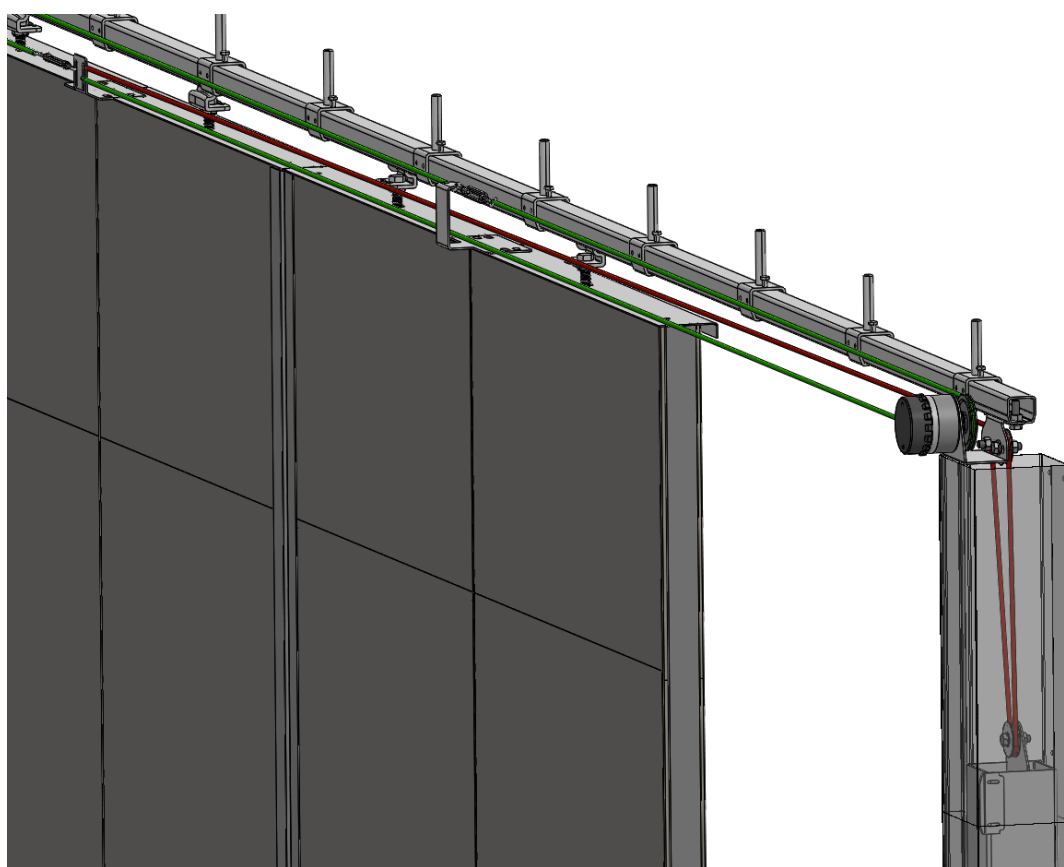




# Appendix

## Steel rope guiding system on fire doors SGS





## CONTENT

<b>1 INTRODUCTION .....</b>	<b>1</b>
<b>2 LEGEND TO CABLING SCHEMES.....</b>	<b>1</b>
<b>3 BRAKE AND COUNTERWEIGHT CONSOLE .....</b>	<b>1</b>
<b>4 SGS SINGLE LEAF (1+0) WITH COUNTERWEIGHT IN COUNTER LABYRINTH 2</b>	<b>2</b>
4.1 Schematic drawing of the door .....	2
4.2 Scheme of cabling .....	2
4.3 Counterweight cabling .....	3
4.3.1 Types of counterweight - introduction .....	4
4.3.2 Simple counterweight.....	5
4.3.3 Double counterweight .....	5
4.3.4 Triple counterweight .....	6
4.4 Brake cabling .....	7
<b>5 SGS SINGLE LEAF (1+0) WITH COUNTERWEIGHT IN OPEN POSITION .....</b>	<b>9</b>
5.1 Schematic drawing of the door .....	9
5.2 Scheme of cabling .....	9
5.3 Counterweight cabling .....	10
5.3.1 Simple counterweight.....	11
5.3.2 Double counterweight .....	11
5.3.3 Triple counterweight .....	11
5.4 Brake cabling .....	12
<b>6 SGS DOUBLE LEAF SYMmETRICal (1+1) .....</b>	<b>13</b>
6.1 Schematic drawing of the door .....	13
6.2 Scheme of cabling .....	13
6.3 Counterweight cabling .....	14
6.3.1 Types of counterweight - introduction .....	15
6.3.2 Simple counterweight.....	16
6.3.3 Double counterweight .....	16
6.4 Brake cabling .....	17
<b>7 SGS TELESKOPIC.....</b>	<b>18</b>
<b>8 COUNTERWEIGHT SPACER WING .....</b>	<b>18</b>



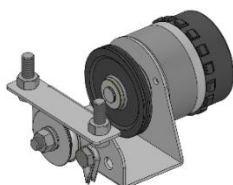


## 1 INTRODUCTION

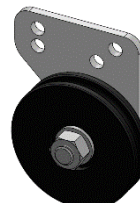
This appendix to the installation instructions deals with the execution of the cabling on SGS fire shutters.

## 2 LEGEND TO CABLING SCHEMES

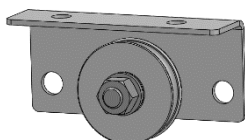
### 1 Brake console



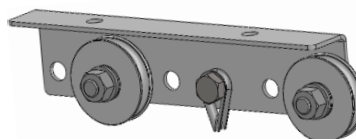
### 2 Return brake pulley



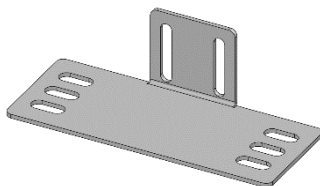
### 3 Additional double counterweight console



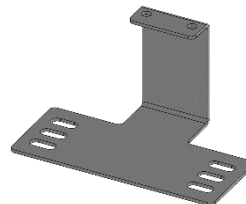
### 4 Additional triple counterweight console



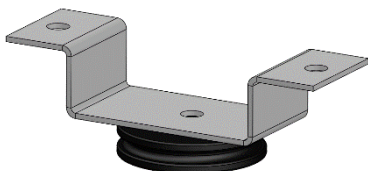
### 5 Carrier



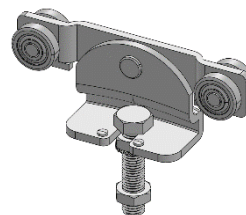
### 6 Carrier for 2KR



### 7 Return pulley



### 8 Section trolley



## 3 BRAKE AND COUNTERWEIGHT CONSOLE

Before mounting the console on the rail, make sure that the pulley bolt and eyelet bolt are installed in the correct holes. The location of the screws depends on the opening direction of the leaf and the type of counterweight (single, double or triple). For wider counterweights, double (with three pulleys) or triple (with five pulleys), an additional console with additional pulleys is mounted on the rail next to the brake console. If the console is to be mounted to the rail using a socket wrench, it will first be necessary to remove the screw with the pulley and the eyelet and, after mounting on the rail, refit them.

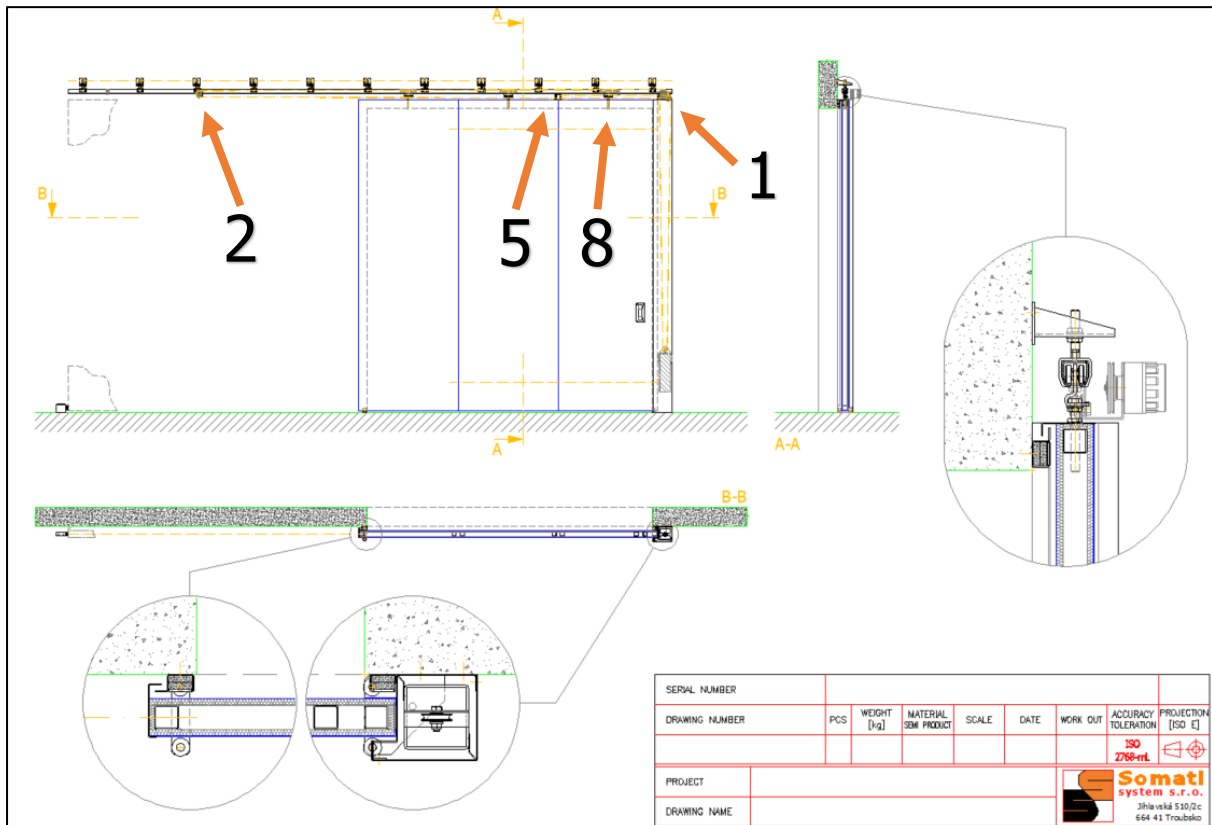




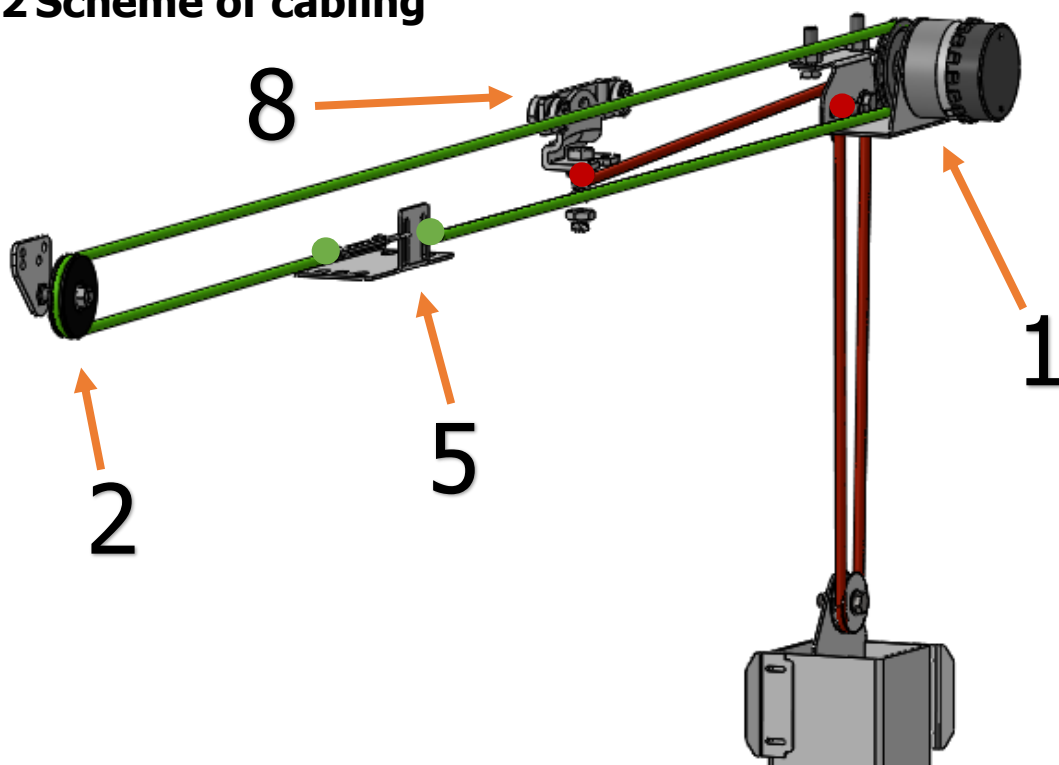
## 4 SGS SINGLE LEAF (1+0) WITH COUNTERWEIGHT IN COUNTER LABYRINTH

The shown variant is valid for a single-leaf door left. The right variant is made the same way, it is just mirror-inverted.

### 4.1 Schematic drawing of the door

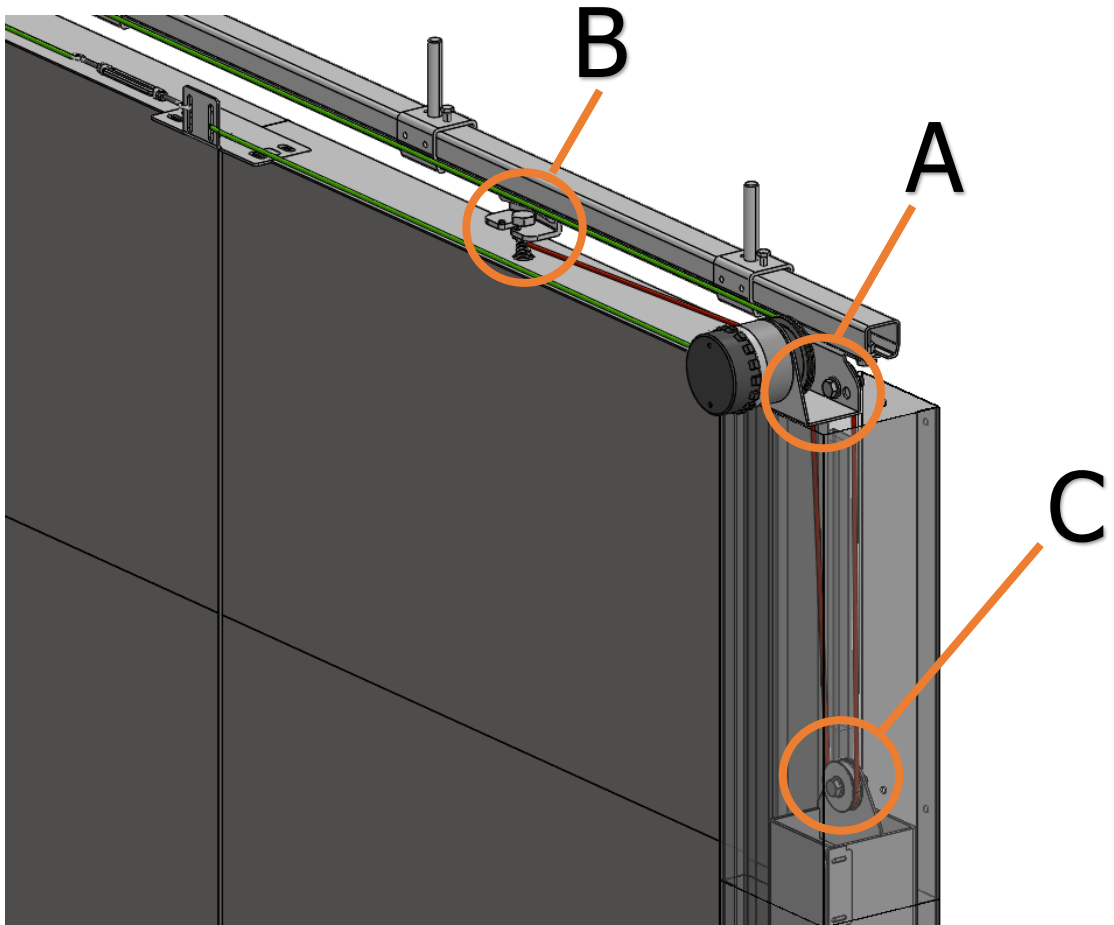


### 4.2 Scheme of cabling

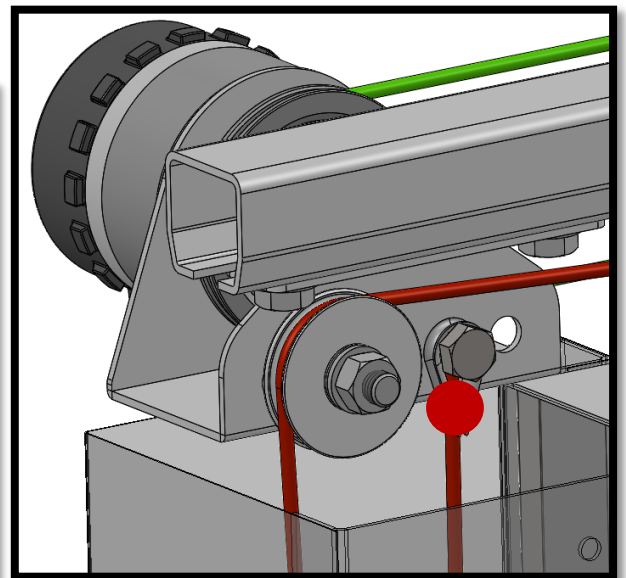
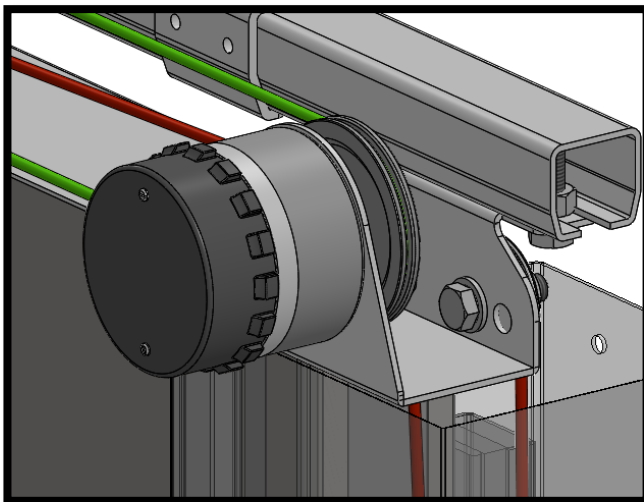




### 4.3 Counterweight cabling



A

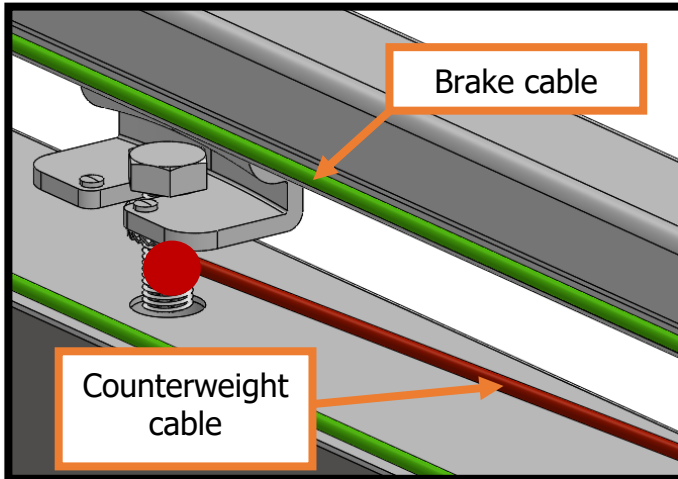


View from the wall

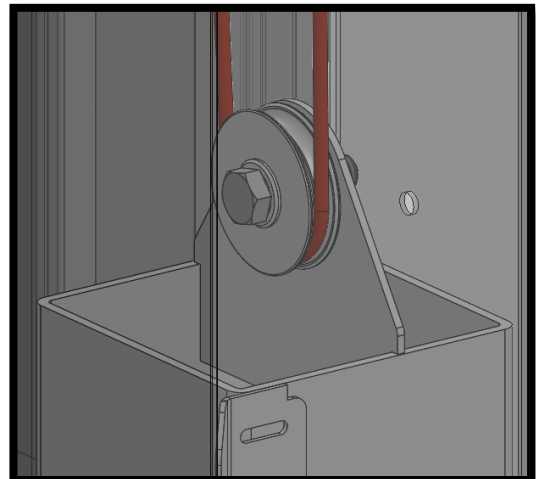




B

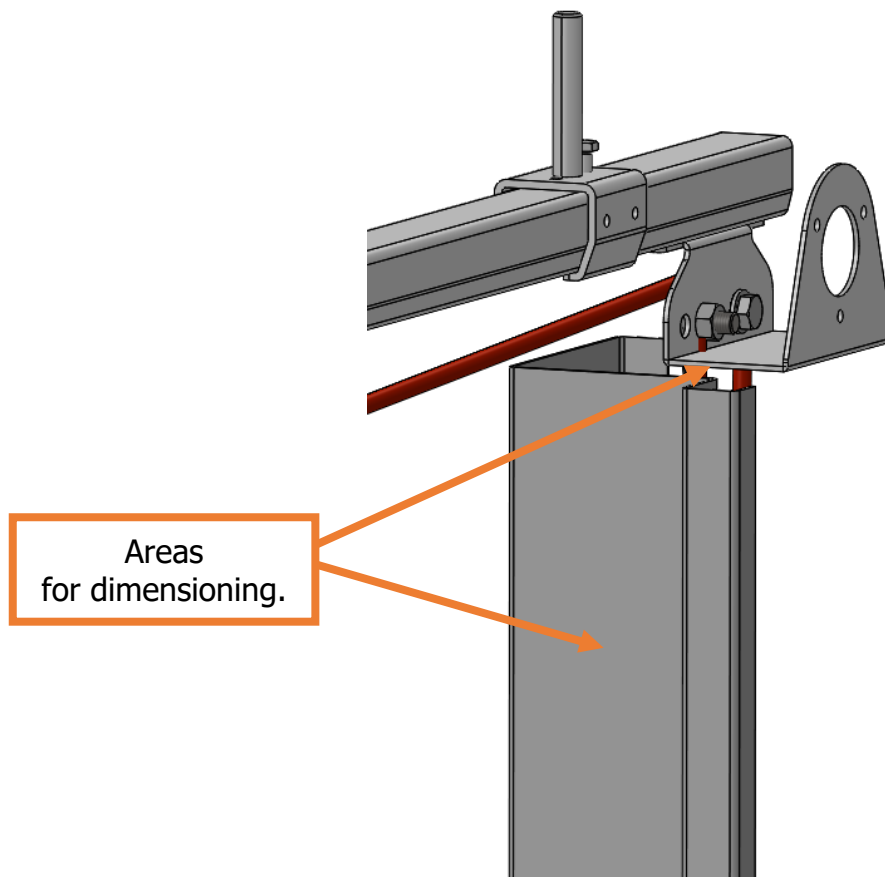


C



The cable is attached to the brake console [A] at one end and to the screw of the first carriage [B] at the other end.

#### 4.3.1 Types of counterweight - introduction



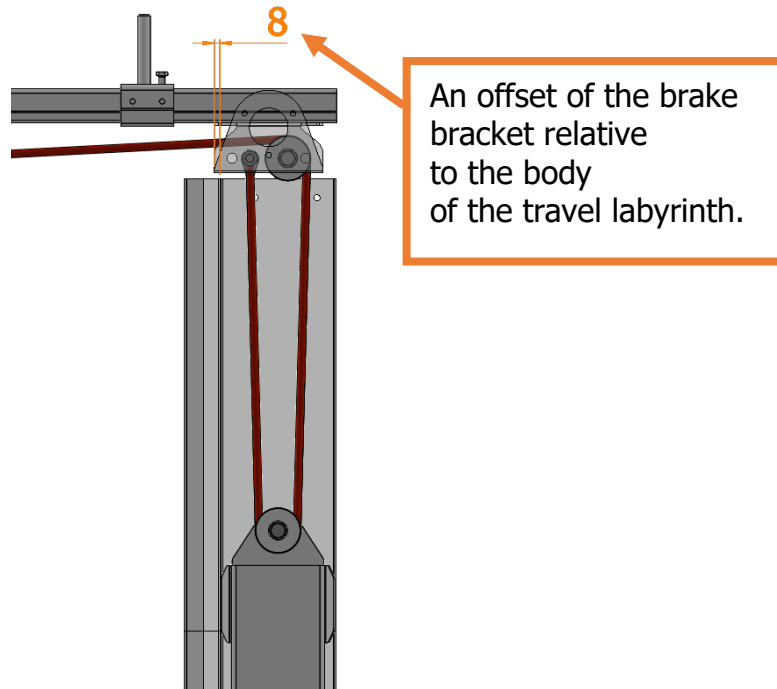
The areas are the same for all types of counterweight





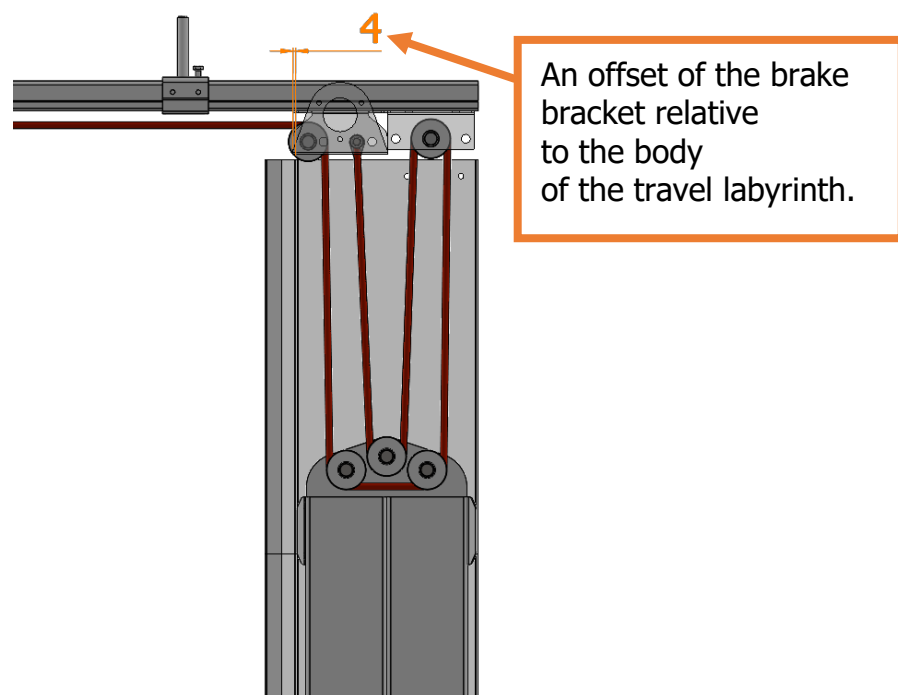
### 4.3.2 Simple counterweight

Both the pulley and the eyebolt are located in the centre holes of the brake bracket. The eyelet is closer to the edge of the construction hole.



### 4.3.3 Double counterweight

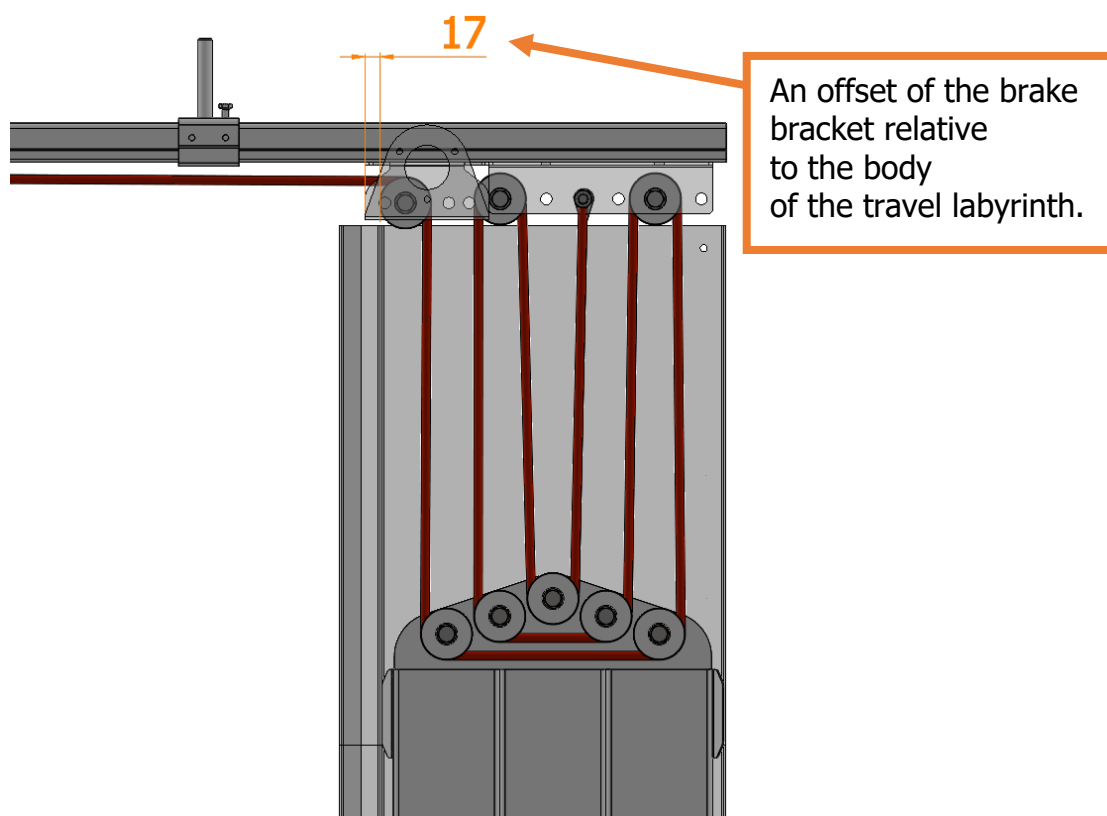
The same brake console will be used as in the case of a simple counterweight, together with an additional console for a second pulley. The pulley in the brake console will be located in the first hole from the construction hole, a cable eyelet in the third hole from the construction hole. An additional console with one pulley will be mounted under the rail holder behind the brake console and the pulley will be located in the middle hole.





#### 4.3.4 Triple counterweight

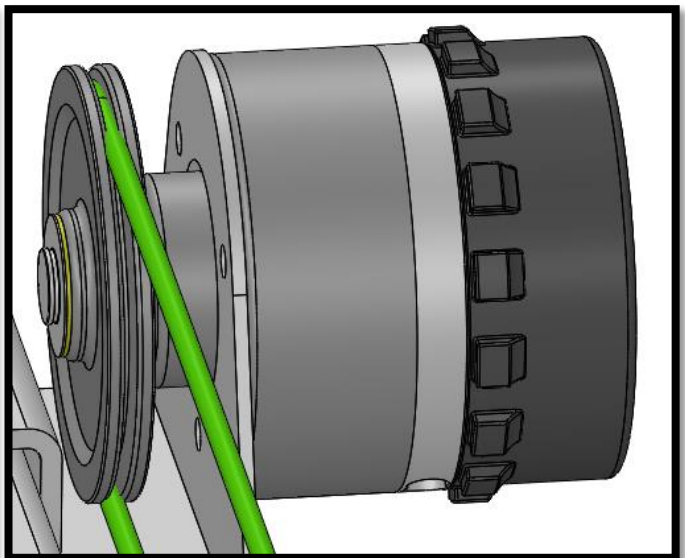
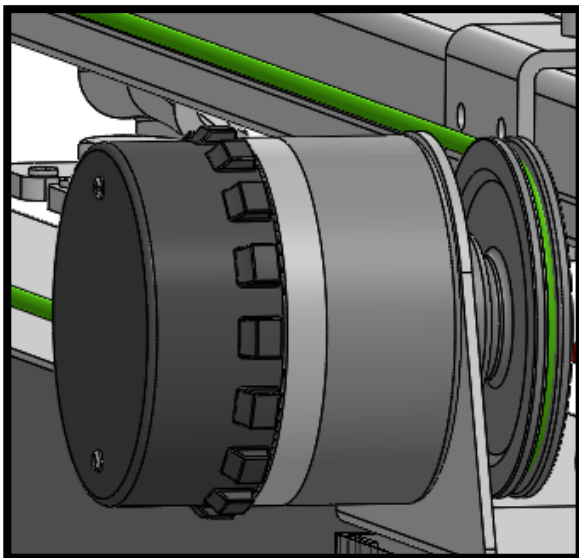
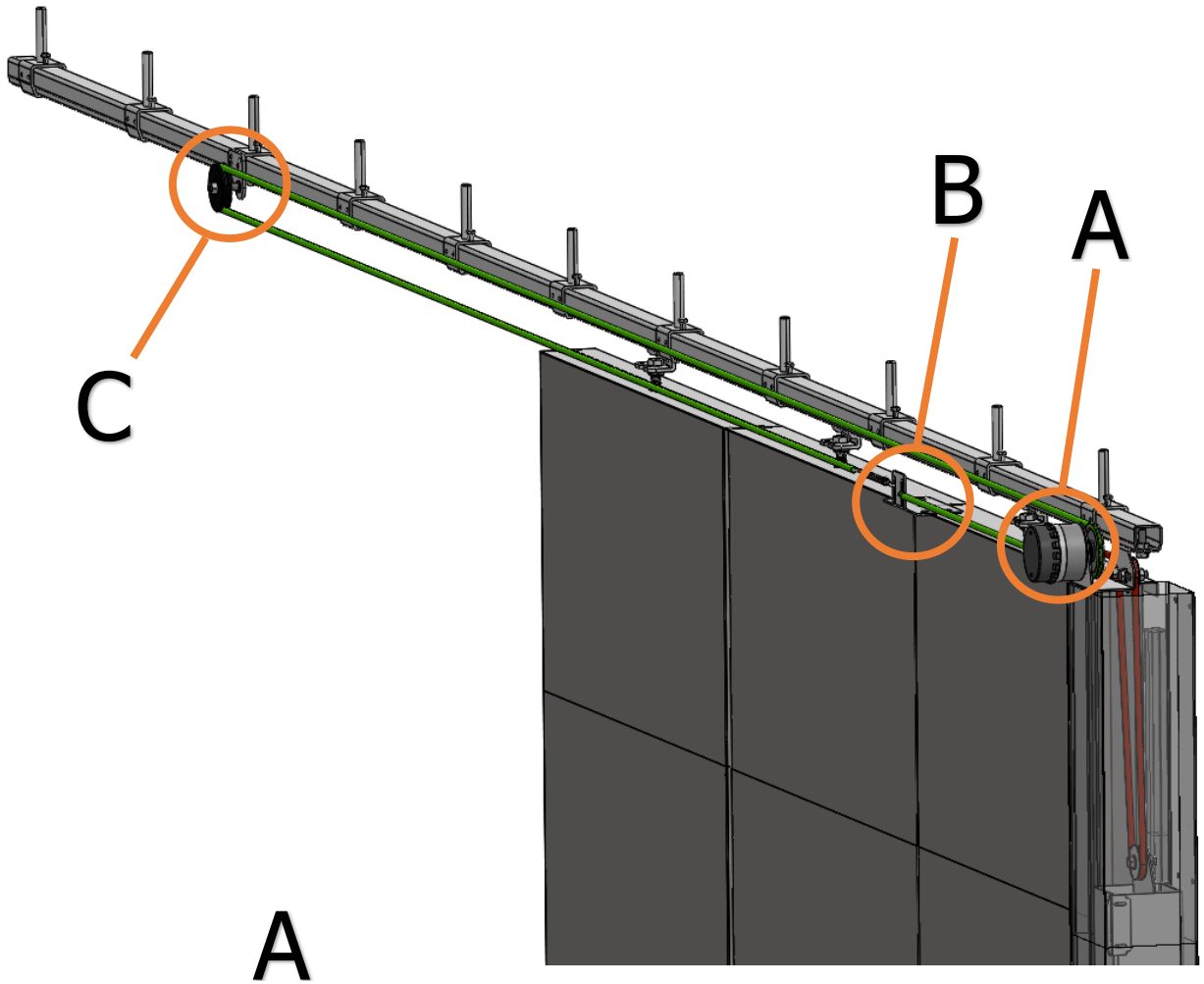
The same brake console will be used as in the case of a simple counterweight, together with an additional console for other two pulleys. The pulley in the brake console will be located in the first hole from the construction hole. The additional console will be mounted under the rail holder behind the brake console and will have pulleys in the first and fifth holes from the construction hole and a cable eyelet in the third hole from the hole.





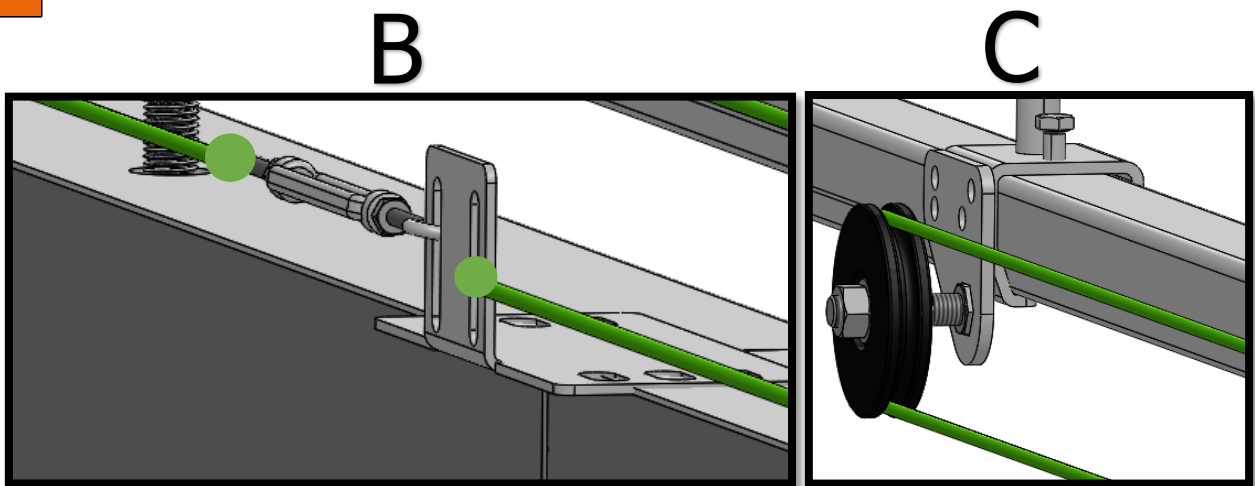


## 4.4 Brake cabling



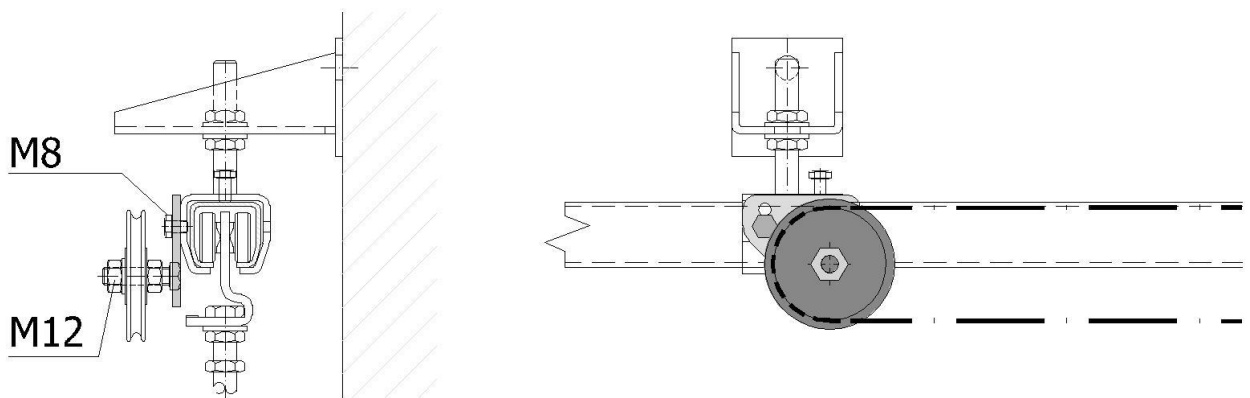
View from the wall



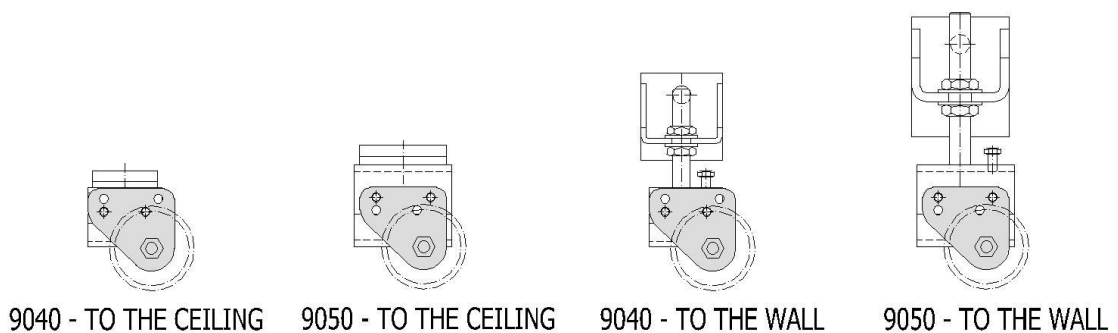


The cable is attached to the carrier [B] on one side directly, on the other side via a turnbuckle.

The return pulley [C] is supplied mounted on a rail holder which is modified for this purpose by cutting M8 threads in two side holes. This holder must be placed in the position specified in the assembly drawing.



Scheme of position of counter-pulley holder



Examples of counter-pulley positions on four different types of rail holders

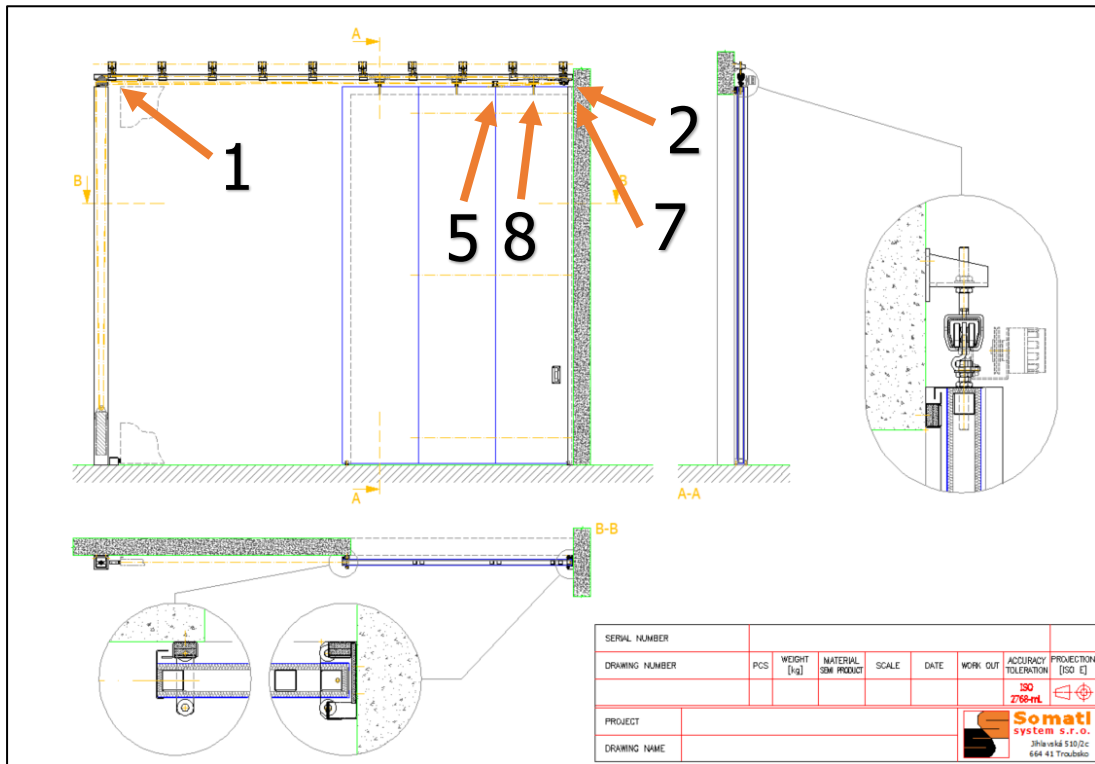




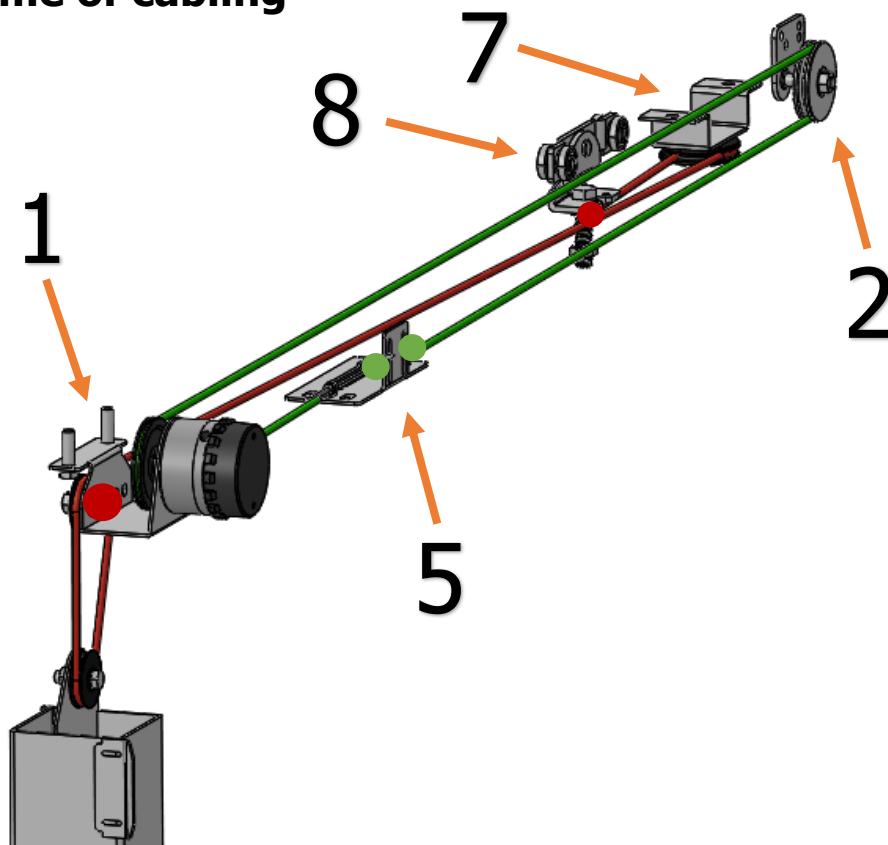
## 5 SGS SINGLE LEAF (1+0) WITH COUNTERWEIGHT IN OPEN POSITION

The shown variant is valid for a single-leaf door left. The right variant is made the same way, it is just mirror-inverted.

### 5.1 Schematic drawing of the door

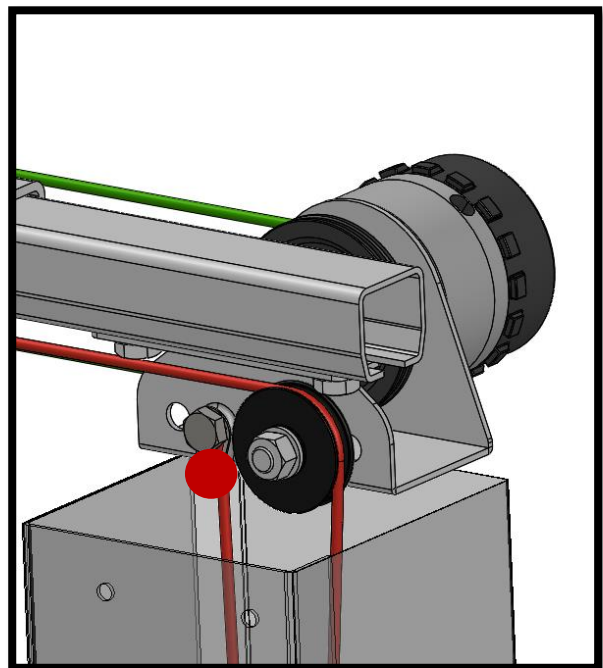
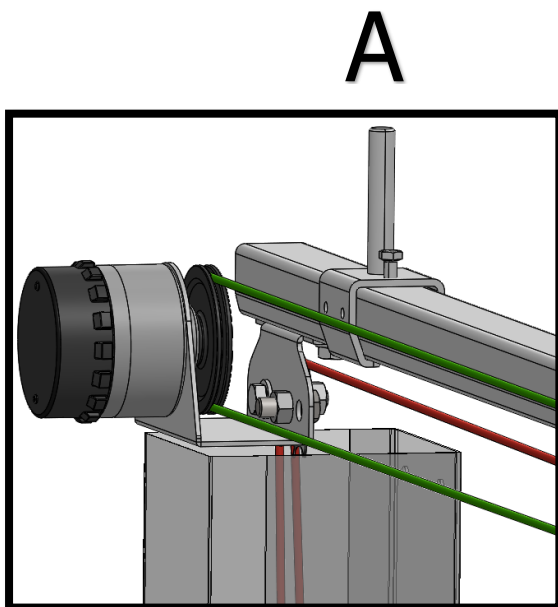
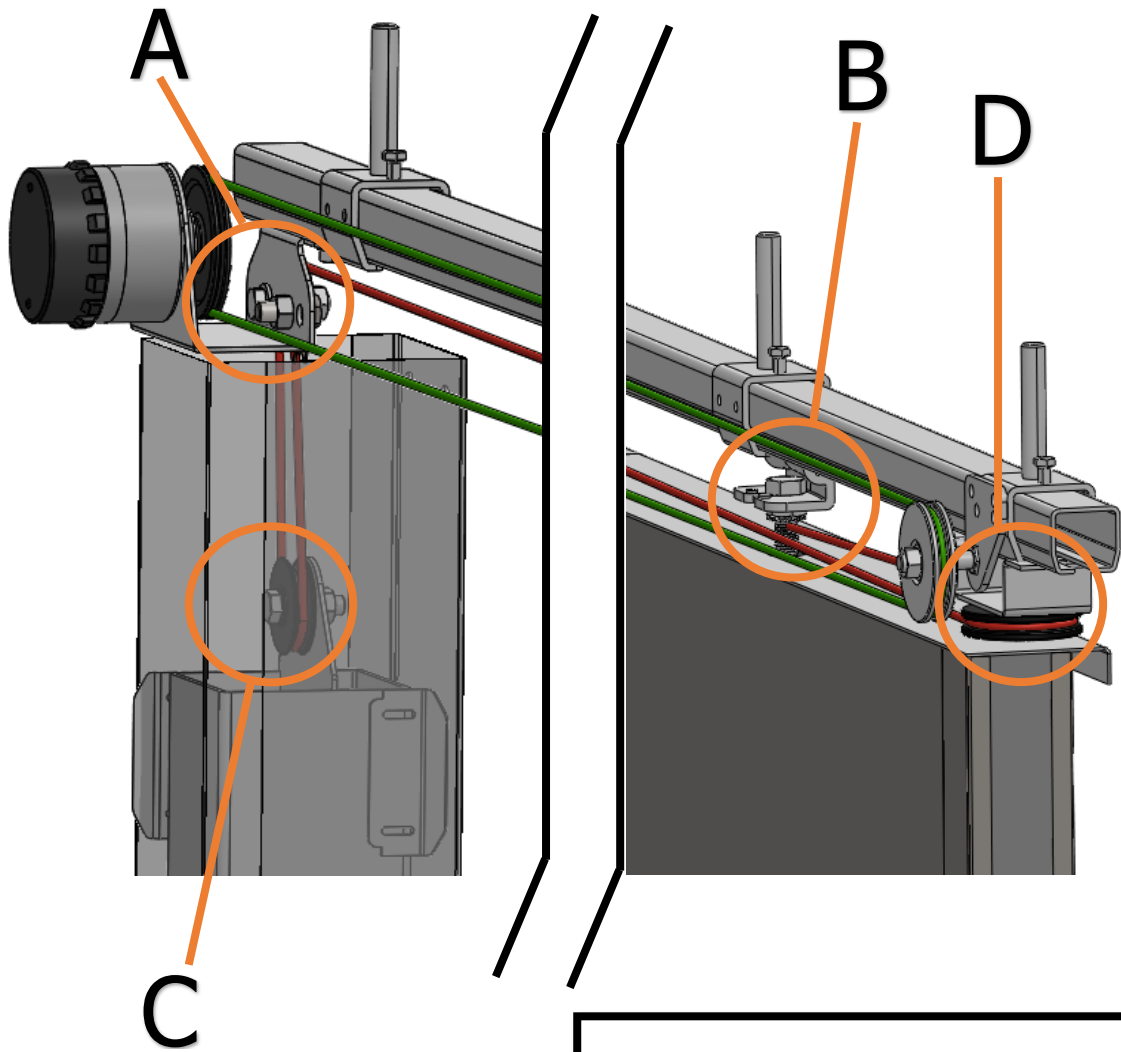


### 5.2 Scheme of cabling

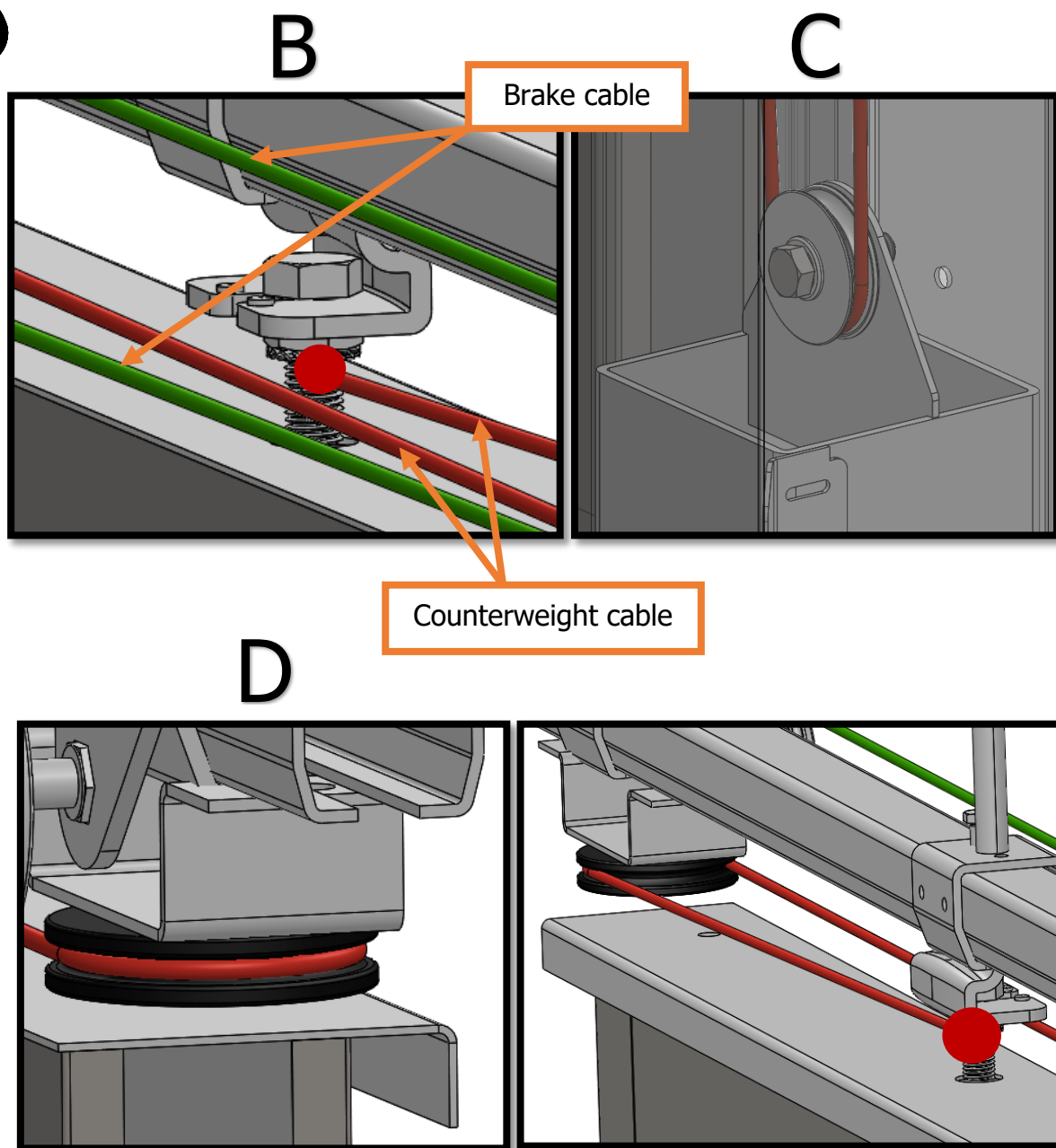




### 5.3 Counterweight cabling



View from the wall



View from the wall

The cable is attached to the brake console [A] at one end and to the screw of the first carriage [C] at the other end. Before attaching to the carriage, the cable is passed through the return pulley [D].

### 5.3.1 Simple counterweight

See chapter 3.2.2, but mirrored.

### 5.3.2 Double counterweight

See chapter 3.2.3, but mirrored.

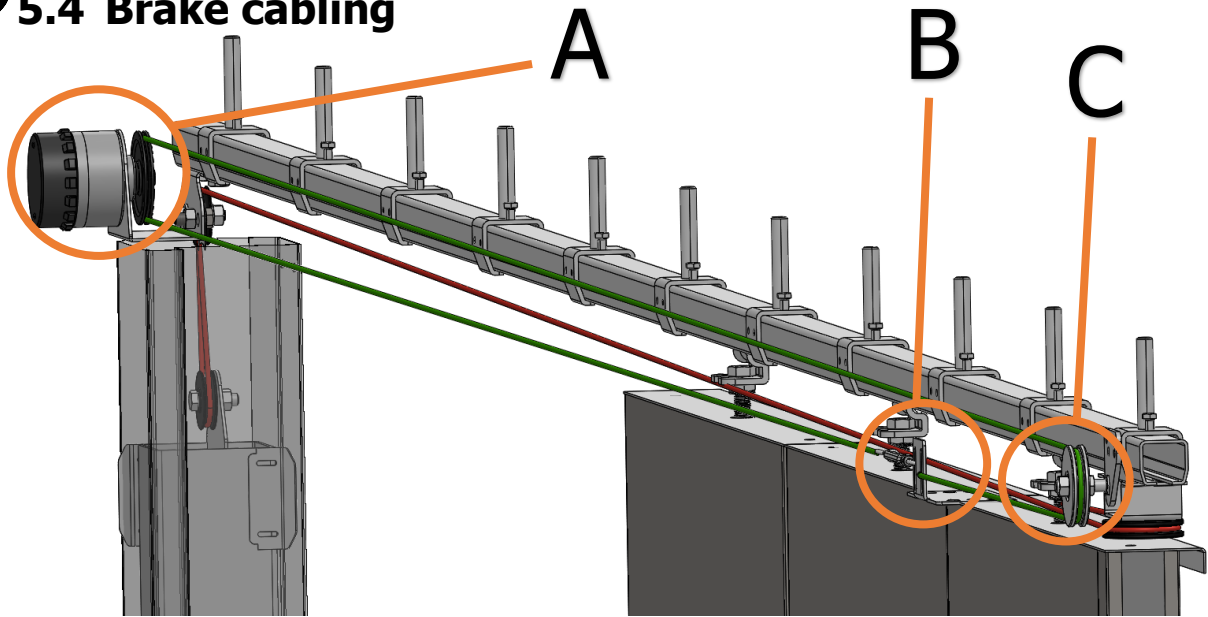
### 5.3.3 Triple counterweight

See chapter 3.2.4, but mirrored.



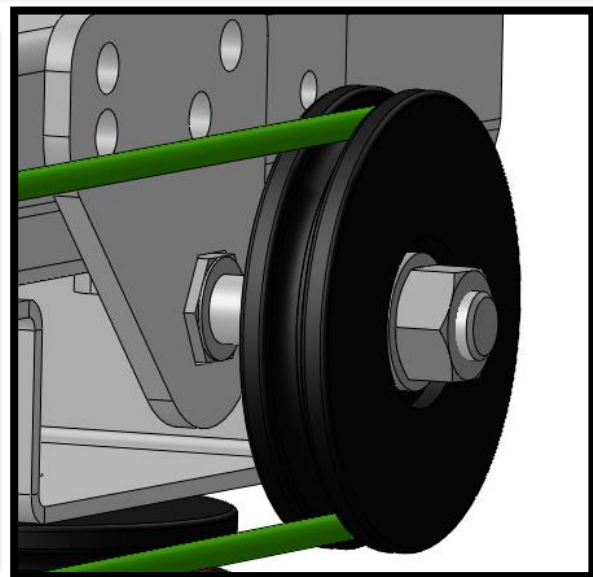
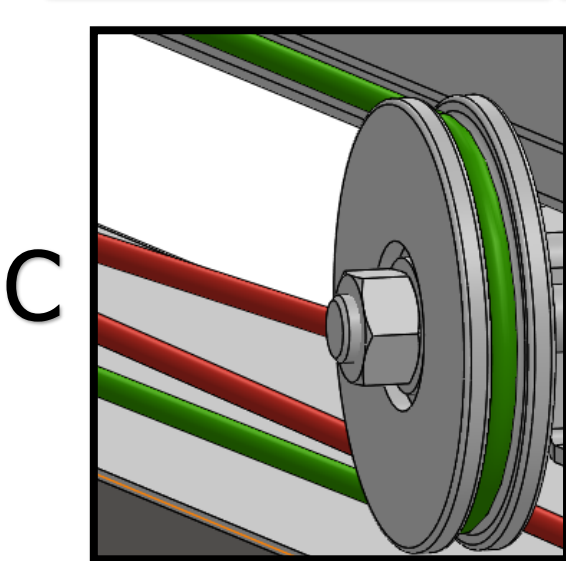
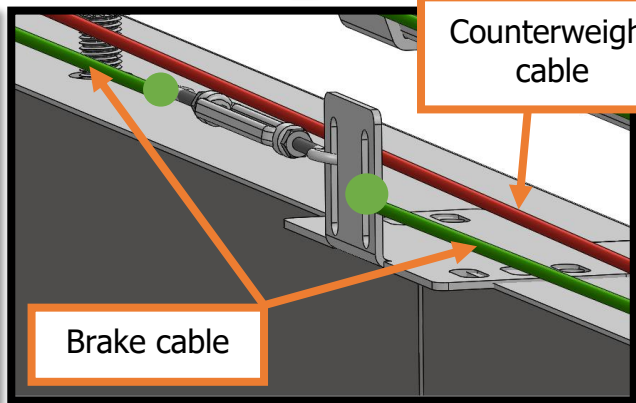
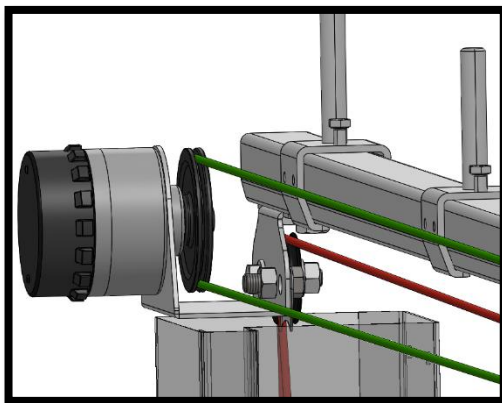


## 5.4 Brake cabling



A

B



The cable is attached to the carrier [B] on one side directly, on the other side via a turnbuckle. The procedure is the same as for classic single-leaf door. The return pulley [C] is mounted in the same way as in chapter 3.3.



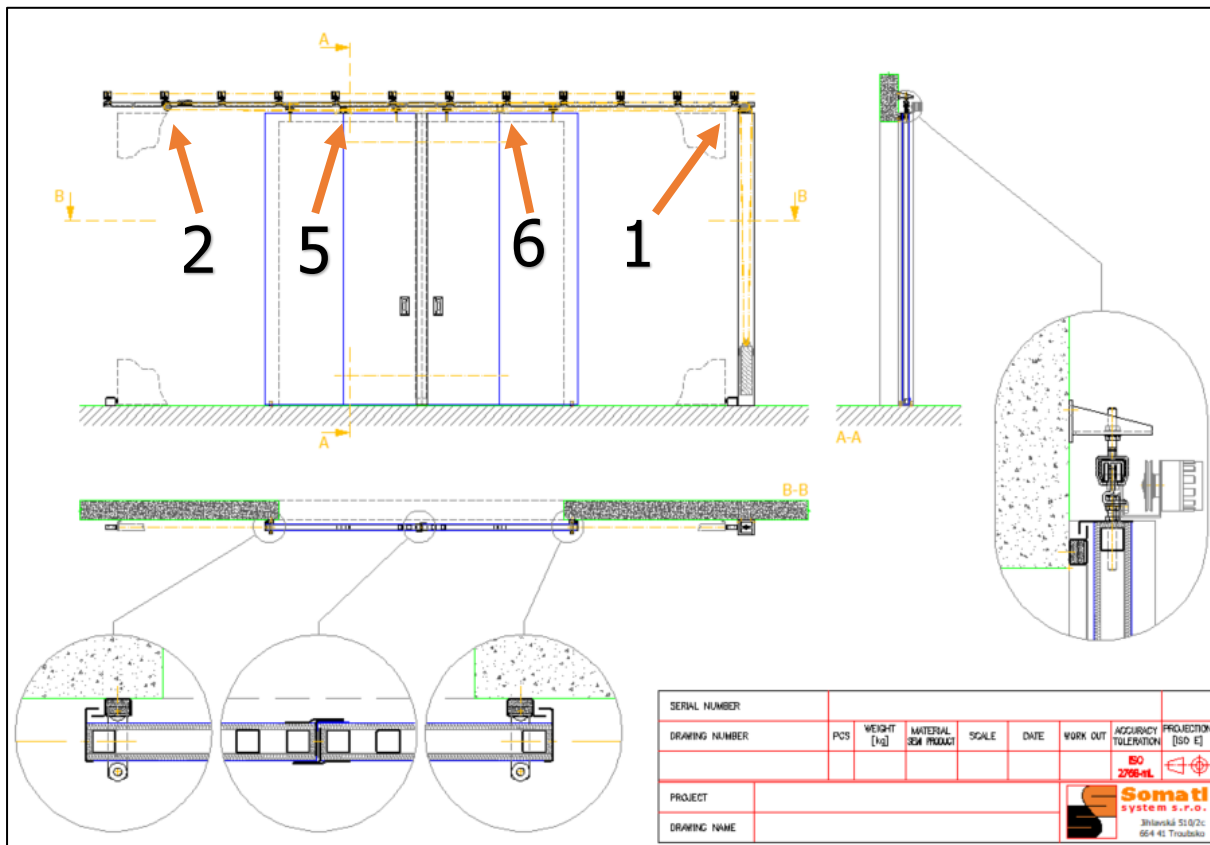




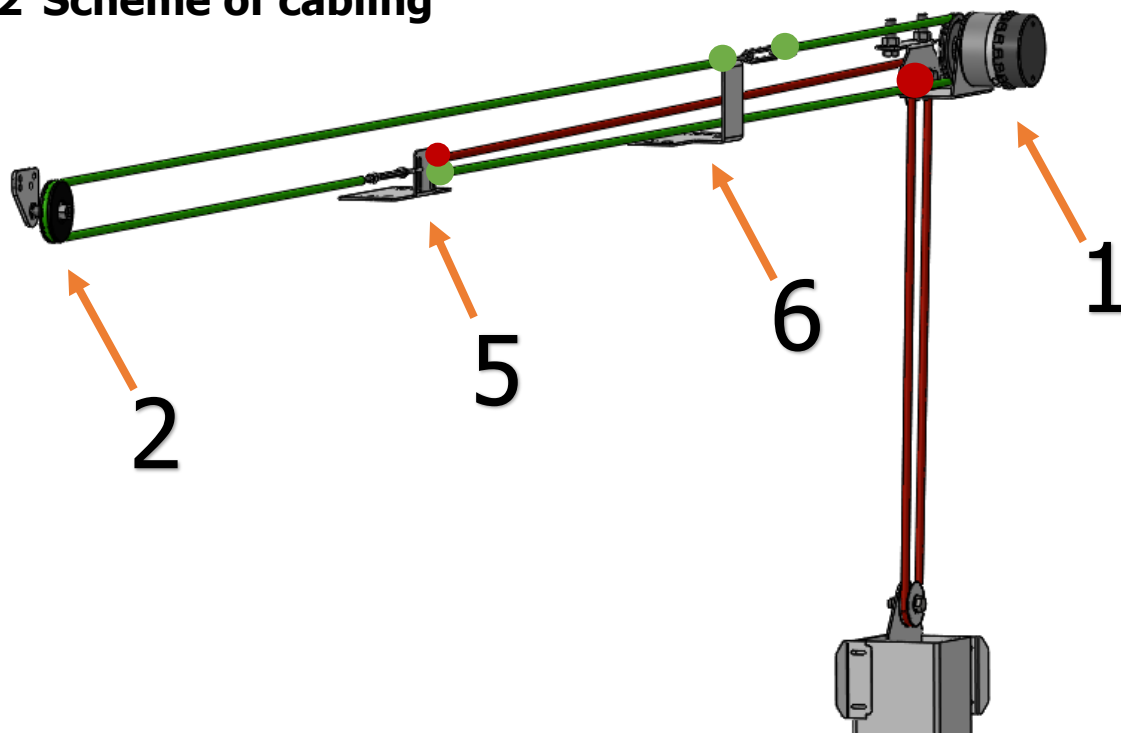
## 6 SGS DOUBLE LEAF SYMMETRICAL (1+1)

The shown variant is valid for a two-leaf door with a counterweight on the right side. The variant with the counterweight on the left side is made the same, it is just mirror-inverted.

### 6.1 Schematic drawing of the door

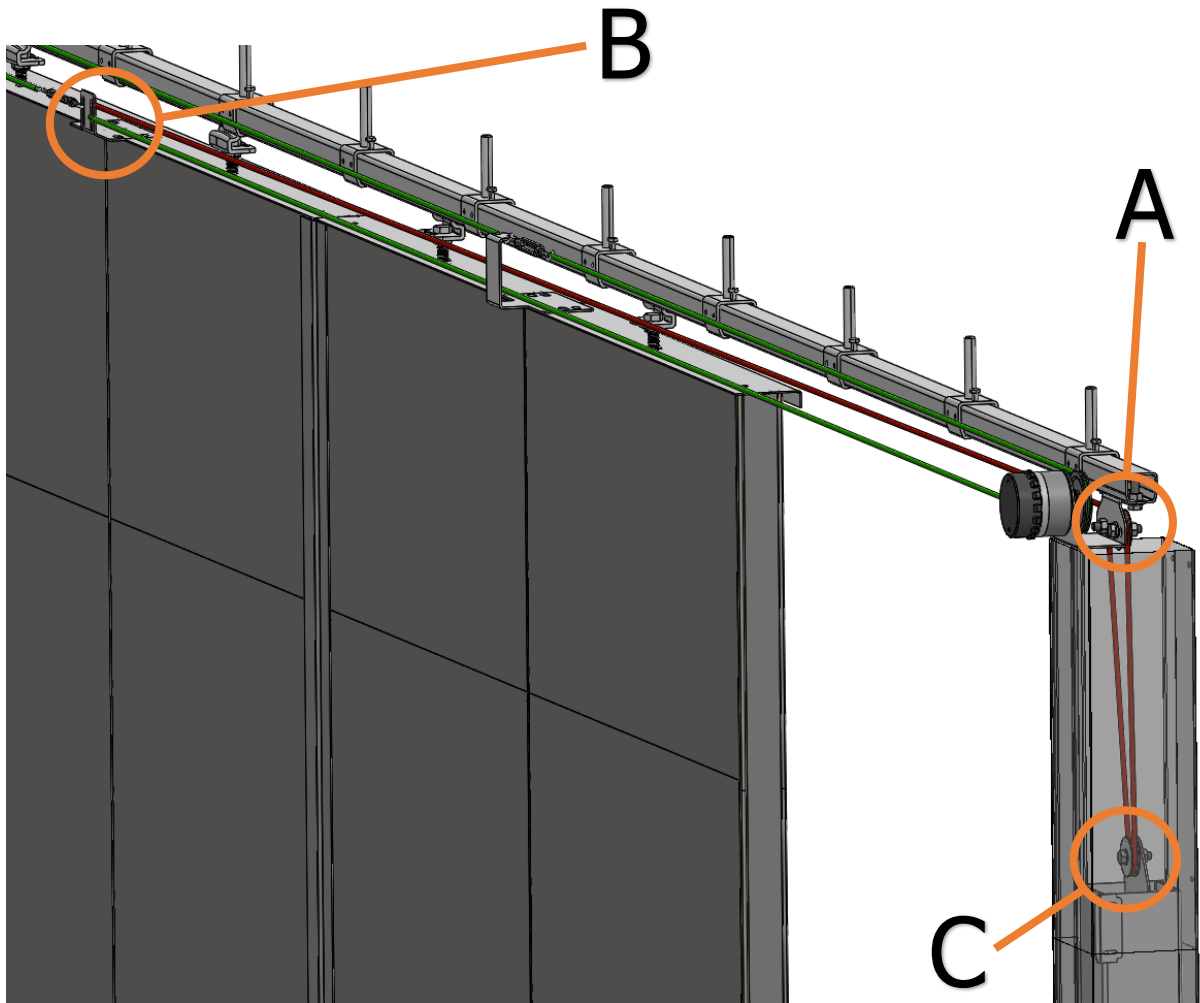


### 6.2 Scheme of cabling

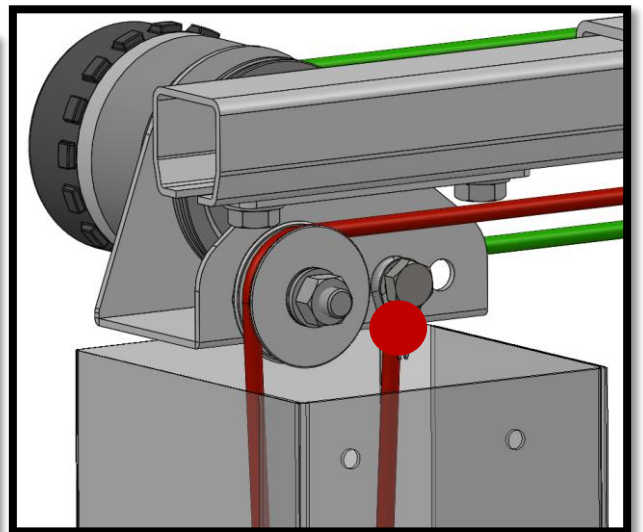
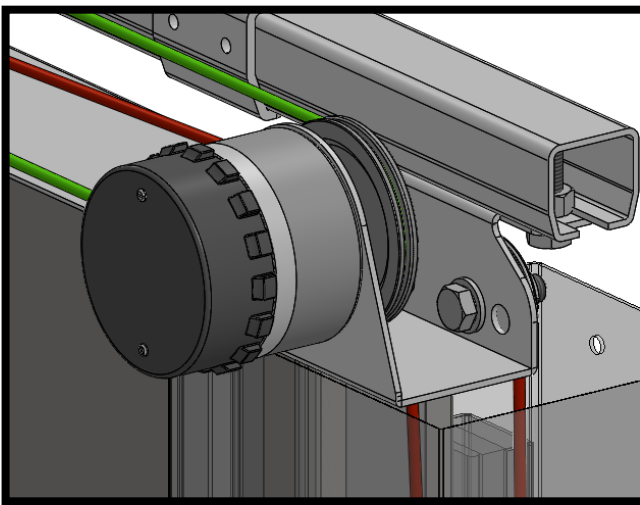




## 6.3 Counterweight cabling



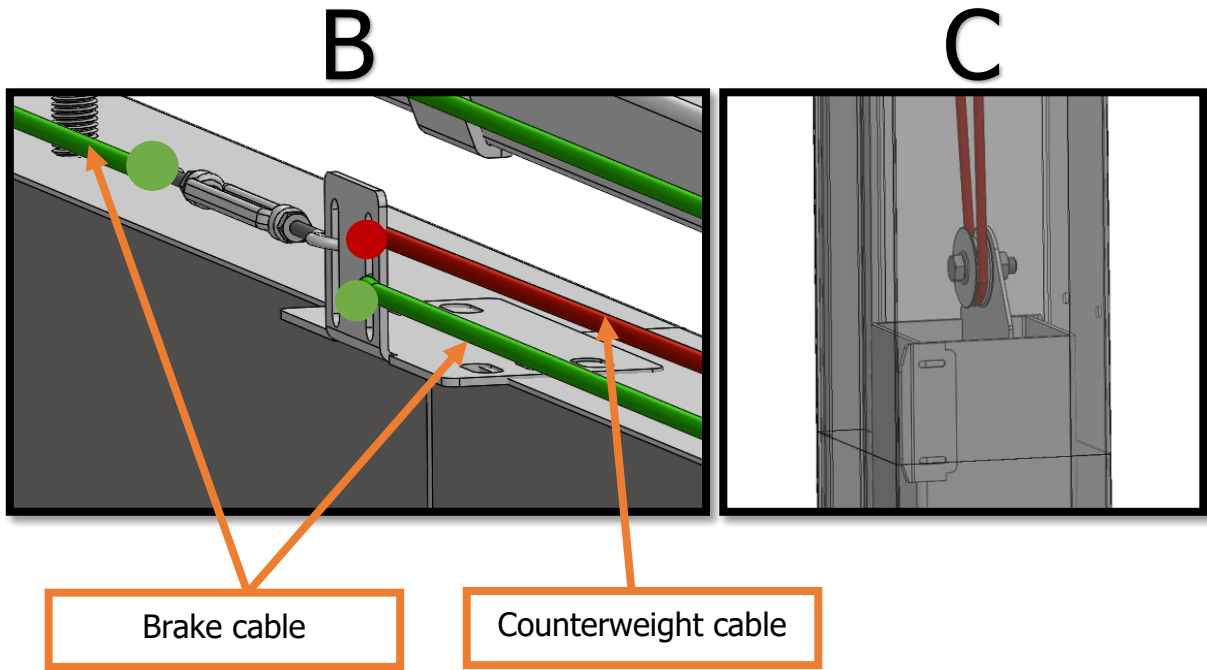
A



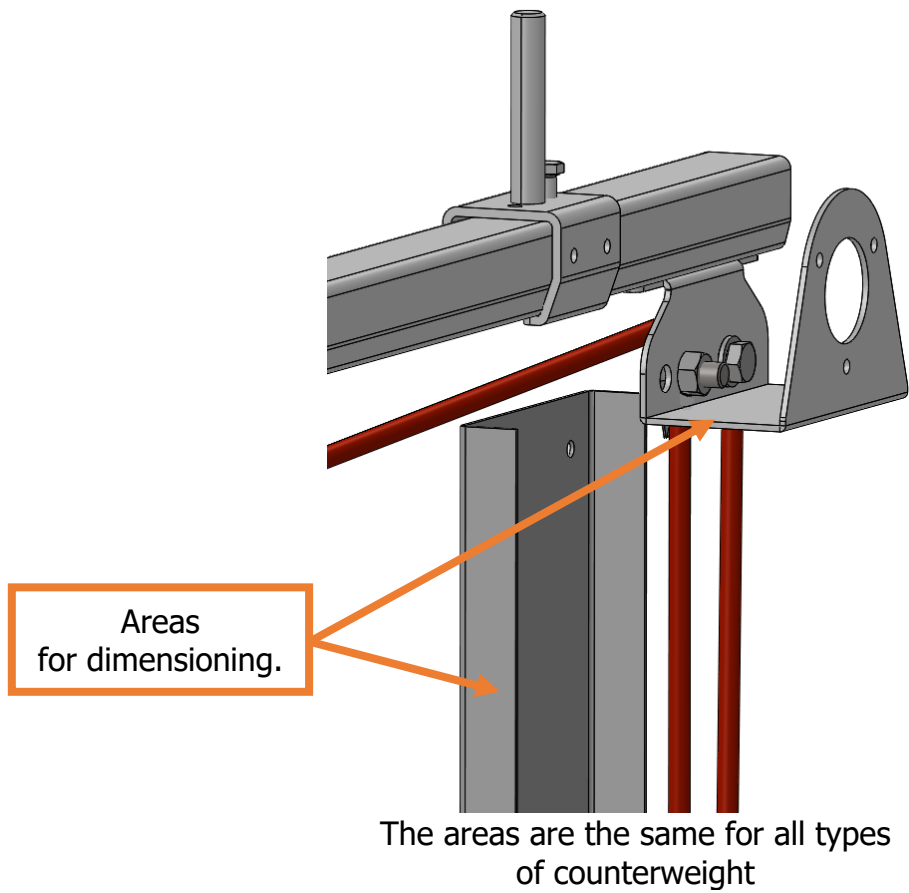
View from the wall







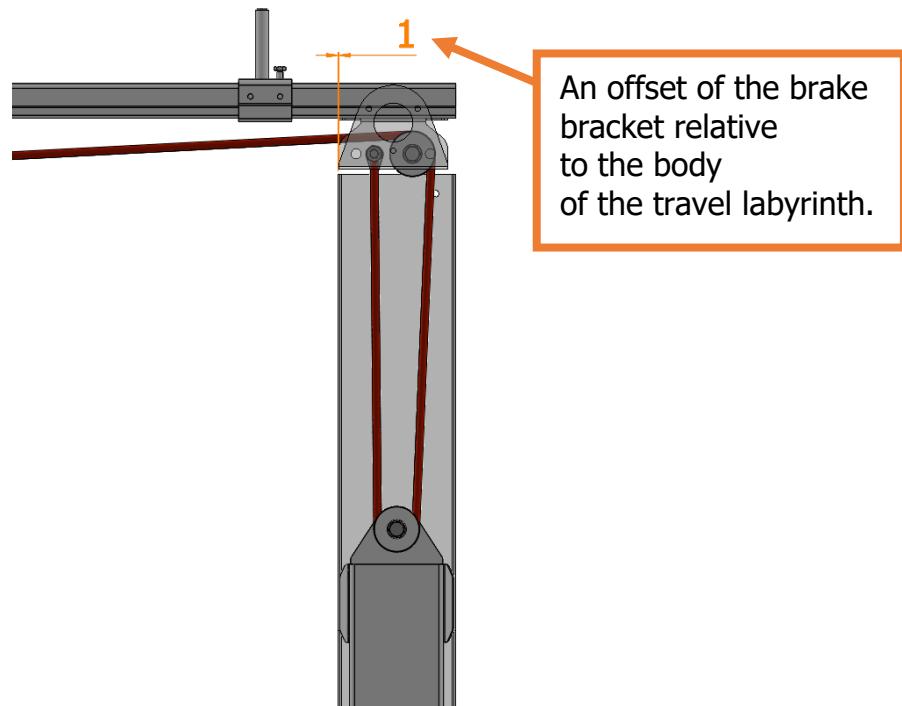
### 6.3.1 Types of counterweight - introduction





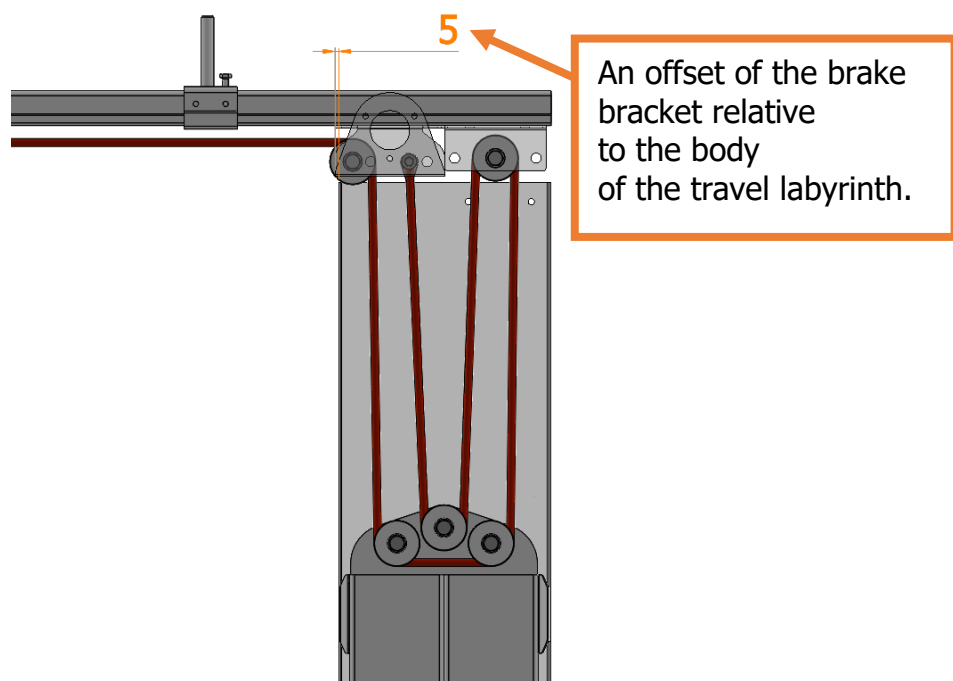
### 6.3.2 Simple counterweight

Both the pulley and the eyelet are located in the centre holes of the brake console. The eyelet is closer to the edge of the construction hole.



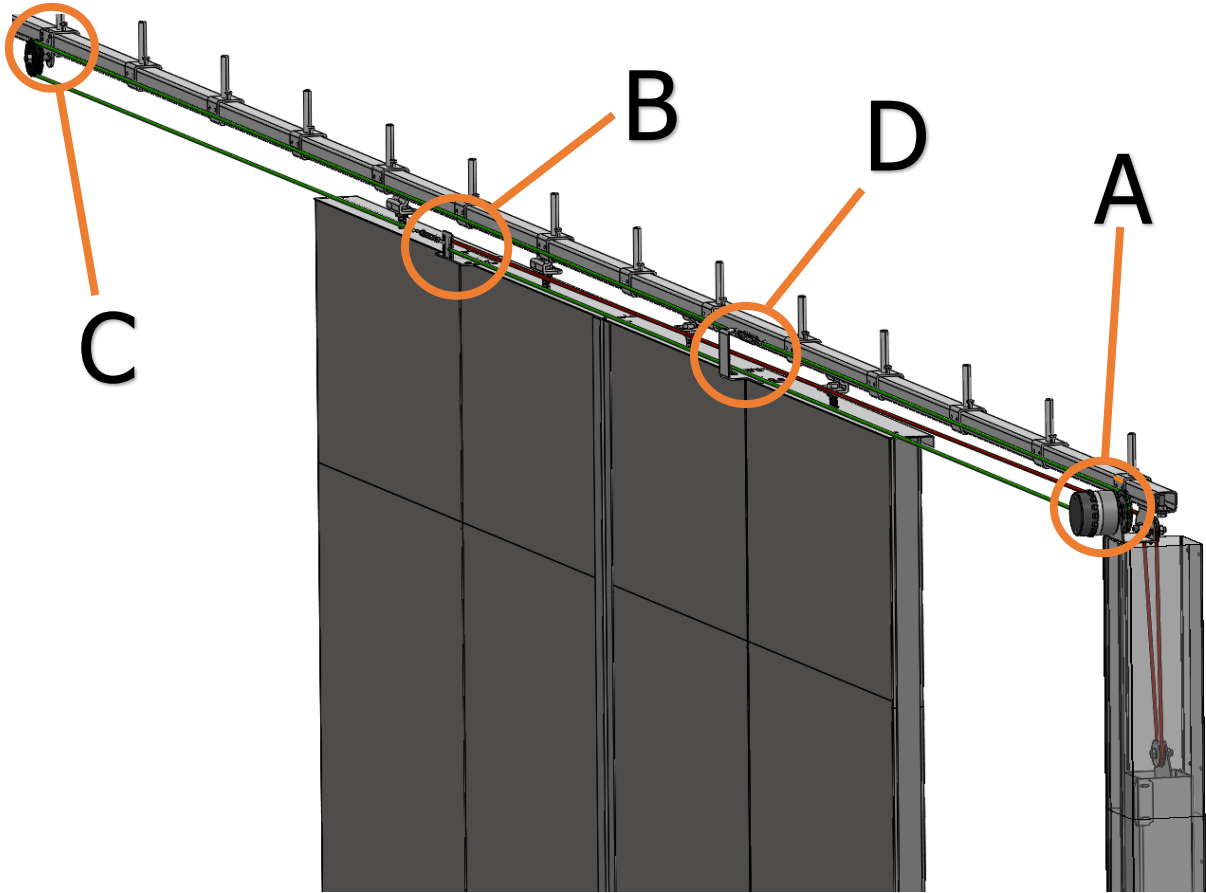
### 6.3.3 Double counterweight

The same brake console will be used as in the case of a simple counterweight, together with an additional console for a second pulley. The pulley in the brake console will be located in the first hole from the construction hole, the cable eyelet in the third hole from the construction hole. An additional console with one pulley will be mounted under the rail holder, behind the brake console and the pulley will be located in the middle hole.

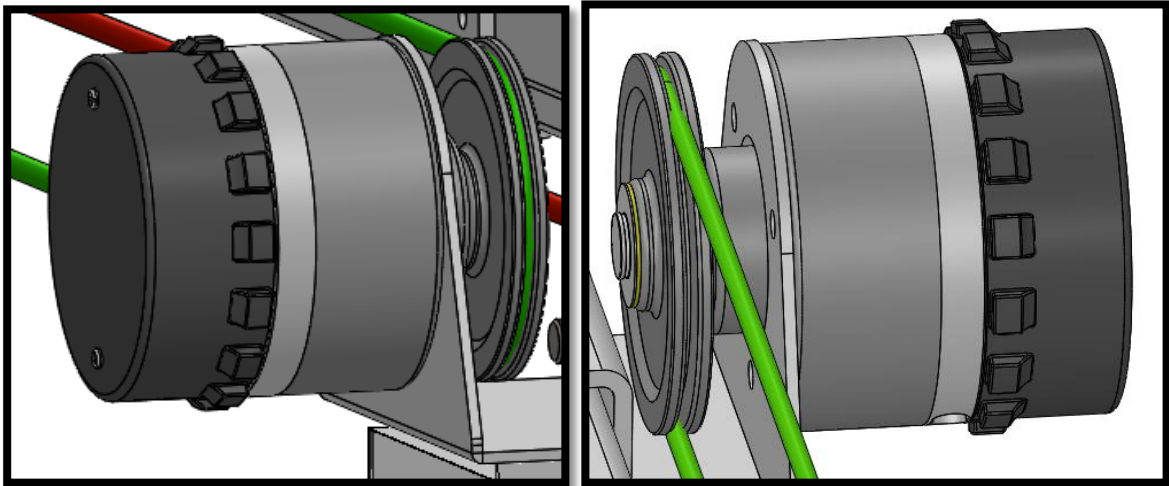




## 6.4 Brake cabling

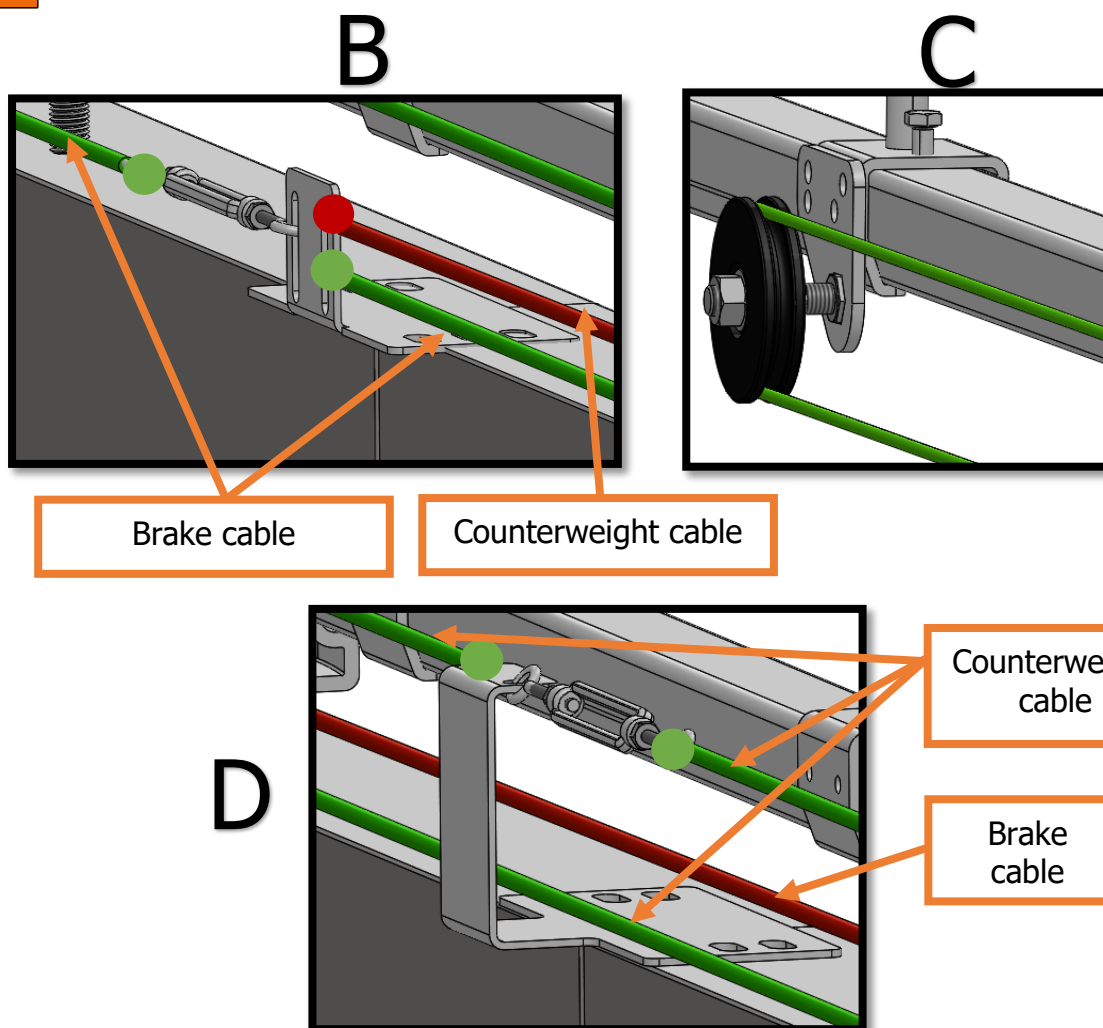


A



View from the wall





## 7 SGS TELESKOPIC

The cabling of the brake and counterweight circuits is identical to the classic variants described above. The cabling between the individual sections of the telescopic door is described in the document **MN\_SGS-T** in its current version.

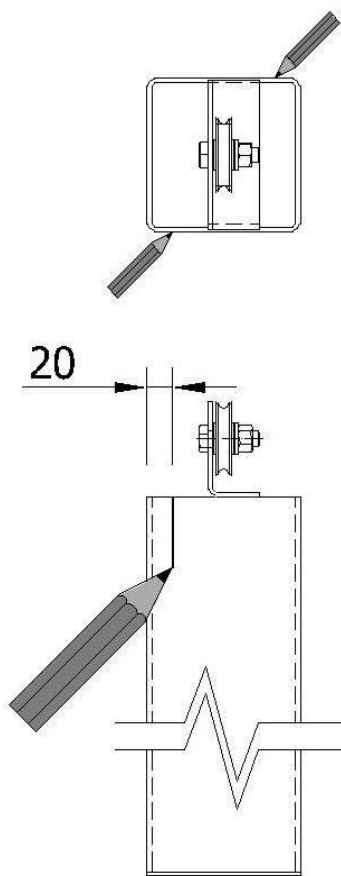
## 8 COUNTERWEIGHT SPACER WING

Before fitting the counterweight into the travel labyrinth it is necessary to mount 2 pcs of spacer wings on its upper part for preventing the counterweight from rotating around the vertical axis. The position of the wings differs according to the opening direction and fire resistance of the door. According to the diagram, mark a line at a distance of 20 mm from the edges on two opposite sides of the counterweight. Attach the spacer wing to the line with an edge or a cut-out - depending on the given fire resistance of the door (see picture). For doors with fire resistance up to and including EI60, the wing is attached to the line with a cut-out, for doors with fire resistance EI90-EI120, the wing is attached to the line with the edge. Attach the wing using the supplied TEX self-drilling screws.



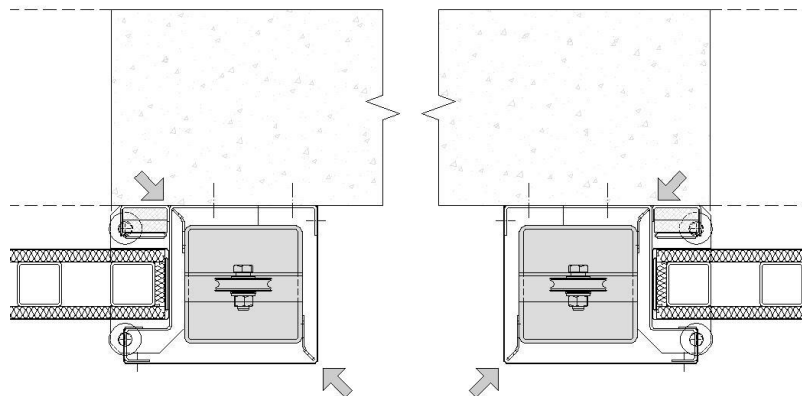


### Position of distance angle profiles according to the opening direction of gate



Left gate:

right gate:



### Distance of the distance angle profiles from the edge of counterweight according to the fire resistance of gate

