	Non-intended use	
	3.1.3 3.1.4	Changes to the product	
	3.1.4	Permissible walls and wall thicknesses	
	3.2.1	El ₂ 30 fire-retardant closures	
	3.2.2	El ₂ 90 fire-resistant closures	
	3.3	Permissible wall connections	
	3.4	Permissible fixtures	
	3.4.1	Attachment of side quiding rails	
	3.4.2	Attachment of lintel labyrinth	
	3.5	Permissible clearances	
	3.6	Permissible floor	9
4	Fittir	ng instructions	
	4.1	Fitting symbols and abbreviations	
	4.2	Instructions before fitting starts	
	4.3	Variant overview	
	4.3.1	Sectional door – Normal turn	
	4.3.2	Sectional door – Normal turn with high lift	
	4.3.3	Sectional door – Vertical lift	12
	4.3.4	Sectional door – Low headroom turn	12
	4.4	Fitting the side guiding rails	13
	4.5	Fitting the wall labyrinth	13
	4.6	Fitting the drive elements	
	4.6.1	Variant 1: Drive unit mounted on lintel	
	4.6.2	Variant 2: Drive unit in sectional door's park zone	
	4.7	Fitting the guide rails in park zone	
	4.8	Fitting the guide roller (only with roll shaft at back)	
	4.8.1	For variant 1: Sectional door with standard turn	
	4.8.2 4.8.3	For variant 2: Low headroomFitting the door elements	
	4.8.4	Fitting the belt suspension	
	4.9	Fitting S ₂₀₀ accessories	
	4.10	Fitting the guide rail casing	
	4.11	Fitting the cushioned end stop	
	4.12	Fitting the monitoring switches	
	4.13	Sealing (S ₂₀₀ only)	
	4.14	Fitting the electrical components.	
	4.15	Function test	
	4.15.1		
	4.15.2	, , , , , , , , , , , , , , , , , , , ,	
	4.15.3	•	
5	Info	rmation regarding maintenance	
_	5.1.1	Annual maintenance	
	5.1.2	Monthly function testing by operator	
	5.1.3	Cleaning and care	30
	5.1.4	Galvanised surfaces	
	5.1.5	Painted surfaces	
6	Dism	nantling and disposal	. 31



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 "TITAN" Sectional Door.















2.5 Installer's qualifications

To ensure that the "TITAN" Sectional Door 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 "TITAN" Sectional Door'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 "TITAN" Sectional Door. In the event of incorrect use, damage or a dangerous operational state, switch the "TITAN" Sectional Door 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 "TITAN" Sectional Door.

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:

- _ EI₂ 30 C "TITAN" Sectional Door
- El₂ 30 C2 "TITAN" Sectional Door
- _ El₂ 30 C2 S_a "TITAN" Sectional Door
- _ EI₂ 30 C2 S₂₀₀ "TITAN" Sectional Door
- EI₂ 90 C "TITAN" Sectional Door
- El₂ 90 C2 "TITAN" Sectional Door
- _ El₂ 90 C2 S_a "TITAN" Sectional Door
- _ EI₂ 90 C2 S₂₀₀ "TITAN" Sectional Door

3.1.1 Intended use

An "TITAN" Sectional Door 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 "TITAN" Sectional Door in a completely safe condition.
- Have repairs and maintenance on the "TITAN" Sectional Door carried out by the manufacturer or specialist firms only.
- Comply with the relevant national regulations and approvals.

3.1.2 Non-intended use

The "TITAN" Sectional Door 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 "TITAN" Sectional 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: service@jansentore.com

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 El₂ 30 fire-retardant closures

For a fire-retardant "TITAN" Sectional Door with classification El₂ 30 the following minimum requirements must be met for the declared performance to be retained on site:

		Minimum wall	
Туре	Permissible wall type and components - minimum requirements	thickness in	
		mm	
Α	Fire-resistant masonry walls in accordance with DIN 1053-1, strength class min. 12,	≥115 mm	
	mortar group ≥ II wall thickness	5112 111111	
В	Fire-resistant concrete wall in accordance with DIN 1045, min. strength class C12-	≥115 mm	
Ь	15	5112 WW	
	Fire-resistant walls made from aerated concrete, block or high-precision masonry		
С	units in accordance with DIN 4165, strength class 4, or walls made from reinforced	≥175 mm	
	- horizontal or vertical - aerated concrete slabs, in so far as general building inspec-	21/5	
	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 30, designation (abbreviated)		
	F 30-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.



3.2.2 El₂ 90 fire-resistant closures

For a fire-resistant "TITAN" Sectional Door with classification EI₂ 90 the following minimum requirements must be met for the declared performance to be retained on site:

		Minimum wall	
Туре	Permissible wall type and components - minimum requirements	thickness in	
		mm	
Α	Fire-resistant masonry walls in accordance with DIN 1053-1, strength class min. 12,	≥175 mm	
	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	≥175 mm	
	Fire-resistant walls made from aerated concrete, block or high-precision masonry		
C	units in accordance with DIN 4165, strength class 4, or walls made from reinforced	>17E mm	
	- horizontal or vertical - aerated concrete slabs, in so far as general building inspec-	≥175 mm	
	orate 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 "TITAN" Sectional Door:

- Gap, between profiles of door construction and wall, from 1 mm to 9 mm: in this case the door construction 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: With an S200, follow the instructions under point Sealing.



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.

3.4.1 Attachment of side guiding rails

Wall type	Fixture	Min. load-bearing capacity [F _{rk}]
В	Bolt anchor / through bolt	≥ 2 kN
A, B, C	Plastic plug	≥ 2 kN
A, B, C	Threaded rod M8 / M10	Strength class ≥ 4.6
А, В	Grout ≥ 2 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 _{rk}]
B*	Bolt anchor / through bolt	≥ 12 kN
D	Screw installation M8	Strength class ≥ 8.8

^{*}Always concrete in lintel area

3.5 Permissible clearances

Floor gaps can occur when the "TITAN" Sectional Door 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. In the case of the "TITAN" Sectional Door with an S200 requirement, the seal must be flush with 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

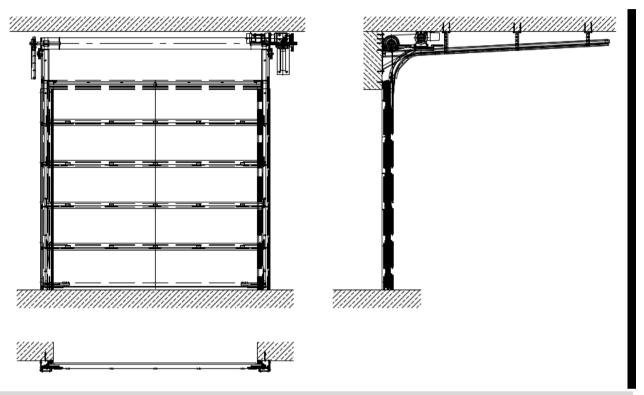
Before actual fitting of the door can start, we recommend that you carry out the following steps in order to ensure that everything goes smoothly:

- 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.

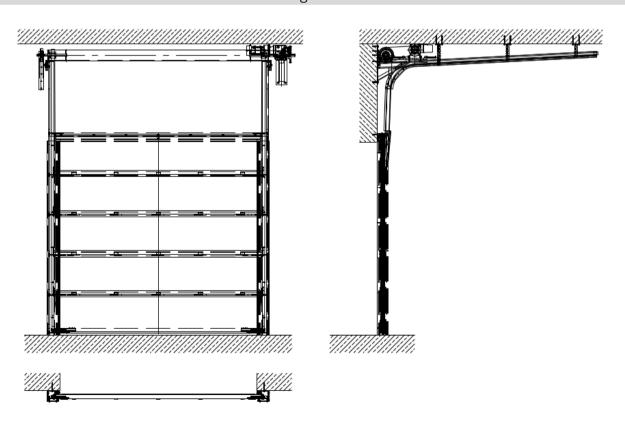


4.3 Variant overview

4.3.1 Sectional door - Normal turn

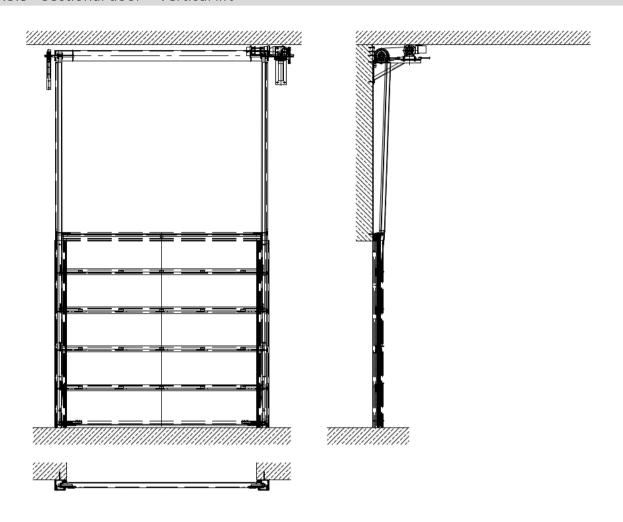


4.3.2 Sectional door - Normal turn with high lift

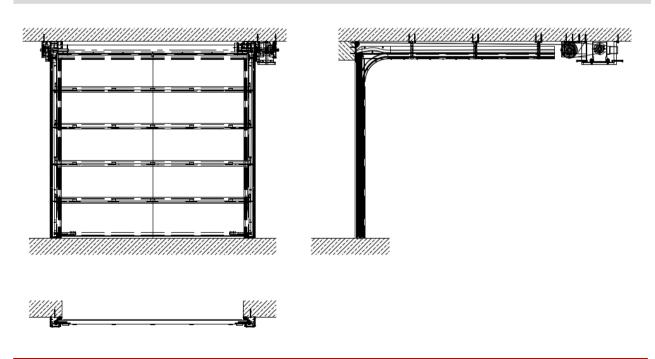




4.3.3 Sectional door – Vertical lift

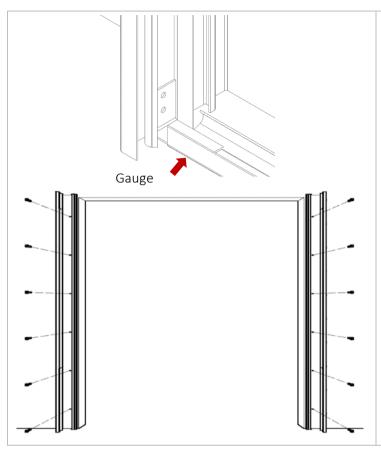


4.3.4 Sectional door – Low headroom turn





4.4 Fitting the side guiding rails

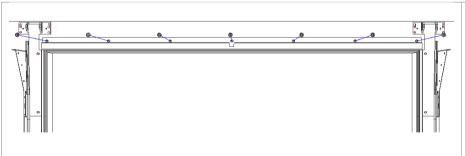


- 1. Check floor slope, take highest point
- 2. Align guiding rails vertically



- 3. Place gauge between guiding rails' C-rails
- 4. Centre guiding rails in relation to clear opening
- 5. Secure guiding rail with clamps
- 6. Even out wall irregularities with spacers
- 7. Fix in place using all available holes

4.5 Fitting the wall labyrinth

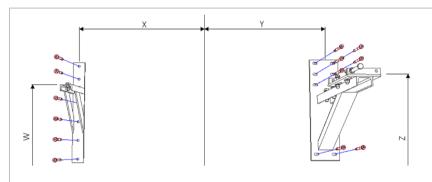


8. Place the wall labyrinth centrally between the two guiding rails on top of the guiding rail's tube and fix in place using all holes

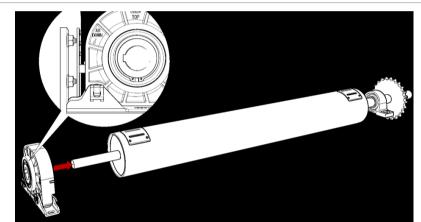


4.6 Fitting the drive elements

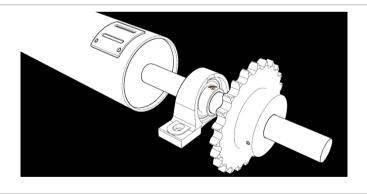
4.6.1 Variant 1: Drive unit mounted on lintel



- 9. Mark centre of clear opening
- 10. Dimensions W-Z of respective bracket must be taken from order-specific drawing
- 11. Align brackets and fix in place

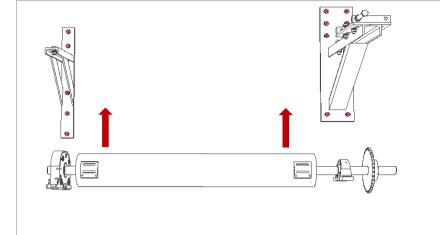


- 12. Slide retainer bracket loosely onto short shaft end
- 13. The AB/DOWN arrow on the retainer must point to the opening side when unrolling

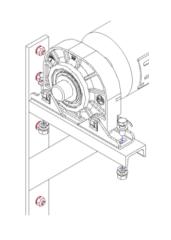


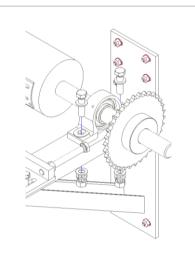
14. Loosen grub screw on pedestal bearing slightly so that bearing can be slid along shaft



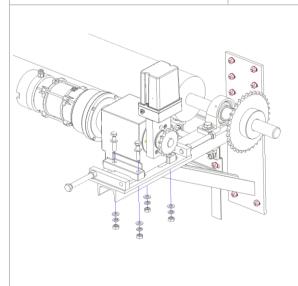


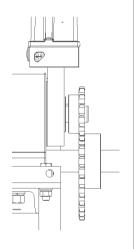
- 15. Raise roll shaft with a suitable lifting aid and lift onto brackets
- 16. Align roll shaft in centre of both guiding rails





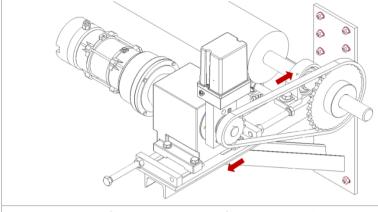
- 17. Bolt retainer and bearing to each bracket
- 18. Remove bearing's grub screws and tap shaft journal with a suitable bit
- 19. Fit grub screws



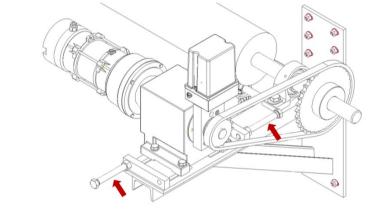


- 20. Place motor on bracket and fit loosely in centre of elongated holes
- 21. Position sprockets in alignment
- 22. Remove sprocket's grub screws on roll shaft and tap shaft journal with a suitable bit
- 23. Fit grub screws
- 24. Cut chain to length



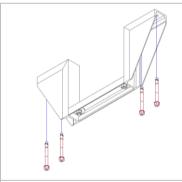


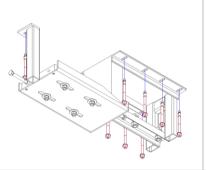
- 25. Slide motor towards wall
- 26. Put chain on loosely
- 27. Tighten by moving motor along elongated hole



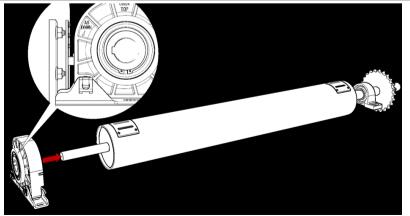
- 28. Using the individual tensioning devices, tension the chain in such a way that the lower run can be pressed in by the thickness of the chain
- 29. Bolt motor in place

4.6.2 Variant 2: Drive unit in sectional door's park zone



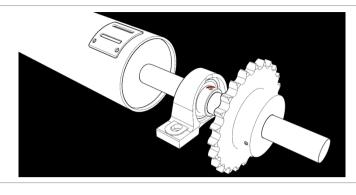


- 30. Measurements and position of respective bracket must be taken from order-specific drawing
- 31. Align brackets and fix in place



- 32. Slide retainer bracket loosely onto short shaft end
- 33. The AB/DOWN arrow on the retainer must point to the opening side when unrolling

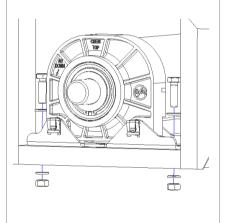


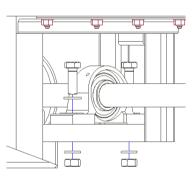


34. Loosen grub screw on pedestal bearing slightly so that bearing can be slid along shaft

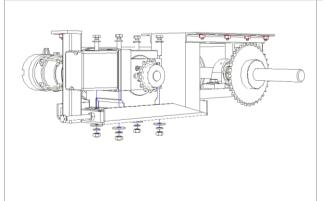


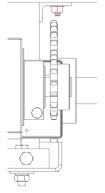
- 35. Raise roll shaft with a suitable lifting aid and lift onto brackets
- 36. Align roll shaft in centre of both guiding rails





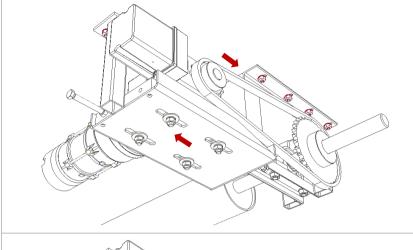
- 37. Bolt retainer and bearing to each bracket
- 38. Remove bearing's grub screw and tap shaft journal with a suitable bit
 - 39. Fit grub screws



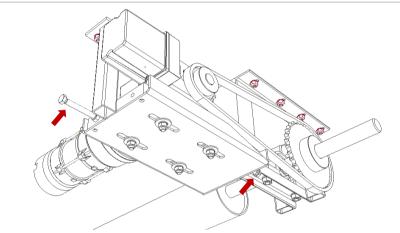


- 40. Place motor on bracket and fit loosely in centre of elongated holes
- 41. Position sprockets in alignment
- 42. Cut chain to length



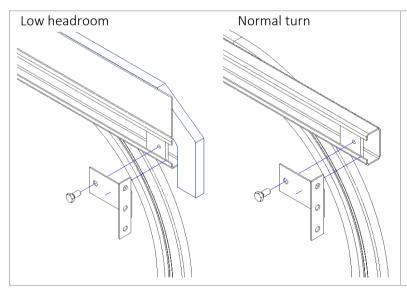


- 43. Slide motor towards wall
- 44. Put chain on loosely and tighten by moving motor along elongated hole



- 45. 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
- 46. Bolt motor in place

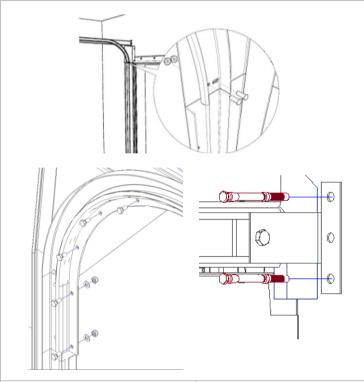
4.7 Fitting the guide rails in park zone



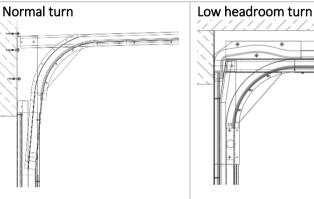
- 47. Insert retaining plate in C-rail
- 48. Bolt wall mount for linkage to retaining plate

(hexagon bolt M10x25)

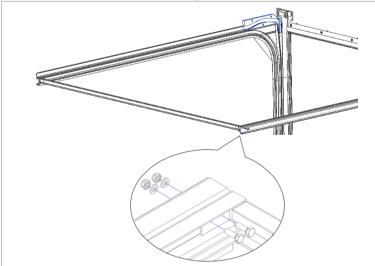




- 49. Bolt arch to vertical guide rails (bolts M6x16)
- 50. Bolt arch's reinforcing profile in all available holes (hexagon bolt M8x16, washer, self-locking nut)
- 51. Fix wall mount in place with dowels
- 52. Repeat on other side

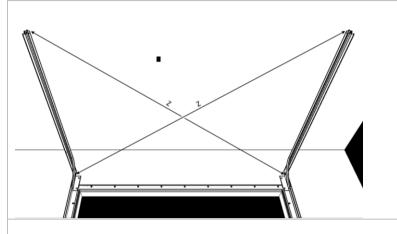


- 53. The guide rails must be level with each other
- 54. With a **normal turn**, the guide rail slopes upwards by 1.5° towards the back
- 55. With a **low headroom turn,** the guide rails must be aligned **horizontally**

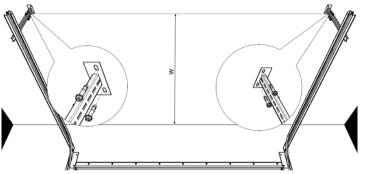


56. Place crossbar between the two guide rails and fix in place (hexagon bolt M6x20)

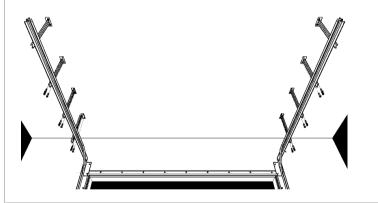




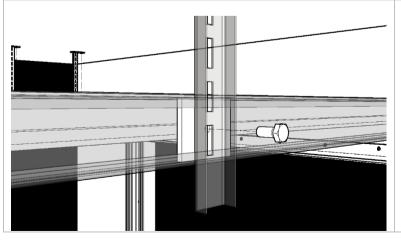
- 57. Measure the diagonals (cross measurement)
- 58. Compare the measurements for the two diagonals



- 59. If the diagonal measurements agree, attach the two guiding rails at the end with the KDU profile
- 60. See order-specific drawing for spacing



- 61. Fix remaining KDUs in place along guiding rails
- 62. Spacing must be taken from order-specific drawing

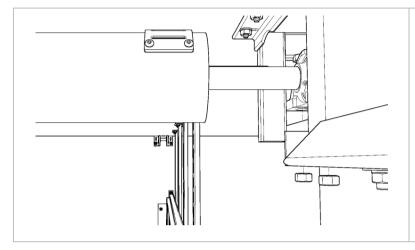


- 63. Insert retaining plates in guide rail and move level with KDUs
- 64. Clamp KDU profiles in C-rail with retaining plate using hexagon bolt



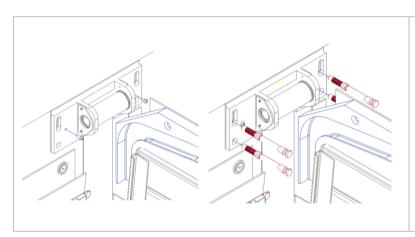
4.8 Fitting the guide roller (only with roll shaft at back)

4.8.1 For variant 1: Sectional door with standard turn



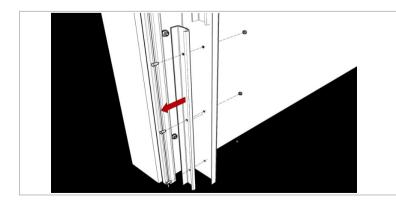
- 65. Position guide roller in alignment with belt guide
- 66. Position must be taken from order-specific drawing
- 67. Repeat for opposite side

4.8.2 For variant 2: Low headroom



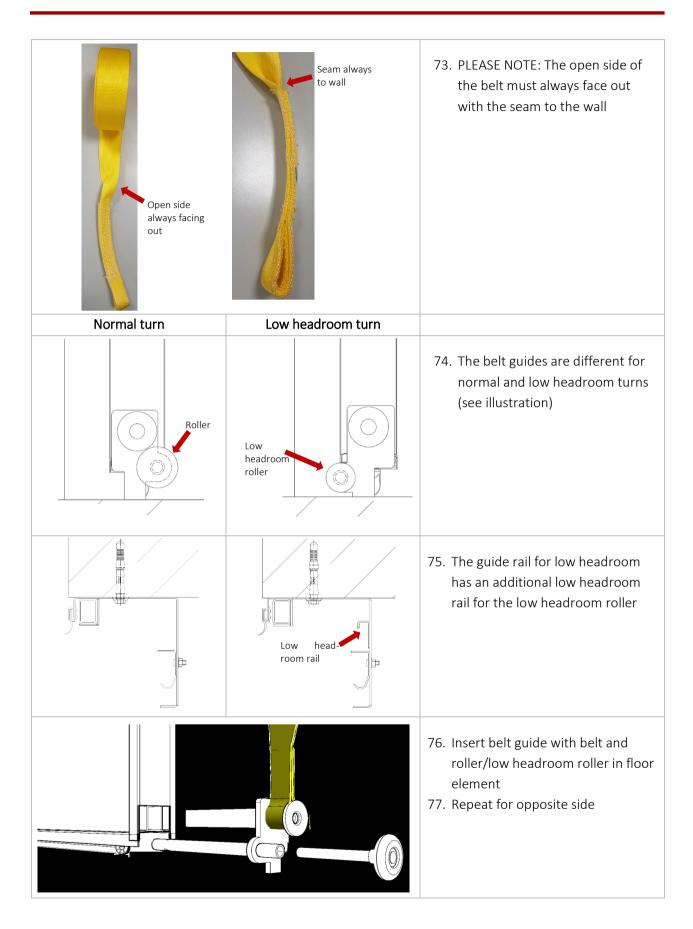
- 68. Position guide roller on horizontal guide rail and secure (sheet-metal screw 4.8x16)
- 69. Fix guide roller in place
- 70. Repeat for opposite side

4.8.3 Fitting the door elements

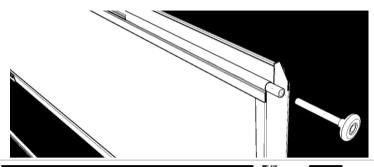


- 71. The lower section of the C-profile must be detached in order to insert the bottom door element
- 72. Repeat for opposite side. For small doors, detaching the C-profile on one side will suffice

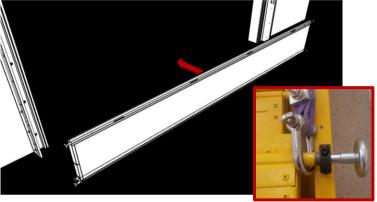




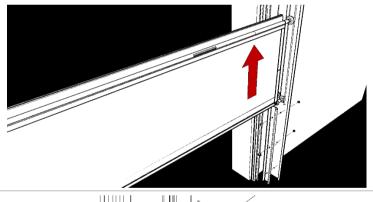




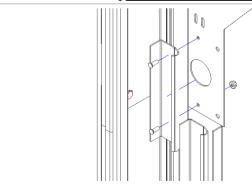
78. Insert rollers on both sides of elements



- 79. Insert bottom door element in guide rail
- 80. Fit with the aid of a hoisting belt and clamping ring

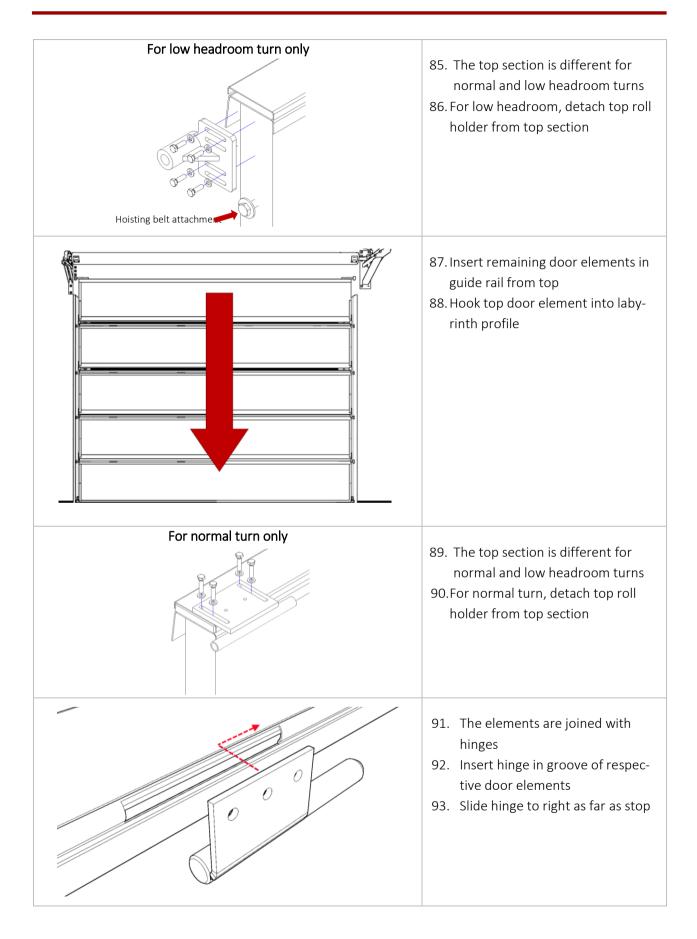


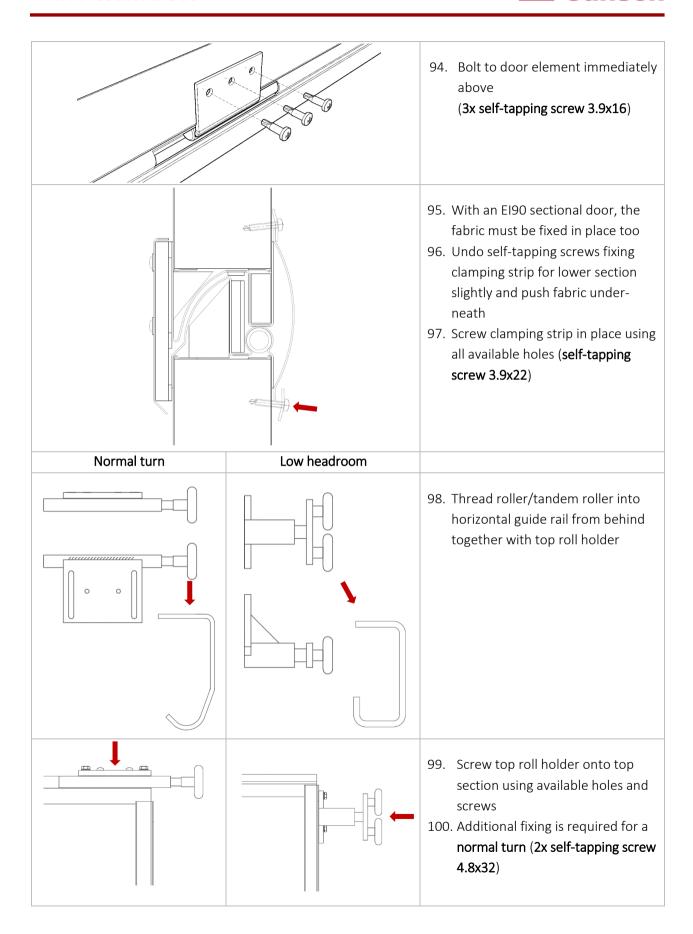
- 81. Elevate bottom door element
- 82. Fit bottom C-profile on both sides
- 83. Bottom door element can be lowered again



84. Remove top repair plate (bolts M6x16)

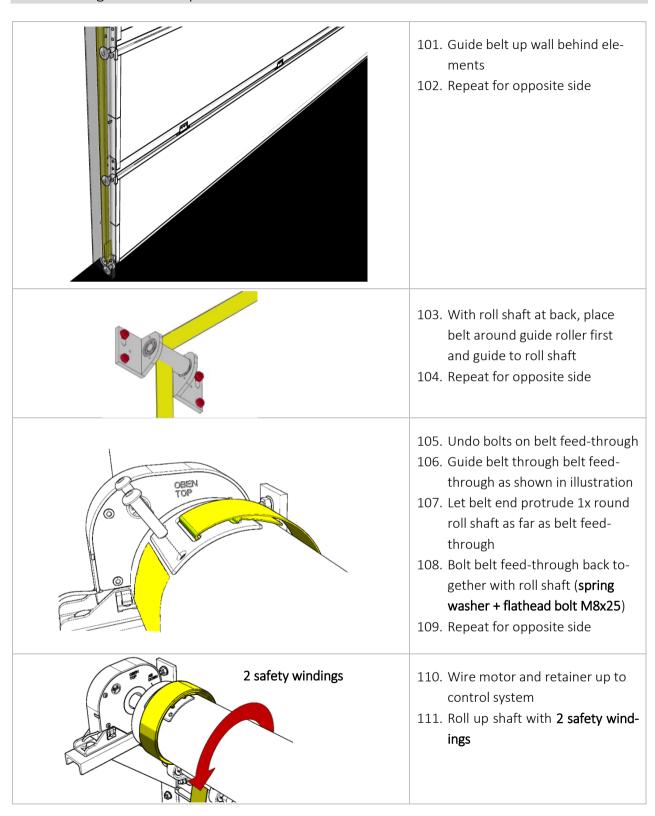






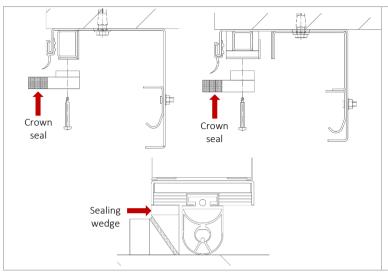


4.8.4 Fitting the belt suspension



4.9 Fitting S₂₀₀ accessories



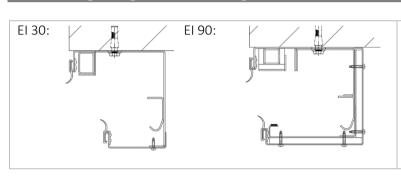


- 112. With an S₂₀₀ sectional door, an additional support must be attached to the horizontal guiding rail
- 113. Open door
- 114. Mount support shoulder in centre of tube

(self-tapping screw ø4.8x38)

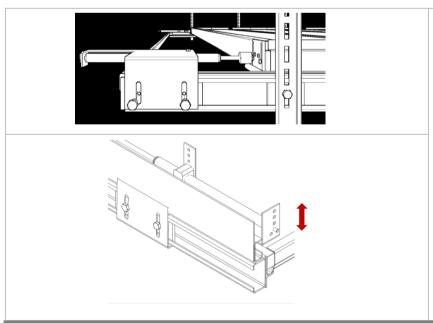
115. The premounted sealing wedge on the door leaf must be in the area of the crown seal when the door closes

4.10 Fitting the guide rail casing



- 116. Screw guide rail casing flush with guide rail in all available holes (self-tapping screw ø3.9x22)
- 117. Repeat for opposite side

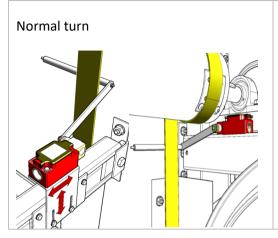
4.11 Fitting the cushioned end stop



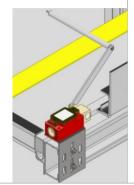
- 118. Raise door to top end position
- 119. Push cushioned end stop into guide rail until gas spring is pressed well in
- 120. In the case of low head-room, the cushioned end stop runs below the horizontal guide rail and can, if necessary, be adjusted for height

4.12 Fitting the monitoring switches



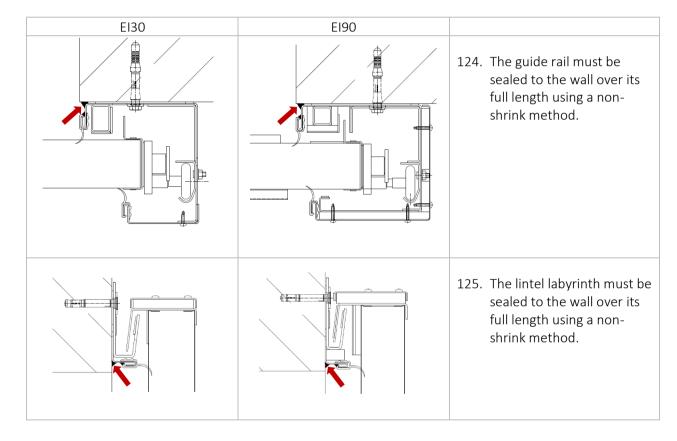


Low headroom turn



- 121. Attach elbow to C-rail and adjust so that monitoring switch presses on belt
- 122. In the case of **low headroom**, the elbow must be attached to the C-rail at the back
- 123. Check functioning of switch by triggering manually

4.13 Sealing (S₂₀₀ only)





4.14 Fitting the electrical components

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

4.15 Function test

4.15.1 Opening and closing process



People, body parts or objects can be trapped by the door elements when the "TITAN" Sectional Door is opening and closing.

- 1. Make sure that there are no people or objects in the "TITAN" Sectional Door's movement zone.
- 2. Check whether the "TITAN" Sectional Door 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

4.15.2 Test report

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

4.15.3 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 "TITAN" Sectional Door 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 "TITAN" Sectional Door. Any failure in this respect will result in loss of the declared performance.

To ensure the proper functioning of the "TITAN" Sectional Door, 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 "TITAN" Sectional Door 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.

6 Dismantling and disposal

Generally speaking, the "TITAN" Sectional Door 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 "TITAN" Sectional Door must be separated into its individual components following dismantling and disposed of in accordance with local official regulations.