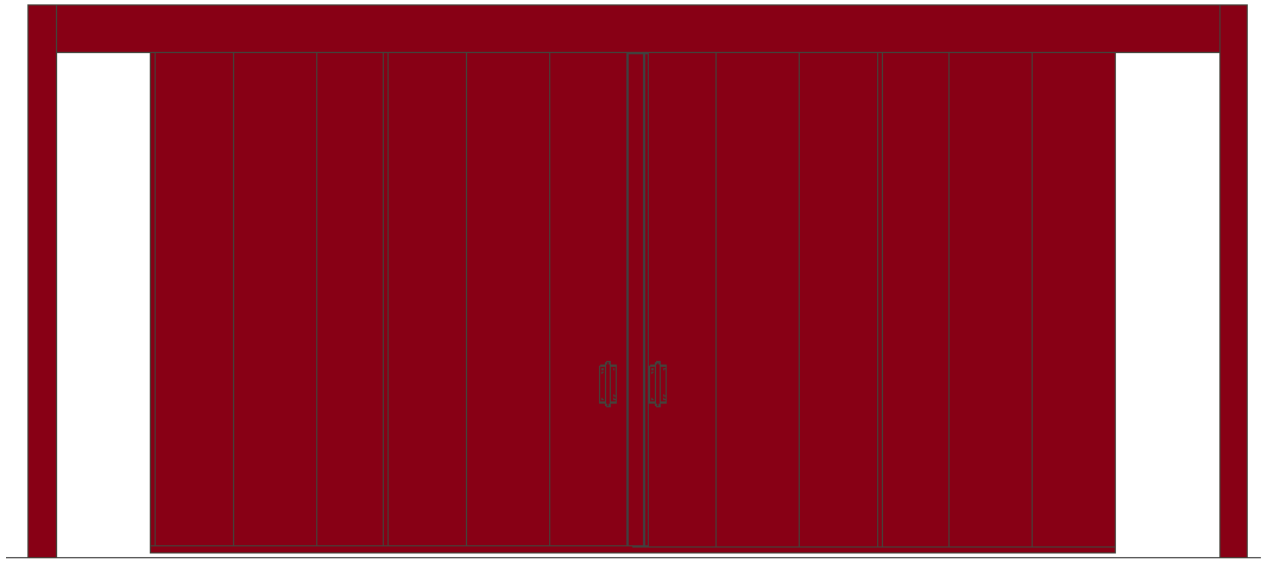


FIRE AND SMOKE BARRIER

"ORPHEUS" Telescopic Sliding Door

2-leaf - Multi-part



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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 "ORPHEUS" Telescopic Sliding Door.



2.5 Installer's qualifications

To ensure that the "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding Door. In the event of incorrect use, damage or a dangerous operational state, switch the "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding Door
- EI₂ 30 C2 "ORPHEUS" Telescopic Sliding Door
- EI₂ 30 C2 S_a "ORPHEUS" Telescopic Sliding Door
- EI₂ 90 C "ORPHEUS" Telescopic Sliding Door
- EI₂ 90 C2 "ORPHEUS" Telescopic Sliding Door
- EI₂ 90 C2 S_a "ORPHEUS" Telescopic Sliding Door

3.1.1 Intended use

An "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding Door in a completely safe condition.
- Have repairs and maintenance on the "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding 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 EI₂ 30 fire-retardant closures

For a fire-retardant "ORPHEUS" Telescopic Sliding Door with classification EI₂ 30 the following minimum requirements must be met for the declared performance to be retained on site:

Type	Permissible wall type and components - minimum requirements	Minimum wall thickness in mm
A	Fire-resistant masonry walls in accordance with DIN 1053-1, strength class min. 12, mortar group ≥ II wall thickness	≥115 mm
B	Fire-resistant concrete wall in accordance with DIN 1045, min. strength class C12-15	≥115 mm
C	Fire-resistant walls made from aerated concrete, block or high-precision masonry units in accordance with DIN 4165, strength class 4, or walls made from reinforced - horizontal or vertical - aerated concrete slabs, in so far as general building inspectorate approval is available, strength class G4.4	≥175 mm
D	Clad steel supports and/or girders in accordance with DIN 4102-4:2016-05 Table 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-enclosing 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 EI₂ 90 fire-resistant closures

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

Type	Permissible wall type and components - minimum requirements	Minimum wall thickness in mm
A	Fire-resistant masonry walls in accordance with DIN 1053-1, strength class min. 12, mortar group \geq II wall thickness	≥ 175 mm
B	Fire-resistant concrete wall in accordance with DIN 1045, min. strength class C12-15	≥ 175 mm
C	Fire-resistant walls made from aerated concrete, block or high-precision masonry units in accordance with DIN 4165, strength class 4, or walls made from reinforced - horizontal or vertical - aerated concrete slabs, in so far as general building inspectorate approval is available, strength class G4.4	≥ 175 mm
D	Clad steel supports and/or girders in accordance with DIN 4102-4:2016-05 Table 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-enclosing 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 "ORPHEUS" Telescopic Sliding Door:

- 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.

3.4.1 Attachment of side guiding rails

Wall type	Fixture	Min. load-bearing capacity [F_{rk}]
B	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
A, B	Grout	≥ 1.5 kN, strength class ≥ 4.6
D	Screw installation M8	Strength class ≥ 8.8

3.4.2 Attachment of guide rail (Wall)

Wall type	Fixture	Min. load-bearing capacity [F_{rk}]
B	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

*Always concrete in opening zone

3.4.3 Attachment of guide rail (Ceiling)

Wall type	Fixture	Min. load-bearing capacity [F_{rk}]
B	Bolt anchor / through bolt	≥ 4.3 kN
B	Screw anchor	≥ 4.3 kN
D	Screw installation M8	Strength class ≥ 8.8

3.5 Permissible clearances

Floor gaps can occur when the "ORPHEUS" Telescopic Sliding 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.



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:

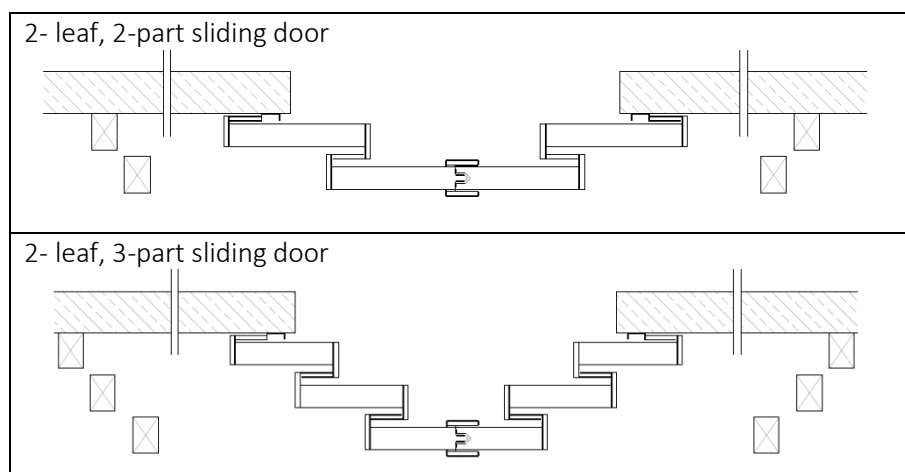
Symbol / Abbreviation	Meaning
	Components marked with the symbol must be aligned/fitted horizontally
	Align/fit vertically
FF	Finished floor level
CH	Clear height
CW	Clear width

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:

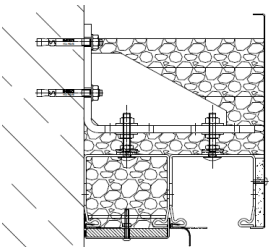
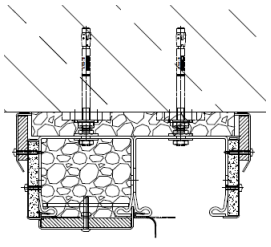
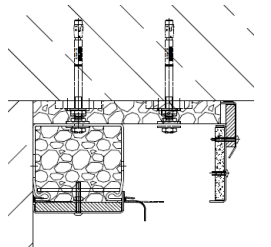
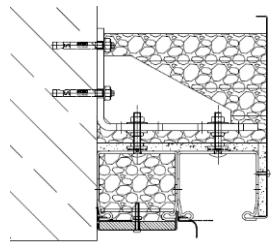
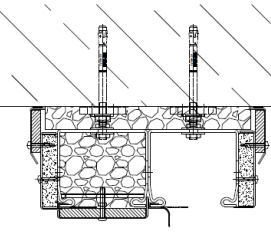
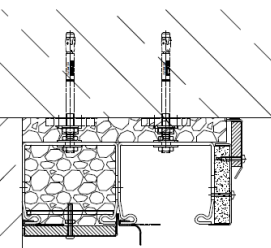
1. Read through the full installation instructions
2. Identify door's stop side
3. Check the ordered dimensions of the door against the structural reality.
4. It is recommended that you carry out fitting in the precise order set out below or discrepancies may occur. The manufacturer is not liable for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

4.3 Variants

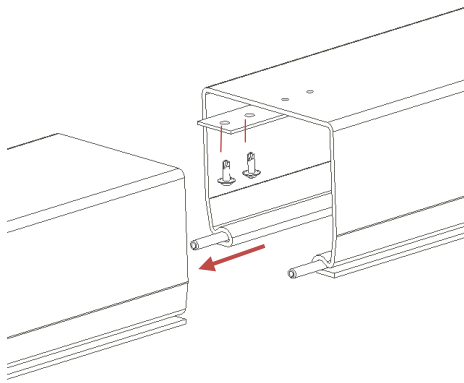
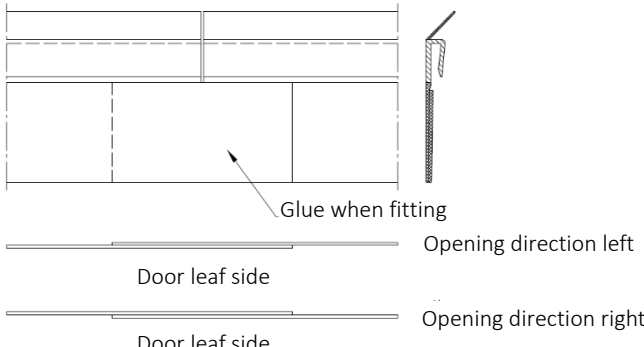


4.4 Fitting the guide rail

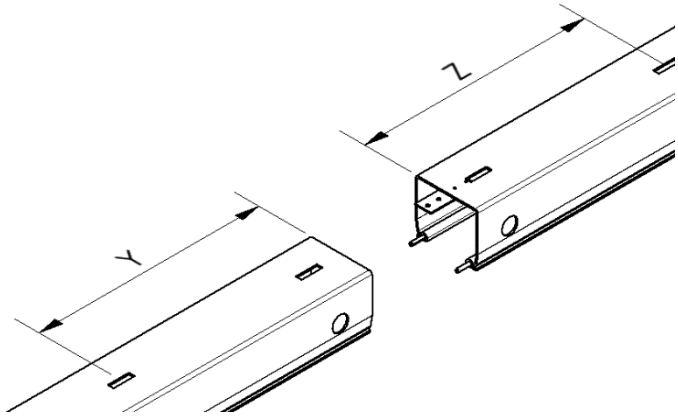
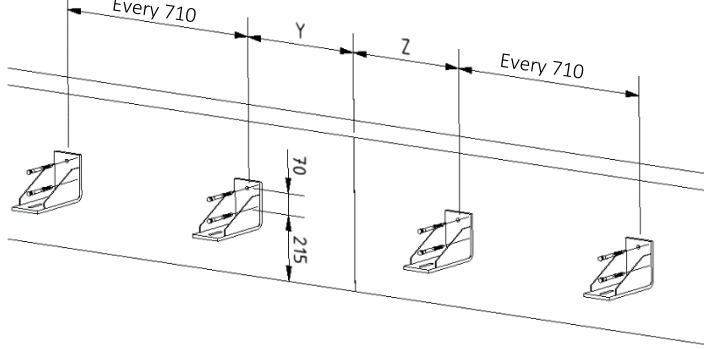

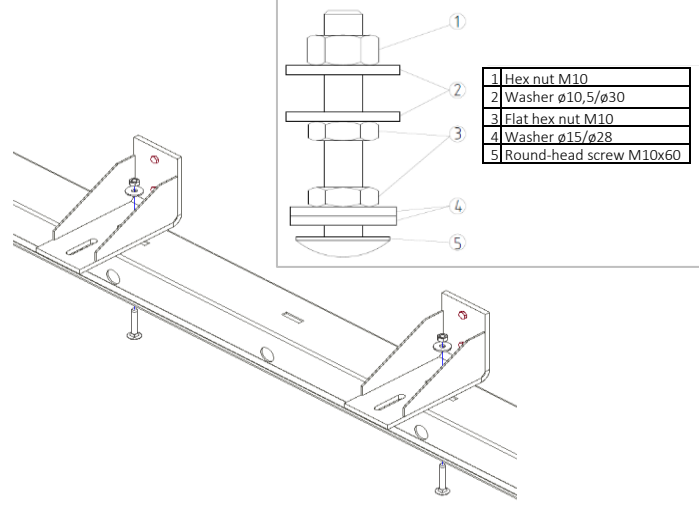

4.4.1 Guide rail fitting variants

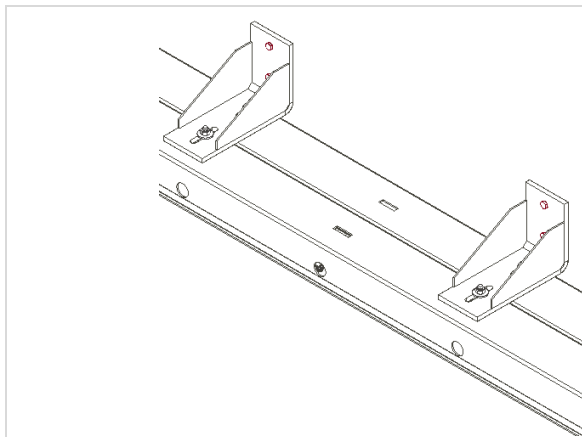
Fire rating	Wall mounting	Flush ceiling mounting	Ceiling mounting
El ₂ 30			
El ₂ 90			

4.4.2 With split guide rail

	<ol style="list-style-type: none"> 1. Detach premounted connecting plate from guide rail, turn and fit as shown in illustration 2. Connect guide rails using clamping sleeves 3. Screw connecting plate to guide rail (2x flathead self-tapping screw $\varnothing 4.2 \times 13$) 4. Guide rail pieces must be arranged alphabetically, starting in the centre with A and moving outwards
<p>Additionally for door with smoke protection (S_a):</p>  <p>Glue when fitting</p> <p>Door leaf side</p> <p>Opening direction left</p> <p>Door leaf side</p> <p>Opening direction right</p>	<ol style="list-style-type: none"> 5. With a split guide rail, the smoke seal (S_a only) must be glued 6. Care must be taken that the door leaf does not hit the blunt edge when closing

4.4.3 For wall mounting of guide rail

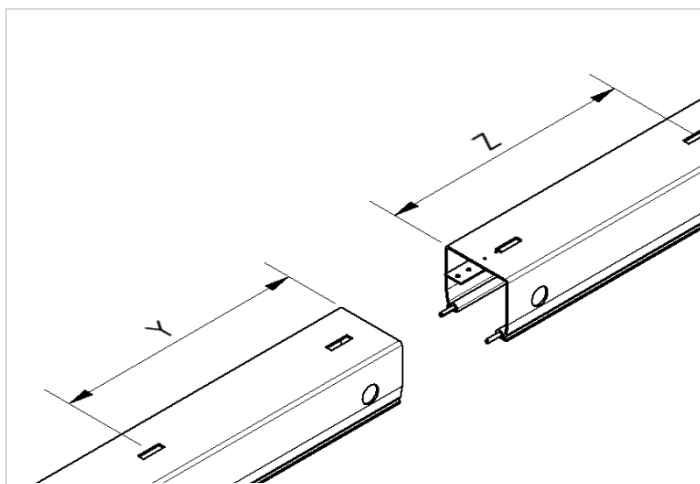
	<ol style="list-style-type: none"> 7. The horizontal measurement for the position of the first two wall brackets depends on dimensions Y and Z 8. Measure Y and Z on the supplied "Rear" guide rail beforehand 9. Connect guide rails using clamping sleeves 10. Screw connecting plate to guide rail (2x flathead self-tapping screw $\phi 4.2 \times 13$) <p>Z, Y = edge to middle of second cutout</p>										
	<ol style="list-style-type: none"> 11. Mark centre of reveal 12. Take basic measurements Y and Z into account for first two wall brackets 13. Mark and pre-drill every 710 mm 14. Screw mounting bracket to wall 15. Align horizontally  										
 <table border="1" data-bbox="694 1467 909 1568"> <tr><td>1</td><td>Hex nut M10</td></tr> <tr><td>2</td><td>Washer $\phi 10,5/\phi 30$</td></tr> <tr><td>3</td><td>Flat hex nut M10</td></tr> <tr><td>4</td><td>Washer $\phi 15/\phi 28$</td></tr> <tr><td>5</td><td>Round-head screw M10x60</td></tr> </table>	1	Hex nut M10	2	Washer $\phi 10,5/\phi 30$	3	Flat hex nut M10	4	Washer $\phi 15/\phi 28$	5	Round-head screw M10x60	<ol style="list-style-type: none"> 16. Screw "Rear" guide rails to individual wall brackets 17. Secure first and last hole in each guide rail first 18. Secure holes in between 19. Align horizontally  20. Height can be adjusted by ± 15 mm
1	Hex nut M10										
2	Washer $\phi 10,5/\phi 30$										
3	Flat hex nut M10										
4	Washer $\phi 15/\phi 28$										
5	Round-head screw M10x60										



21. Repeat for "Front" guide rail

22. Clean guide rails from inside

4.4.4 For flush ceiling mounting or ceiling mounting of guide rail



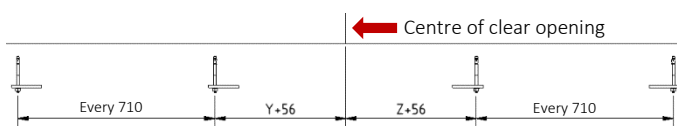
23. The horizontal measurement for the position of the first two middle wall brackets depends on dimensions **Y** and **Z**

24. Measure **Y** and **Z** on the supplied "Rear" guide rail beforehand

25. Connect guide rails using clamping sleeves

26. Screw connecting plate to guide rail
(2x flathead self-tapping screw $\varnothing 4.2 \times 13$)

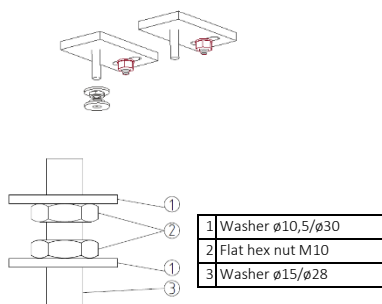
Z, Y = edge to middle of second cutout



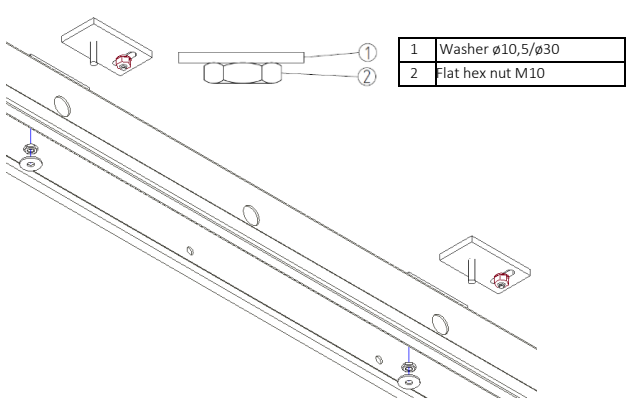

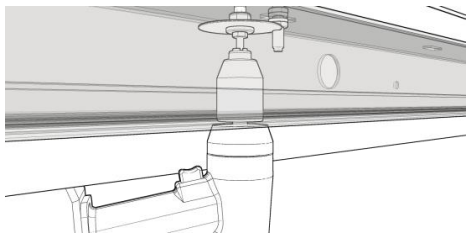
12. Mark and pre-drill position of first ceiling brackets at basic measurement **Y** or **Z + 56 mm**

13. Pre-drill every **710 mm**

14. Screw ceiling bracket to ceiling



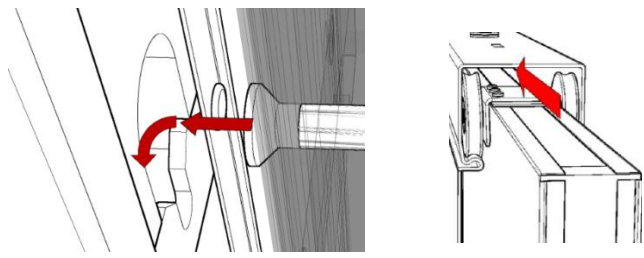
15. Twist threaded rod into ceiling bracket
16. Fit nuts and washers as shown in illustration

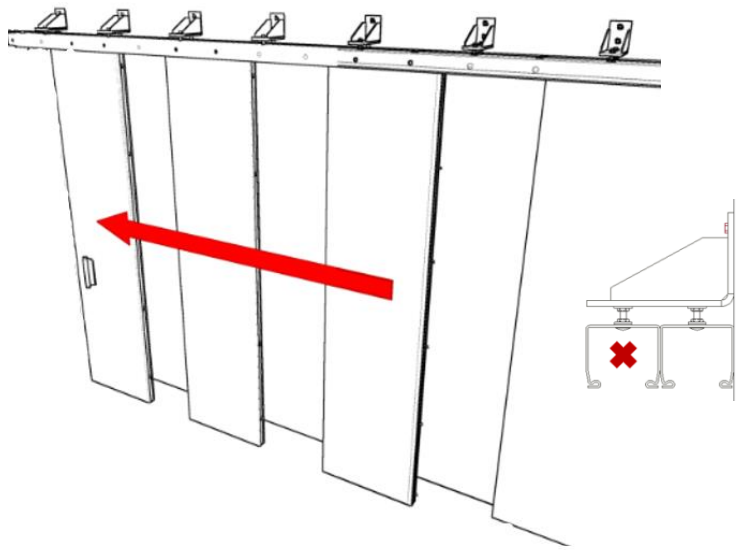
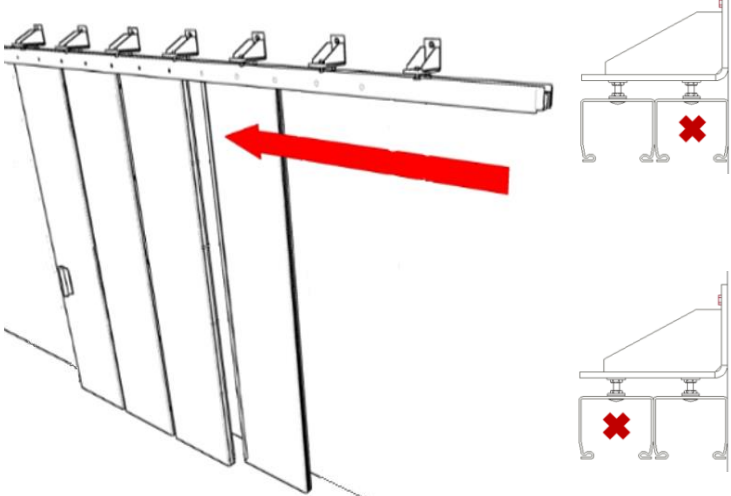
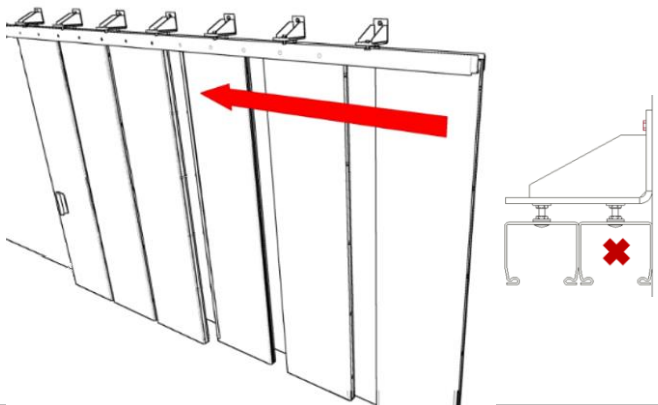
	<p>17. Move "Rear" guide rails into position</p> <p>18. Mount guide rail as shown in illustration</p> <p>19. Align guide rail horizontally </p> <p>20. Repeat for "Front" guide rail</p>
	<p>21. Cut off excess length of threaded rod in guide rails just below nut using cutting disc</p> <p>22. Remove debris and clean guide rail</p>

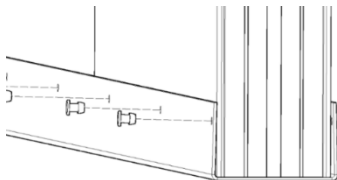
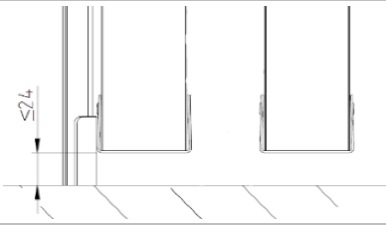
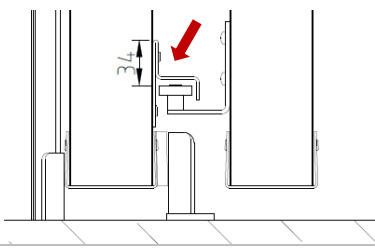
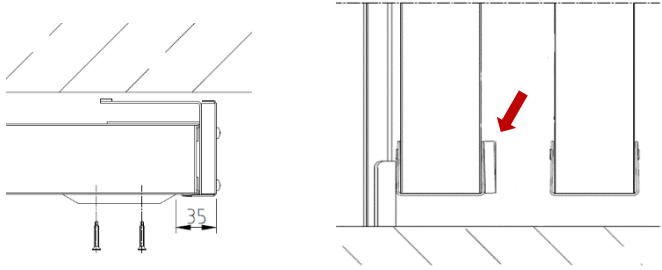
4.5 Fitting the door leaf without wicket

For door with wicket see: *Installation Instructions ORPHEUS Sliding Door Optional Wicket*

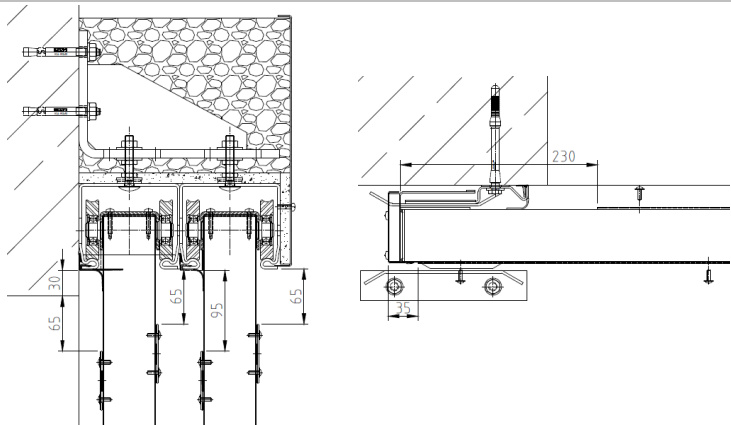

4.5.1 Door leaf

	<p>23. The elements are connected to each other using a push-fit system</p> <p>24. The elements are hooked into the next element one after the other from the top</p>
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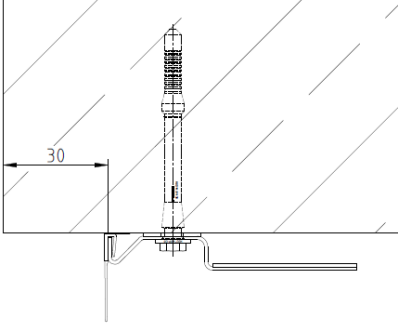

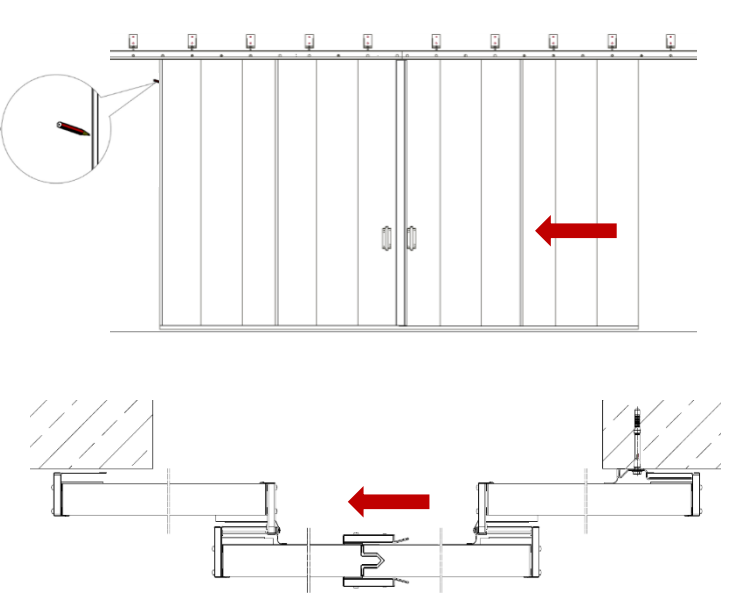
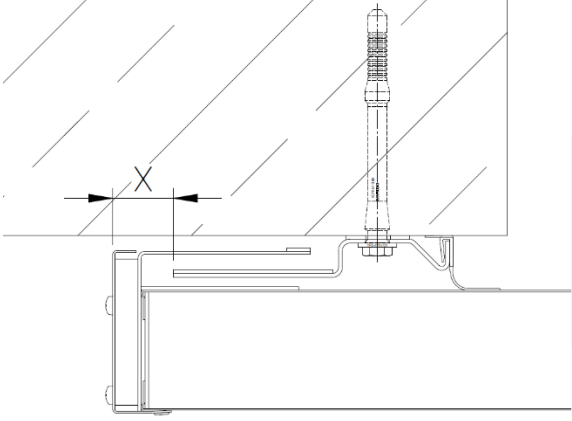


	<p>25. Insert all door elements of front leaf, apart from labyrinth element, in "Front" guide rail at top one after the other and hook in. Start with the highest number (door handle)</p> <p>26. Connect elements using push-fit system</p>
	<p>27. Insert labyrinth element of rear leaf in "Rear" guide rail at top and slide towards centre</p> <p>28. Insert labyrinth element of front leaf in "Front" guide rail at top</p> <p>29. Connect labyrinth element of front leaf using push-fit system and align all elements of front leaf vertically</p>
	<p>30. Insert remaining elements of rear leaf in "Rear" guide rail at top</p> <p>31. Slide first element of rear leaf towards wall labyrinth, but no further than labyrinth element of front leaf</p> <p>32. Connect elements using push-fit system and align vertically</p>
<p>Repeat steps for left side</p>	

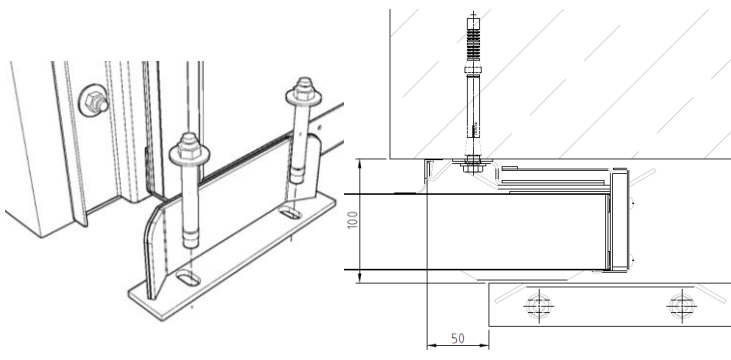
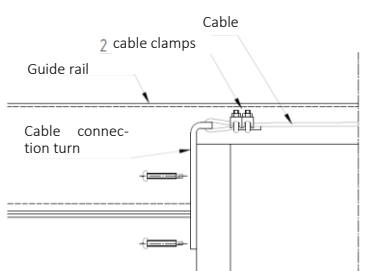
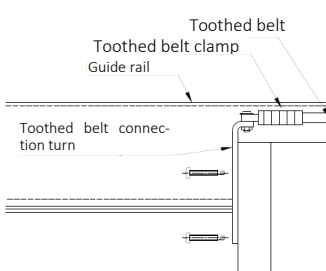
	<p>33. Align end covers 34. Comply with floor gap (see next illustration) 35. Rivet to door element from both sides (blind rivet Ø4x10)</p>
	<p>36. It is imperative that the floor gap dimensions are complied with!</p>
	<p>37. Align guiding rail horizontally 38. Secure guiding rail in all holes (flathead self-tapping screw Ø4.2x13)</p>
	<p>39. Align runner flush with end cover 40. Comply with dimensions (see illustration) 41. Fix runner in place (2 x countersunk self-tapping screw Ø3.9x25) 42. Repeat on other side</p>

4.5.2 Cleats (EI290 closures only)

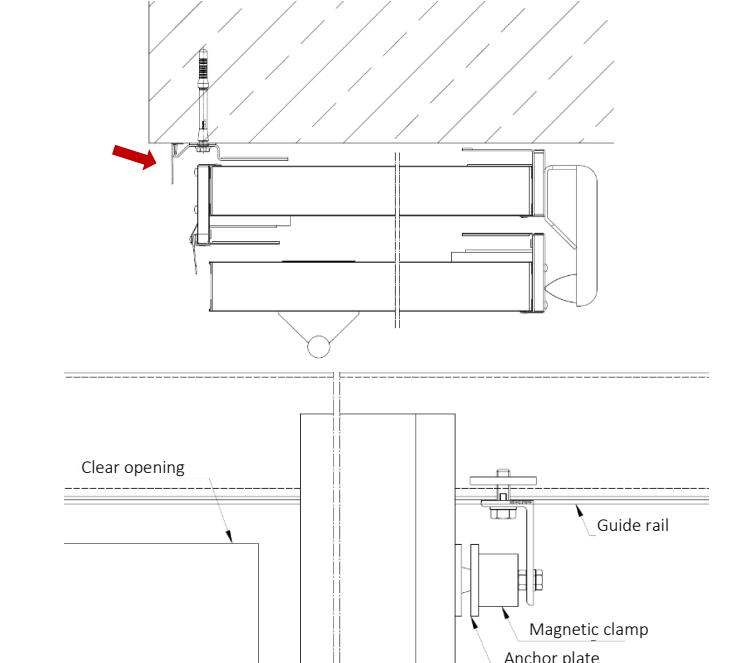
	<p>43. Align cleats horizontally  44. Comply with dimensions (see illustrations) 45. Screw together in all holes (flat-head self-tapping screw Ø4.2x13)</p>
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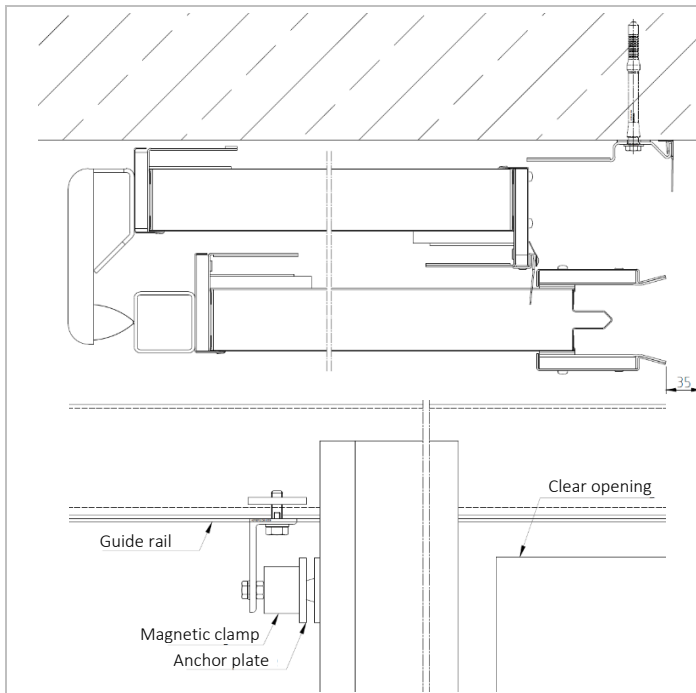
4.6 Fitting the wall labyrinth, floor guide and cable turn

	<p>46. Guide plate on wall labyrinth is always at bottom</p> <p>47. Position right-hand wall labyrinth vertically (see illustration) </p> <p>48. Use all available holes and fix wall labyrinth in place with dowels</p>
	<p>49. Carefully close door! Slide door until all labyrinths and both leaves meet in centre</p> <p>50. Mark edge of element for left-hand leaf</p> <p>51. Open door leaf until mark is visible</p>
	<p>52. Guide plate on wall labyrinth is always at bottom</p> <p>53. Position wall labyrinth vertically 2-part X=36 mm  3-part X=46 mm  offset from mark in direction of clear opening</p> <p>54. Use all available holes and fix wall labyrinth in place with dowels</p>

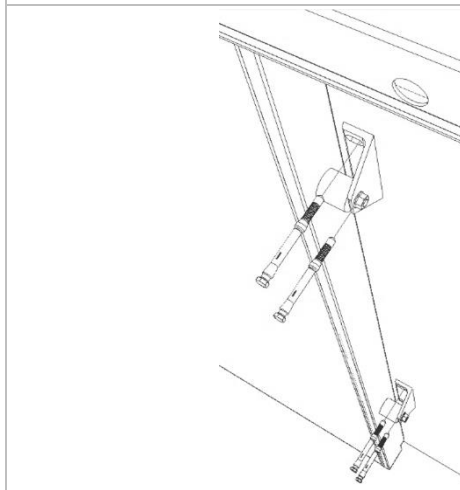
	<p>55. Floor guides must not protrude into opening</p> <p>56. Floor guides are 50 mm from front edge of wall labyrinth and approx. 100 mm from wall</p> <p>57. Bolt floor guide in place (2x stud bolt W-HAZ-S)</p> <p>58. Promaseal PL strips are enclosed loose for levelling</p>
<p>Cable:</p> 	<p>Toothed belt:</p>  <p>59. Secure cable/toothed belt connections to door leaf labyrinths at pre-drilled positions using self-tapping screws provided</p>

4.7 Fitting the magnetic clamp and cushioned end stops

	<p>60. Fully open right-hand door leaf so that seal on right-hand wall labyrinth folds back</p> <p>61. Mount bracket with magnetic clamps below "Front" guide rail in such a way that anchor plate is in contact with magnetic clamp when door is open</p> <p>62. Tighten threaded pins on bracket's magnetic clamp</p>
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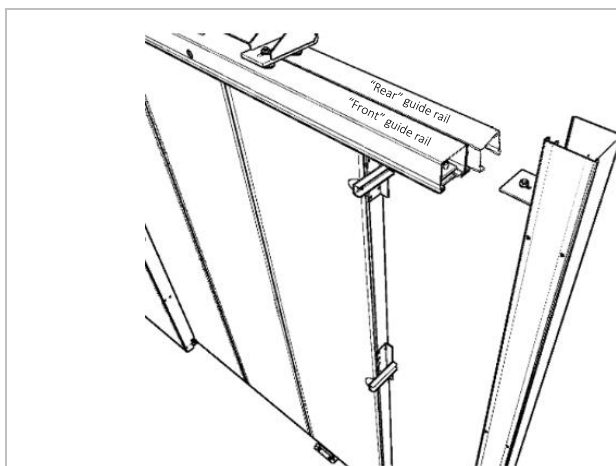


63. Fully open left-hand door leaf so that centre junction's cleat is 35 mm from reveal
64. Mount bracket with magnetic clamps below left-hand guide rail in such a way that anchor plate is in contact with magnetic clamp when door is open
65. Tighten threaded pins on bracket's magnetic clamp



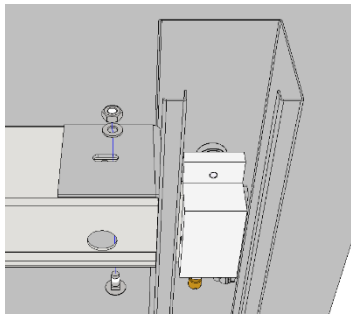
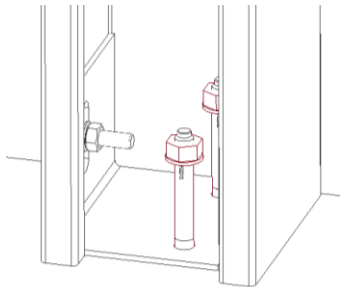
66. Fully open door until magnetic clamp hits magnetic clamp completely
67. Fit two cushioned end stops with a gap of max. **5 mm** between cushion and door element as an end stop (**segment anchor**)
1x centrally in top third and 1x centrally in bottom third of door leaf
68. Repeat on other side

4.8 Fitting the counterweight box (if weights are opposite lead-in)

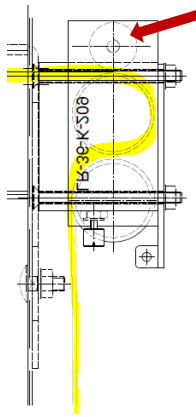
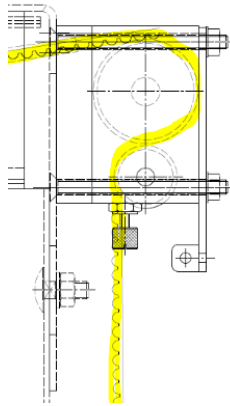


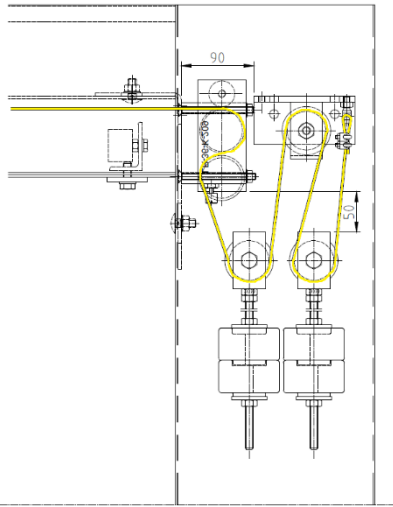
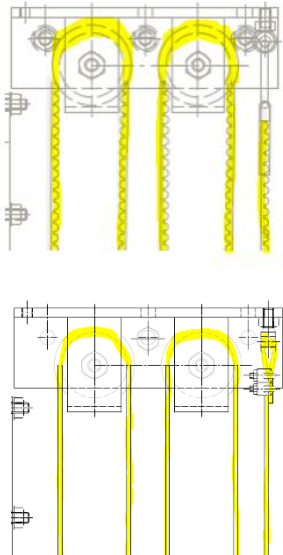
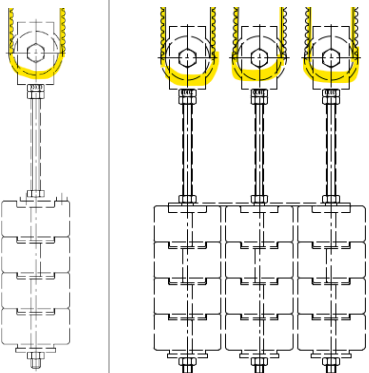
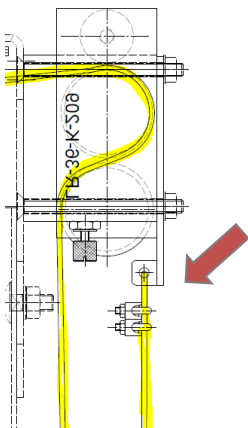
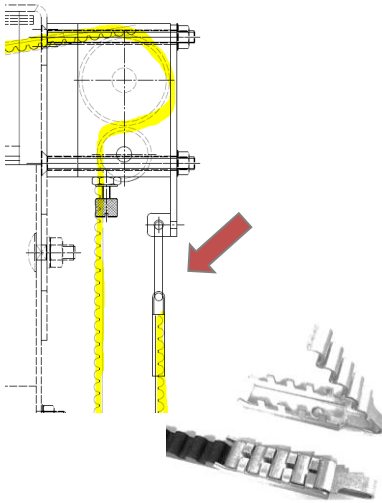
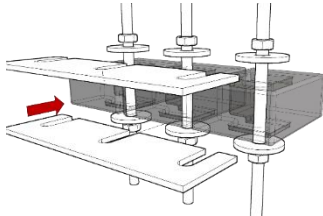
69. Place first counterweight box against "Rear" guide rail
70. Align vertically
71. Repeat for second counterweight box and place against "Front" guide rail
72. Repeat for other side



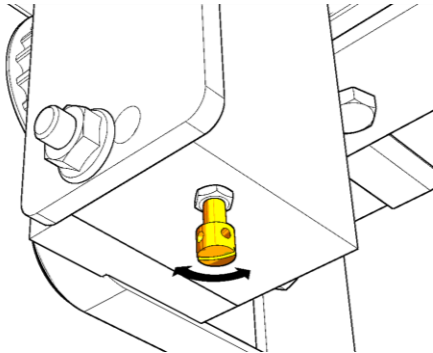
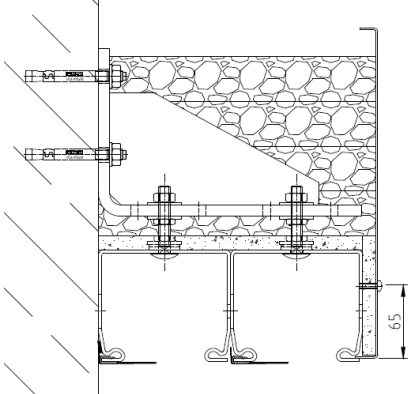
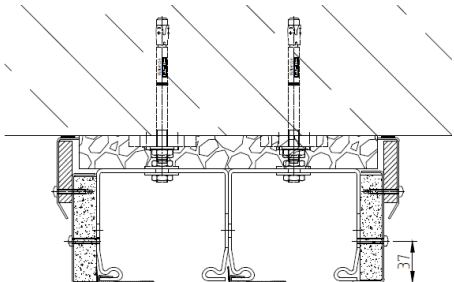
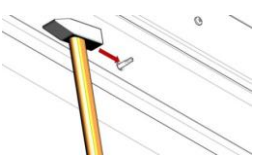
	<p>73. Screw counterweight boxes' connection bracket to guide rail (round-head screw M10x25, washer $\varnothing 10.5$, nut M10)</p> <p>74. Repeat for other side</p>
	<p>75. Bolt counterweight boxes to floor with two segment anchors in the holes</p> <p>76. Repeat for other side</p>

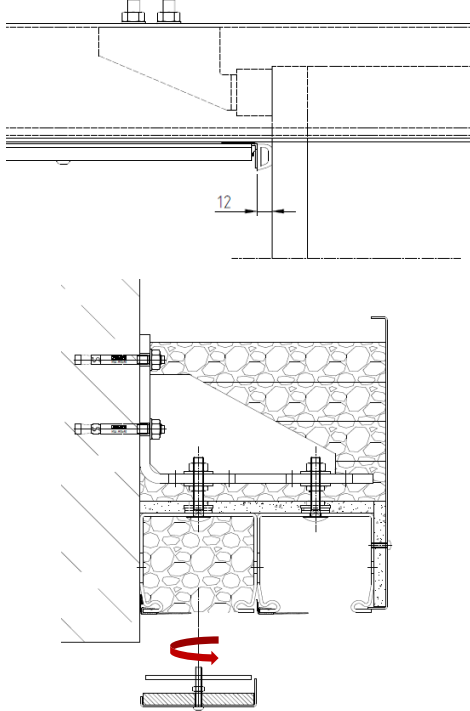
4.9 Fitting the weights and weigh guides

<p>Cable:</p>  <p>Eccentric screw</p>	<p>Toothed belt:</p> 	<p>77. Feed toothed belt/cable through radial damper as shown in illustration</p> <p><u>Cable:</u></p> <p>78. To prevent the cable from slipping through, the ball bearing must be positioned in such a way with the eccentric screw that the cable is pressed against the pulley firmly enough</p> <p>79. Lock in position with hexagon bolt</p>
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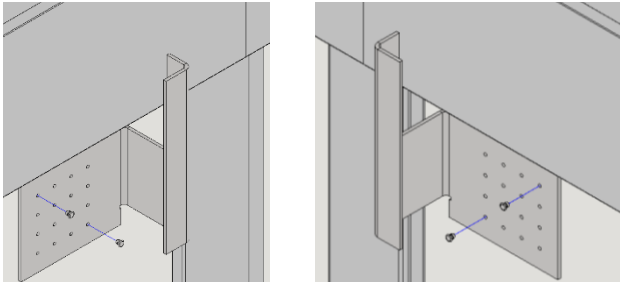
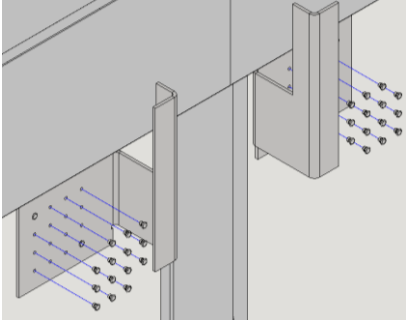
		<p>80. Position guide roller, if there is one: top edge of guide roller flush with top edge of guide rail, 90 mm from connection bracket</p> <p>81. Mark mounting points, pre-drill and fit guide roller (segment anchor)</p> <p>82. Feed toothed belt/cable through guide roller(s) at weight(s) as shown in illustration</p> <p>83. If there are several weight brackets, the toothed belt/cable must also be fed through the guide rollers on the counterweight box</p> <p>84. The maximum gap between the radial damper and the weights' pulley with the door open is max. 50 mm</p>
	<p>Cable:</p>  <p>Toothed belt:</p> 	<p>85. Cut toothed belt/cable to length</p> <p><u>Cable:</u></p> <p>86. Feed cable through mechanism on radial damper or guide roller and secure with two cable clamps</p> <p><u>Toothed belt:</u></p> <p>87. Secure belt with clamp inc. snap hook</p> <p>88. Hook toothed belt into mechanism on radial damper and/or guide roller via snap hook</p>
		<p>89. If there are several weight brackets, they must be joined by means of a weight connector plate and clipped over the nuts.</p>

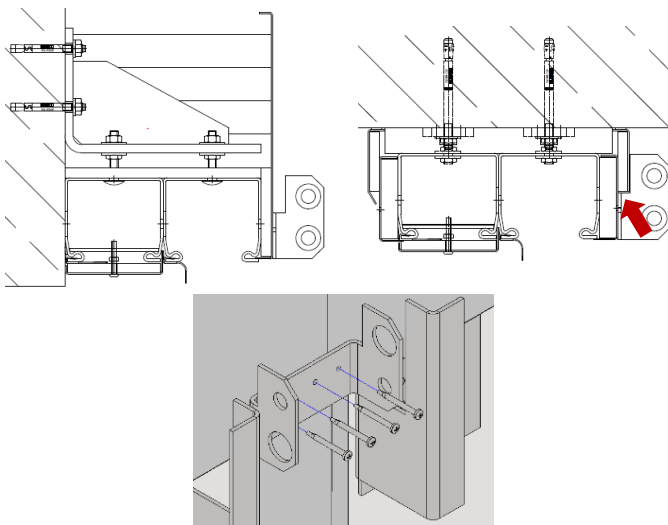
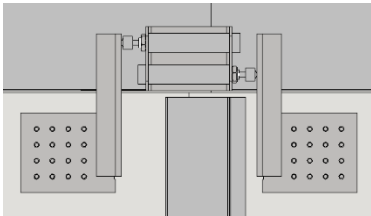
4.10 Fitting the casing, adjusting the radial damper and end positions

	<ol style="list-style-type: none"> 90. Open door and allow to close via closing weight 91. Adjust closing speed by means of brass screw on radial damper 92. Closing speed: 0.3 m/s 93. Open door and allow to close again at least three times. Readjust radial damper if necessary
<p>Wall mounting every 600 mm, distance from edge = 100 mm</p>  <p>Ceiling mounting every 350 mm, distance from edge = 80 mm</p>  	<ol style="list-style-type: none"> 94. For EI₂ 90 (wall mounting), also fit fire-resistant plasterboard over the guide rail's opening zone 95. Position side casing as shown in illustration 96. Comply with dimensions (see illustration) and fix in place with oval-head self-tapping screw Ø4.8x45 97. With ceiling mounting, covers have to be fitted as well: position cover on ceiling and fix in place with oval-head self-tapping screws Ø4.8x45 in all holes 98. Strike all screws off from inside 99. For EI₂ 90 and EI₂30 (ceiling mounting only), also put mineral wool over guide rail 100. Clean guide rail

	<p>101. Fill "Rear" guide rail with mineral wool between stop bars</p> <p>102. Put cover strip up against "Rear" guide rail (short side to wall)</p> <p>103. Leave a gap of 12 mm between door leaf labyrinth and cover strip's mounting bracket</p> <p>104. Fix cover strip in place</p>
	<p>105. Screw weight box's cover back on</p>

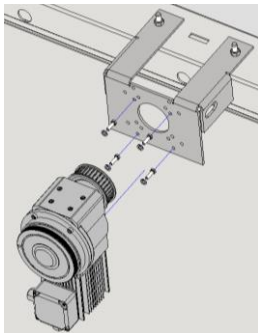
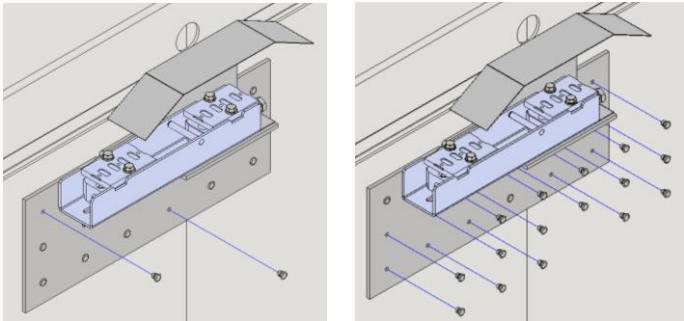
4.11 Fitting the damper unit

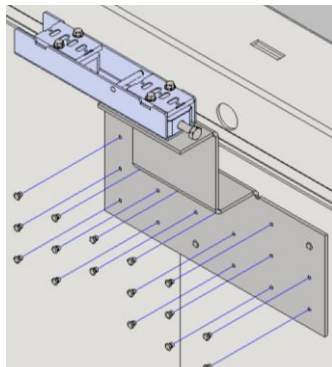
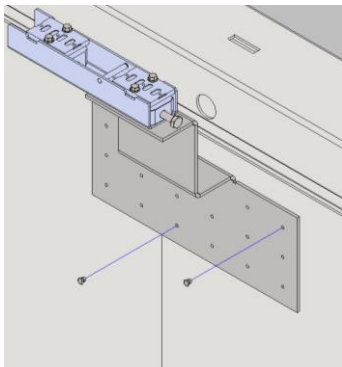
	<p>106. First attach the brackets on the left- and right-hand leaves to the door leaf with blind rivets ø4 in the two pre-drilled holes</p>
	<p>107. Pre-drill all available bracket holes</p> <p>108. Fully rivet brackets blind rivets ø4</p>

	<p>109. Remove damper from bracket</p> <p>110. Ceiling mounting: Remove leg of guide rail casing in area of damper seat</p> <p>111. Close door</p> <p>112. Fix bracket in place centrally over leaf junction as shown in illustration</p>
	<p>113. Fit damper back in place</p> <p>Rubber buffers also possible as an option</p>

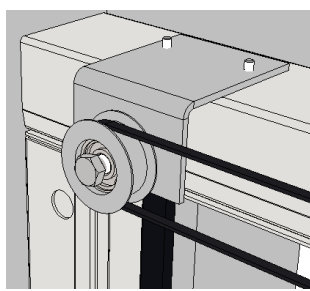
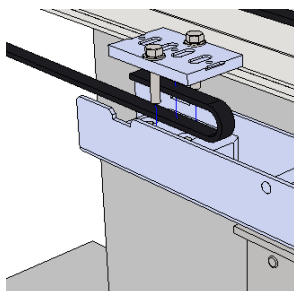
4.12 Fitting the opening assistance

Shown without guide rail casing:

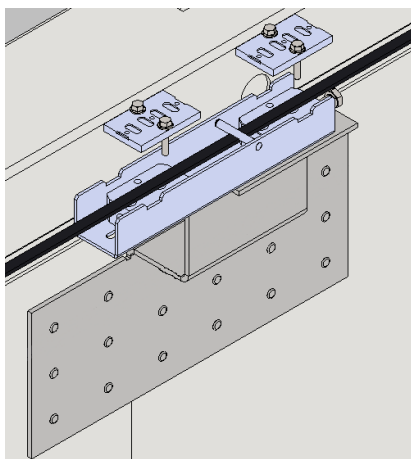
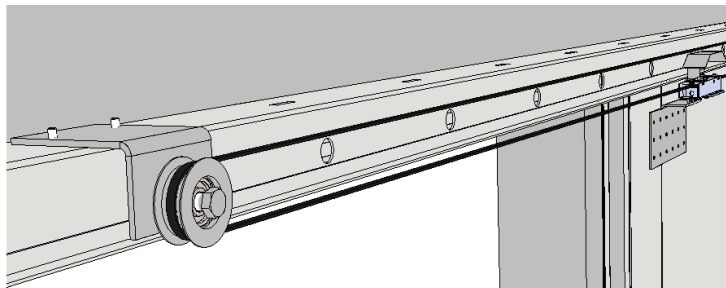
	<p>114. Remove toothed belt pulley from motor</p> <p>115. Attach motor to premounted bracket (4x hexagon bolt M6x20 + spring washer)</p> <p>116. Attach toothed belt pulley to motor</p>
	<p>117. First attach the toothed belt tensioner bracket on the left-hand leaf to the door leaf with blind rivets ø4 in the two pre-drilled holes</p> <p>118. Pre-drill all available bracket holes</p> <p>119. Fully rivet bracket blind rivets ø4</p>



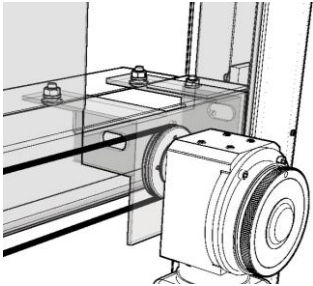
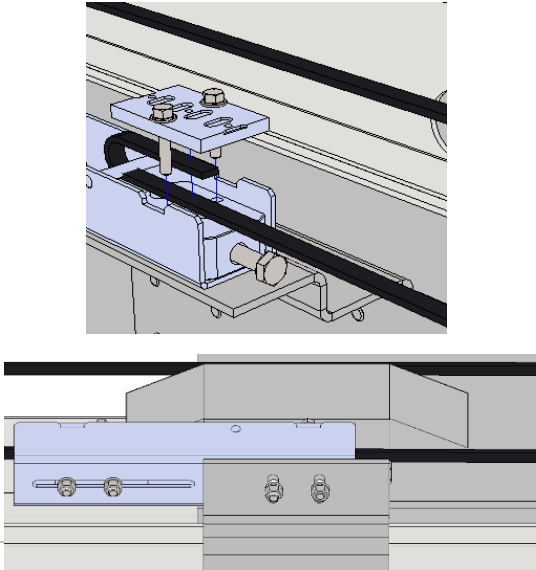
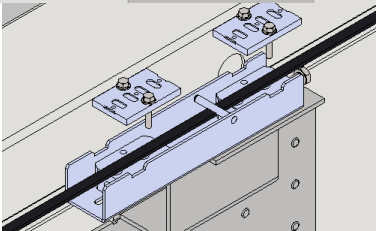
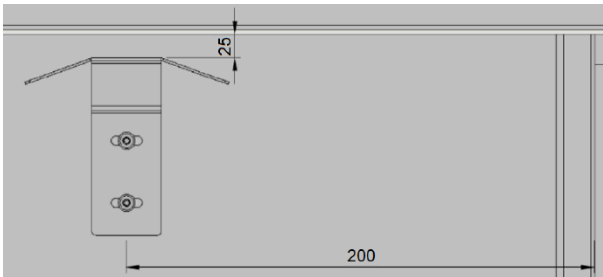
- 120. First attach the toothed belt tensioner bracket on the right-hand leaf to the door leaf with **blind rivets ø4** in the two pre-drilled holes
- 121. Pre-drill all available bracket holes
- 122. Fully rivet bracket
blind rivets ø4

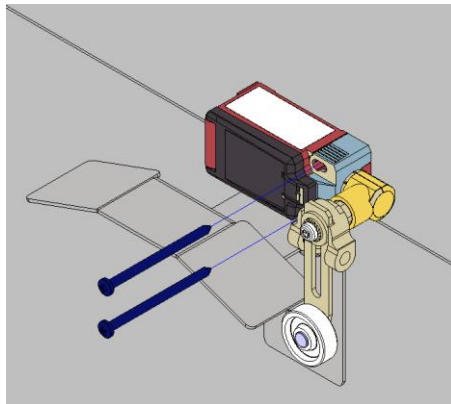


- 123. Detach toothed belt tensioner plate on left-hand leaf
- 124. Make loop with toothed belt
- 125. Fasten plate with belt in between
- 126. Feed toothed belt around guide roller to right-hand leaf's toothed belt tensioner



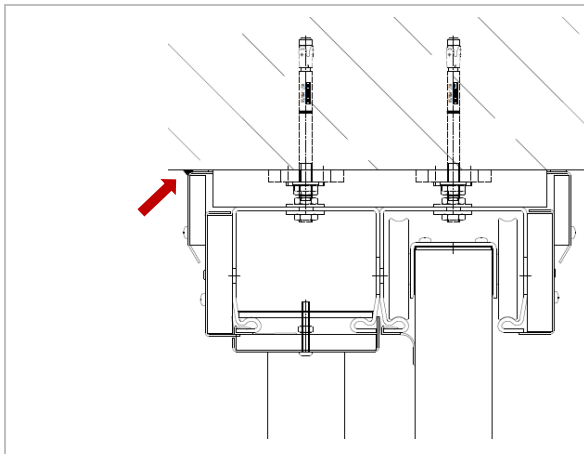
- 127. Detach right-hand leaf's toothed belt tensioner plates
- 128. Lay toothed belt in direction of opening assistance, but do not fix in place yet

	<p>129. Feed through opening in motor bracket and place around opening assistance's toothed belt pulley</p>
	<p>130. Detach left-hand leaf's toothed belt tensioner plate on other side 131. Loop toothed belt around steel rod 132. Fasten plate with belt in between 133. Can be retensioned by turning hexagon bolt 134. Tension toothed belt so that there is no visible sagging 135. Tighten the four nuts on both toothed belt tensioners</p>
	<p>136. Fix toothed belt tensioner plates in place on right-hand side</p>
	<p>137. Screw limit switch actuation bracket onto door leaf approx. 25 mm from guide rail and approx. 200 mm from edge of door leaf (labyrinth side) (2x 5.5x25 flathead screw)</p>



- 138. Limit switch turns opening assistance off when door is open
- 139. Position limit switch on guide rail casing in such a way that limit switch actuation bracket actuates limit switch when door is opened
(2x sheet-metal screw 3.9x60)
- 140. Strike off sheet-metal screws from inside
- 141. Test door for correct functioning
- 142. Door closes by means of counterweights and opens with opening assistance

4.13 Sealing (doors with S_a or S_{200} requirement)



- 143. The guide rail (ceiling mounting) must be sealed to the ceiling in the opening zone using a non-shrink method.

4.14 Sealing the door

To comply with S_{200} requirements, the door must now be sealed, see:

*Installation Instructions ORPHEUS Sliding Door Optional Wicket - **Sealing***

4.15 Fitting the electrical components

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

4.16 Function test

4.16.1 Opening and closing process



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

1. Make sure that there are no people or objects in the "ORPHEUS" Telescopic Sliding Door's movement zone.
2. Check whether the "ORPHEUS" Telescopic Sliding 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

4.16.2 Test report

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

4.16.3 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 "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding Door. Any failure in this respect will result in loss of the declared performance.

To ensure the proper functioning of the "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding 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 "ORPHEUS" Telescopic Sliding Door must be separated into its individual components following dismantling and disposed of in accordance with local official regulations.