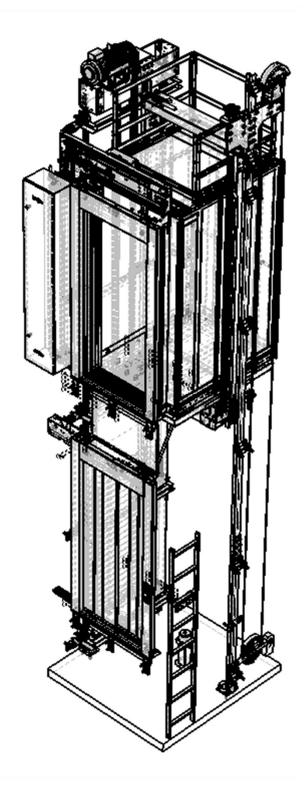
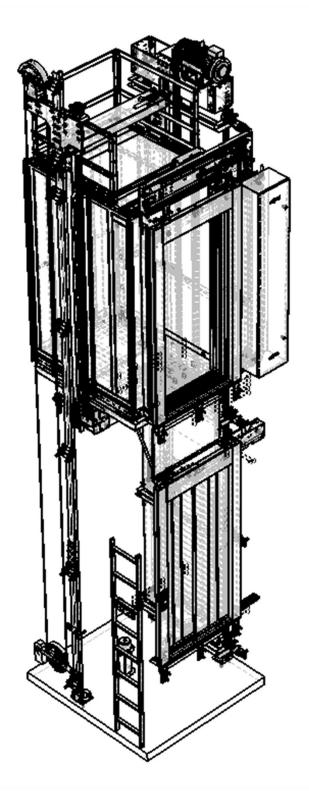


## MRL ELEVATOR SYSTEM MECHANICAL INSTALLATION GUIDE

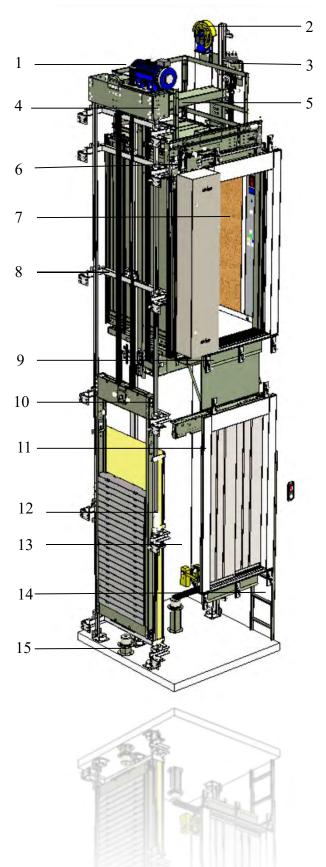






#### WITHOUT MACHINE ROOM ELEVATOR SYSTEM

- 1 GEARLESS MACHINE
- 2 OVERSPEED GOVERNOR
- 3 GOVERNOR BASE
- 4 MACHINE BASE
- 5 CABIN FRAME
- 6 CABIN DOOR
- 7 CABIN
- 8 RAIL BRACKETS
- 9 SKIRT SHEET
- 10 COUNTER WEIGHT
- 11 LANDINGDOOR
- 12 SEPERATOR
- 13 OVERSPEED GOVERNOR BOTTOM
- 14 CABIN BUFFER
- 15 CW BUFFER





#### **1. INTRODUCTION**

- The purpose of this installation guide, based on the experience of qualified personnel in Turkey ILALIFT is to provide a guidance for the installation of the package elevators. Beyond that installation must comply with each country, relevant regulations and standards.
- The lift elevator is responsible for compliance with the relevant regulations and the working standards contained in this manual.
- All information in this manual belongs to ILALIFT. Even without the written permission of ILALIFT, even part of it can not be published and copied.
- This assembly guide should be considered part of the elevator and stored in the control panel.
- > In order to operate the elevator safely, parts of ILALIFT must be used.
- ILALIFT shall not be responsible for any operation not compatible with this manual.

ILALIFT reserves the right to change this manual without giving information.

#### 2. SHIPPING AND STORAGE CONDITIONS

- Use a forklift or transpalet to prevent damage to the product during transport and storage.
- Avoid products being impacted by falling. Do not put any heavy object on the products or press on the packages.
- Prevent products from being exposed to water and exposed to direct sunlight. If the product is damaged or missing when it is removed from the package, please

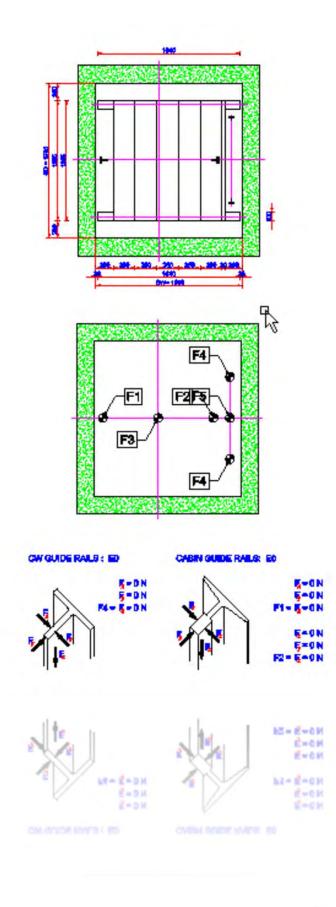
make a contract with the manufacturer immediately.

#### **3. GENERAL INFORMATION**

This manual is prepared for Machine Roomless (MRL) Side Weighted Packet Lifts.



#### 4. PRE-INSTALLATION PREPARATIONS



The work to be done by the site contractor and the preliminary requirements before entering the elevator crew are as follows:

The elevator should be dry and clean.
There should be a ventilation system in the elevator shaft.

The lift well must be dedicated to the elevator only and should be free of any equipment not related to the elevator.

# intelligent lift art

#### 5. SECURITY PRECAUTIONS

#### 1. Basic Safety Rules

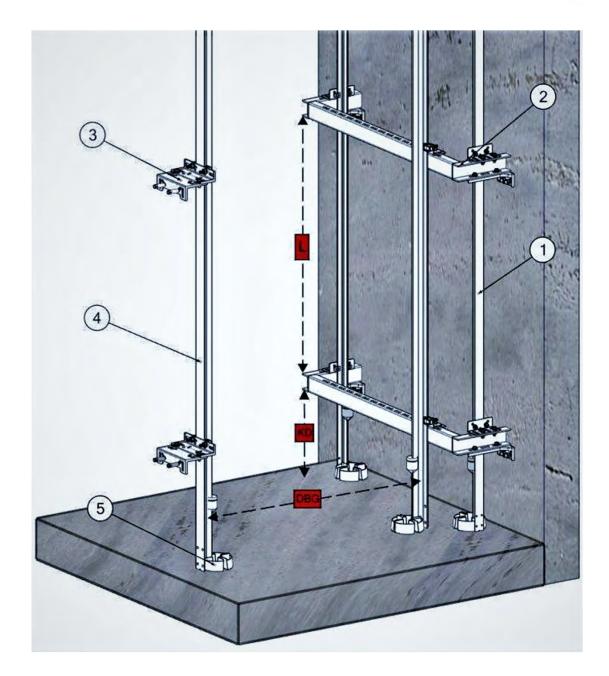
- > Remember that your safety and your colleagues depend on your safety.
- The technical staff should comply with the prevention, protection rules and instructions established in the safety plan and risk assessment.
- In case of an accident or when an emergency is encountered, instructions for taking action should be known.

#### 2. Personal Protective Equipment (PPE)

- > It is necessary to use personal protective equipment.
- Always use personal protective equipment in the direction of the risk to be avoided and keep it in a ready-to-use condition.
- Know that KKT protects you and reduces your risk, but do not forget that you have not completely removed the risk.

## 6. GUIDE RAIL MOUNTING

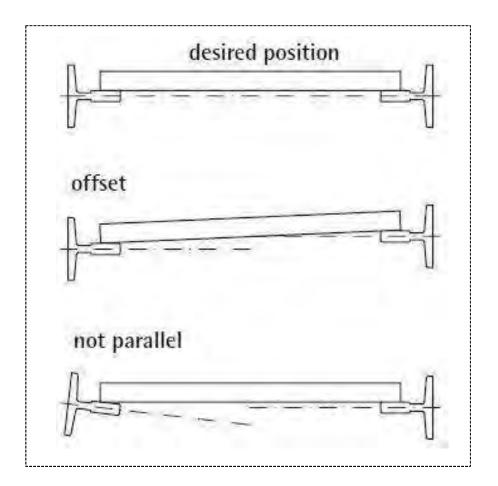




No	Part Name
1	Counterweight Guide Rail
2	Shaft Partition
3	Cabin Guide Rail Brackets
4	Guide Rail
5	Oil Cup



#### 6.1 Well Compartment Mounting Position of Console Group And Guide



	KD
When the guide rail base cradle is not used	250 mm
When the guide rail base caster is used	1000 mm

Capacity (Q)	L
225 -1600 kg	1500 mm
1600-2000kg	1250 mm

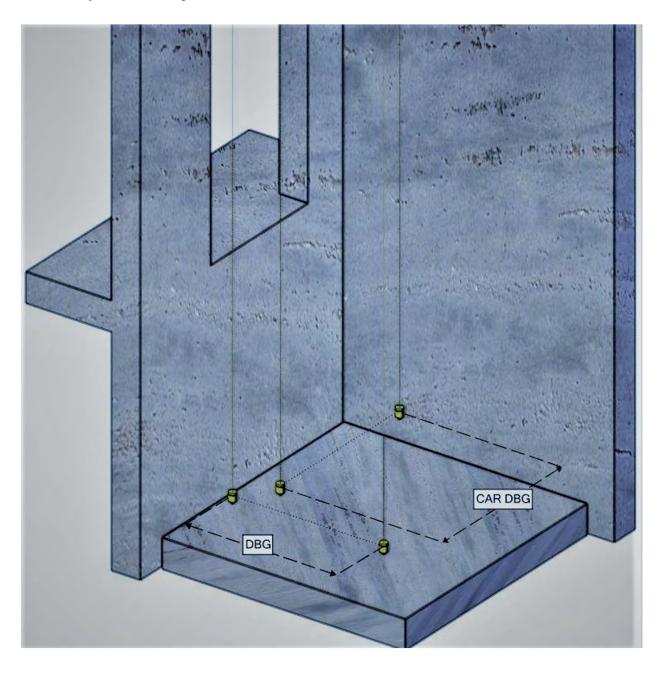
KD: Distance to the base of the first console

L: Distance between guide rail consoles (DBG)



#### 6.2 Roleve

The relaying of the well is a process of checking the suitability of the project to be installed by determining the actual dimensions of the well.



- > Empty well, paddle gauge assembly is done.
- > The jug is thrown into the well and fixed in the bottom of the well.
- Measurements are made on all floors with the help of meter. During this process, use the Well Relay Form (See Page 2).



#### 6.3 Clamped Steel Anchor Assembly

The strength values of clip-on steel dies are valid for C25 class

concrete. Concrete grade: C20 / 25 (TS EN 206)

Average Pressure Strength: 25 Mpa

The maximum strength is achieved with an average of two rounds of tightening after the fitting of the anchor has been completed and the clearance of the nut has been obtained.

Tightening Moment: 50 N / m

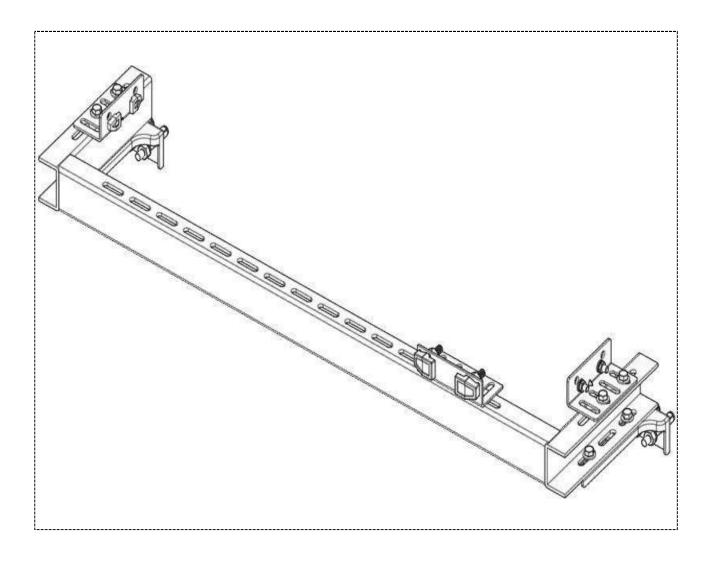




#### 6.4 Shaft Partiton Group

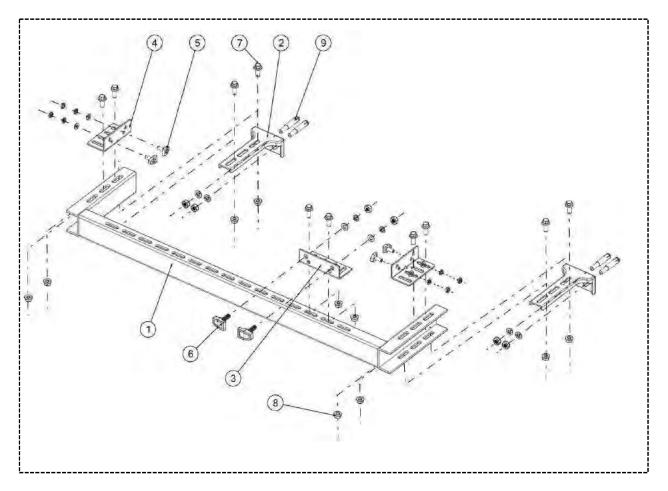
Use the brackets to make holes in the wall for easier installation. After squeezing the braid, remove the wall bracket and attach the bracket parts to each other as shown below. Casting nails

together with the guide rails, will be tightened during installation.





#### 6.5 Assembly of Shaft Partitioning Console Group

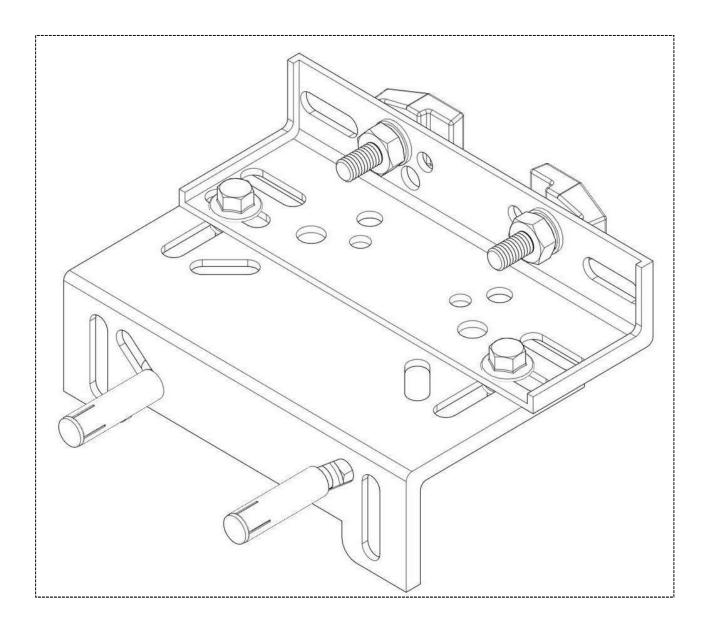


No	Part Name	Qty
1	Well partition Main body	1
2	Wall Console	2
3	Cabin Guide Rail Connection Console	1
4	Counterweight Cable Connection Console	2
5	M1-Cast Nail Group (*)	4
6	M2-Cast Nail Group (*)	2
7	DIN 6921 Flanged Bolt M12X30	10
8	DIN 6923 Flanged Nut M12	10
9	Clip-on Steel Anchor M12x110	4

\* Casting nails; nut, spring washer and flat pulu is sent with.

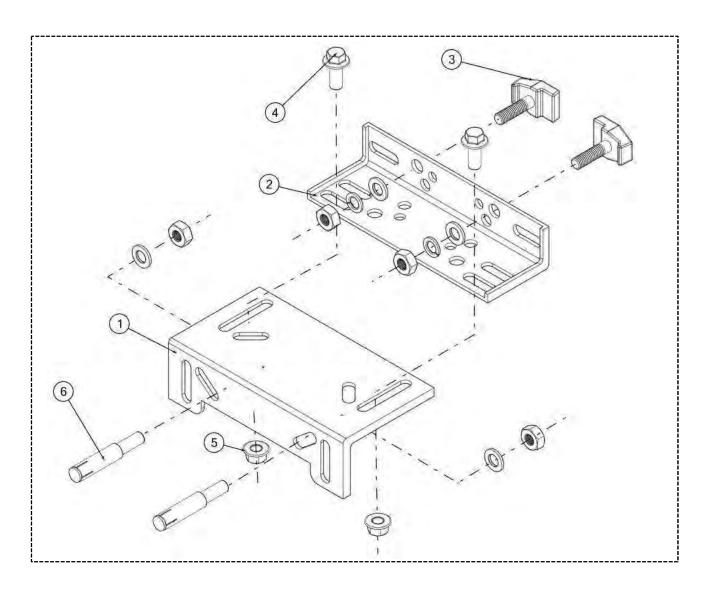


## 6.6 Guide Bracktes Group





## 6.7 Installation of Cabin Guiding Rail Brackets Group



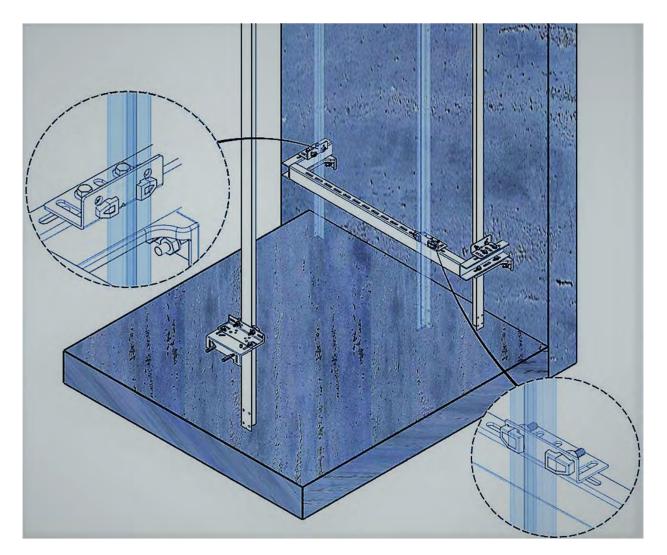
No	Part Name	Qty
1	Wall Console (Brackets)	1
2	Cabin guide rail Connection Console	1
3	M2-Cast Nail Group (*)	2
4	DIN 6921 Flanged Bolt M12X30	2
5	DIN 6923 Flanged Nut M12	2
6	Clip-on Steel Anchor M12x110	2



#### 6.8 First Length Guide Rail Assembly

The guide rails must be cleaned outside the elevator well before installation. a distilled petroleum product / similar alcohol cleaning product should be used for spatula, cloth, other dirt to remove. When the elevator is assembled, the guide rails should be repaired before the oil is poured into the oil pan.

The female part of the guide rail is mounted on the lower side and the male part on the upper side.



Capacity(Q)	0 <q<630< th=""><th>630≤Q&lt;1200</th><th colspan="2">1200≤Q&lt;2000</th></q<630<>	630≤Q<1200	1200≤Q<2000	
Cabin Guide Rail	T70x65x9	T89x62x16,	T90x75x16,	
	170x05x9	T90x75x16	T125x82x16	
Counterweight Guide Rail	T50x50x5	T50x50x5	T70x65x9	



#### 6.9 Joining of Guide Rails

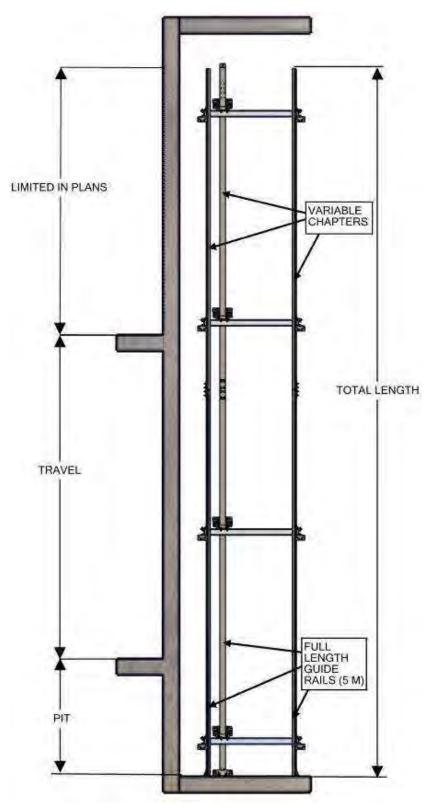
Pay attention to the male-female sides. If the backing sheet is not used, the rails should touch the base.

1	2	3	4	5	
TS ISO 7465 Guide rail	Rail Connectio n Flange Hole Diameter	DIN 6921 Flange d Bolt	DIN 6923 Flange d Nut	DIN 7168 castin g Nail	
T50x50x5	Ø9	M8x35	M8	M1	
T70x65x9	Ø13	M12x40	M12	M2	
T89x62x16	Ø13	M12x40	M12	M3	
T90x75x16	Ø13	M12x40	M12	M3	
T125x82x16	Ø17	M16x50	M16	M4	
	5		P		



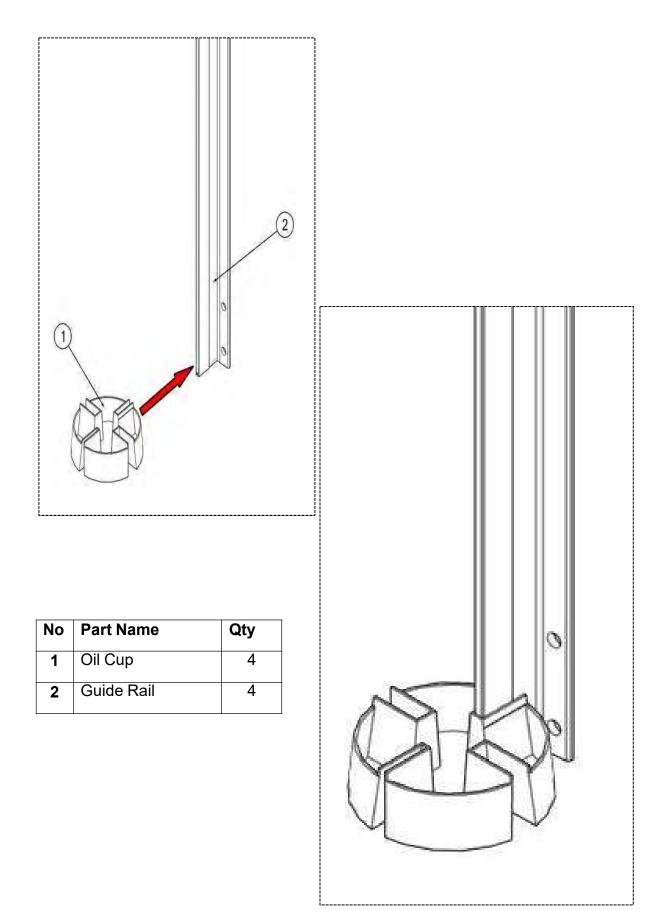
#### 6.10 Cutting of The Variable Section of Guide Rails

By taking advantage of the determined total length, the variable part of the cabin and the counterweight of the counterweight is cut off. adjust the distance of the rails to the ceiling so that the upper cabinets do not leave the guide rails.



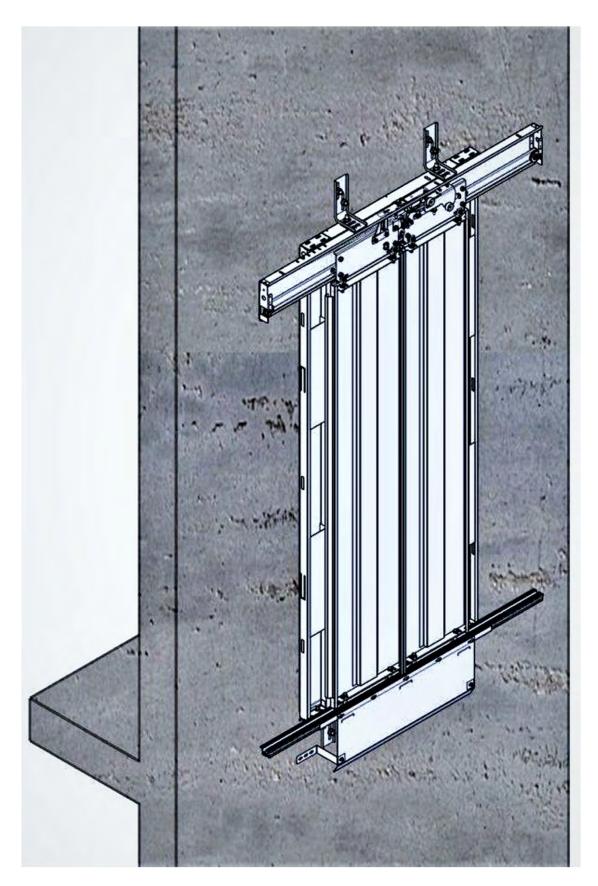


### 6.11 Mounting of Oil Collecting Cups





#### 7. FULL AUTOMATIC FLOOR DOOR INSTALLATION

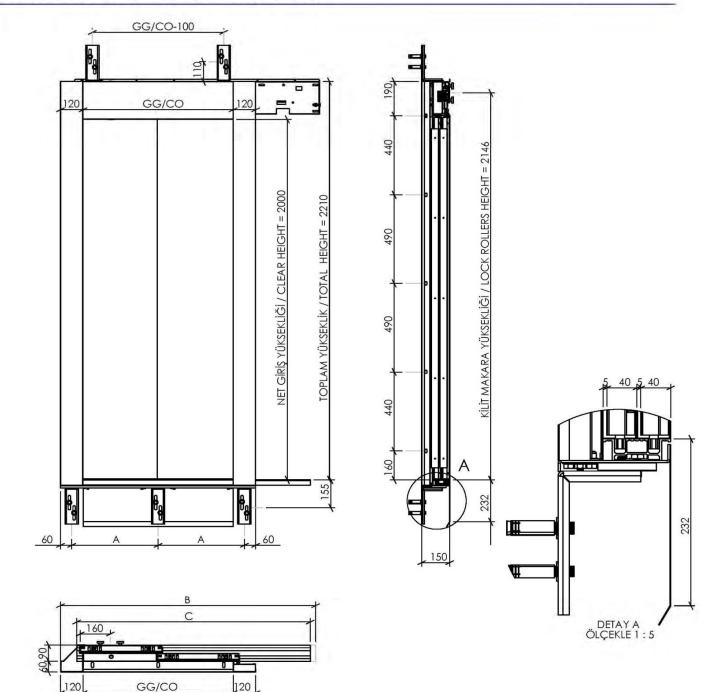








# 2 PANEL TELESKOPİK KAT KAPISI 2 PANEL SIDE OPENING LANDING DOOR

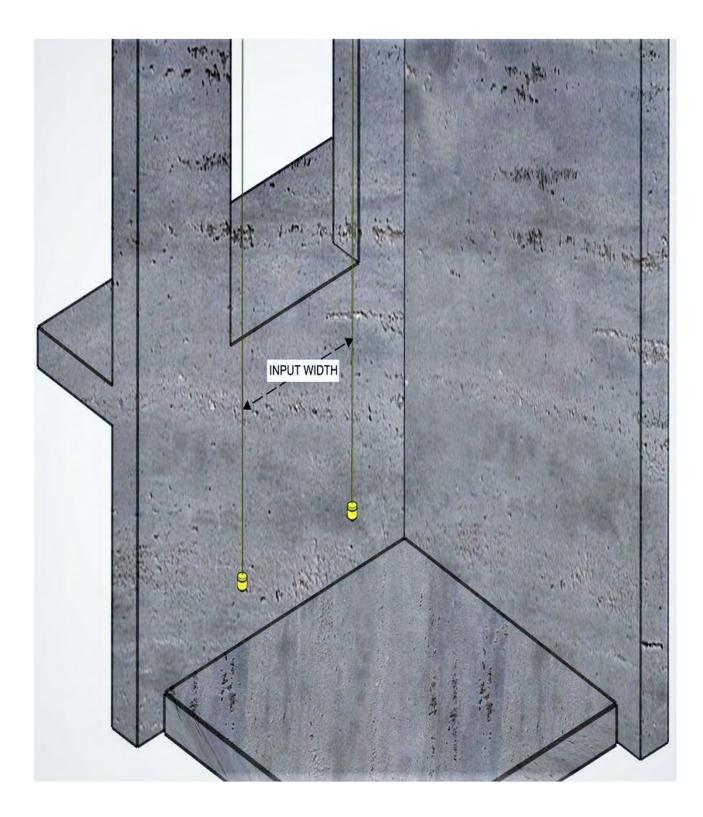


GIRIŞ GENIŞLİĞİ =GG CLEAR OPENING =CO	600	700	800	900	1000	1100	1200	1300
A	360	410	460	510	560	610	660	710
В	1060	1210	1360	1510	1660	1810	1960	2110
с	945	1095	1245	1395	1545	1695	1845	1995



#### 7.2 Disposal of Flooring Tile for Floor Door Frame Installation

For the assembly of the floor door frame, adjust the spacing between the frames to match the entrance size of the door.

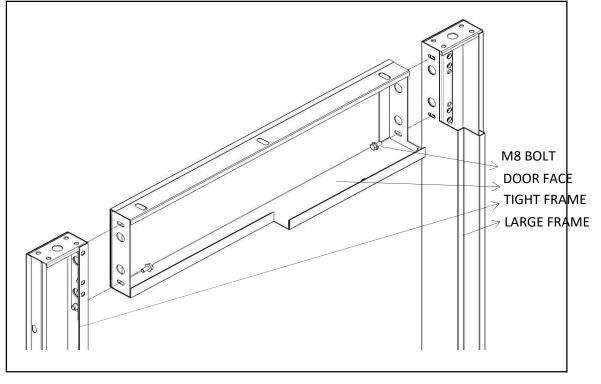




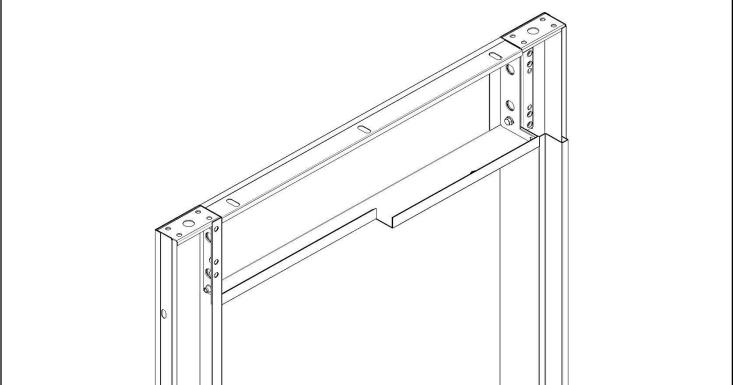
#### 7.3 Mounting of Side Posts With Upper Head

Secure the right and left pillars of the door cage with bolts and nuts on the top head.

Check if the front of the cabin is at the same level.



The narrow and wide frames of the door frame are fixed to the door forehead with 4 M8 bolts. It should be noted that the front side of the door frame is flush.

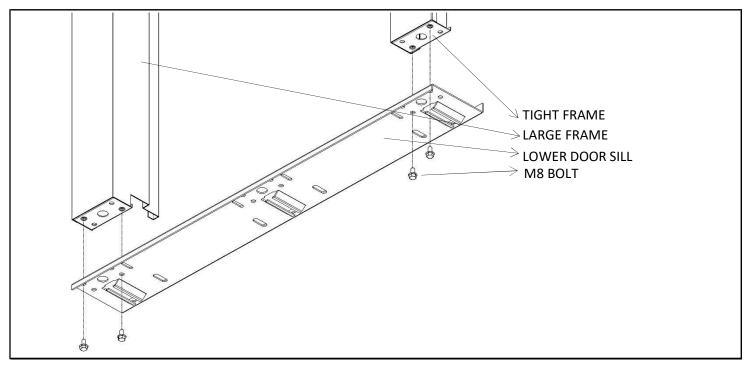


## <u>INSTALLATIO</u>N GUIDE

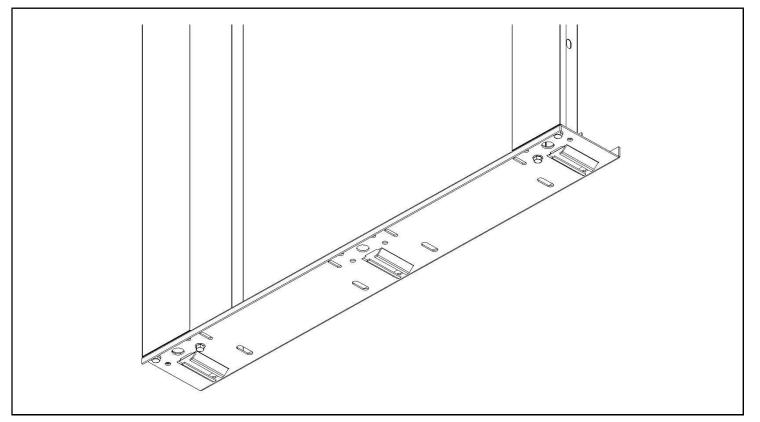


#### 7.4 Installation of Side Pole With Lower Threshold Body

Secure the lower sill body to the right and left pillars with bolts and nuts.



The narrow and wide frames of the door frame are fixed to the door bottom sill with 4 M8 bolts. It should be noted that the front face of the door frame is flush with the lower threshold of the door.

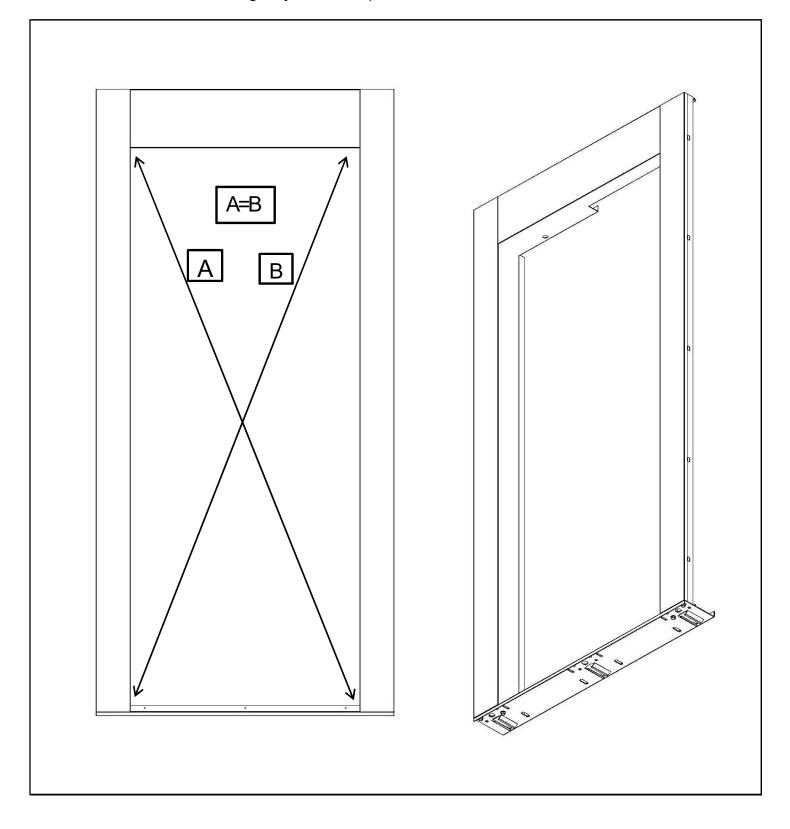




#### 7.5 Floor Gate Front Threshold Assembly

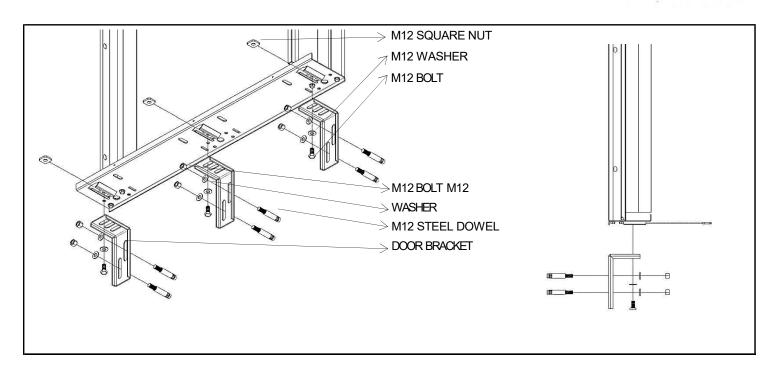
Before fixing the door frame to the wall, it should be measured from the diagonal corners and make sure that it is not crooked.

Two measures measured diagonally should be equal to each other.

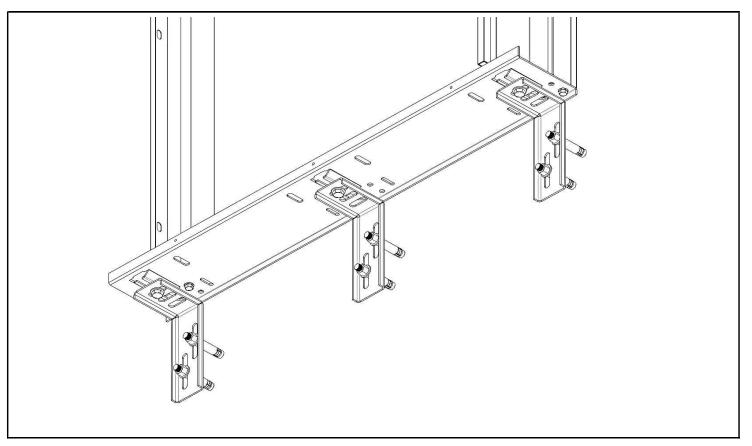




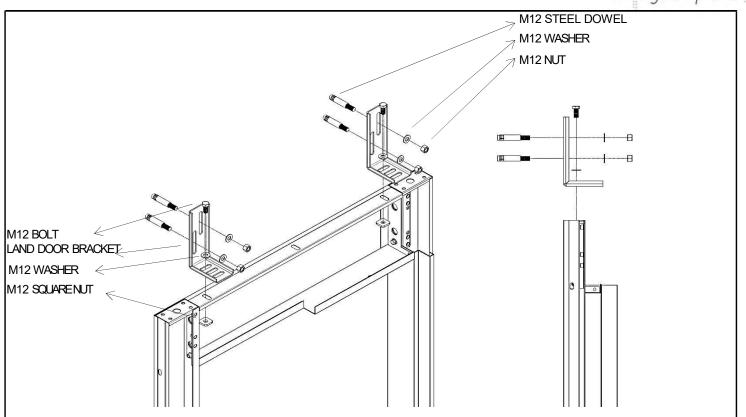




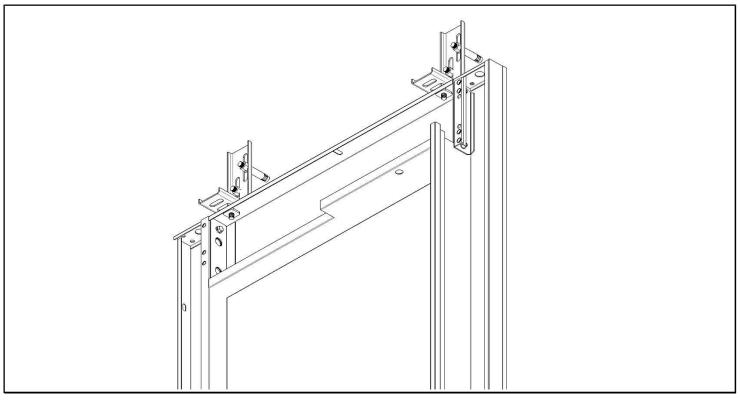
Floor door consoles are fixed to the wall with M12 steel dowels in the dimensions given in the technical details. Then the door frame and consoles are placed on it. Square nuts from the slots opened for M12 square nuts on the threshold are inserted into the slot and fixed to the door consoles.





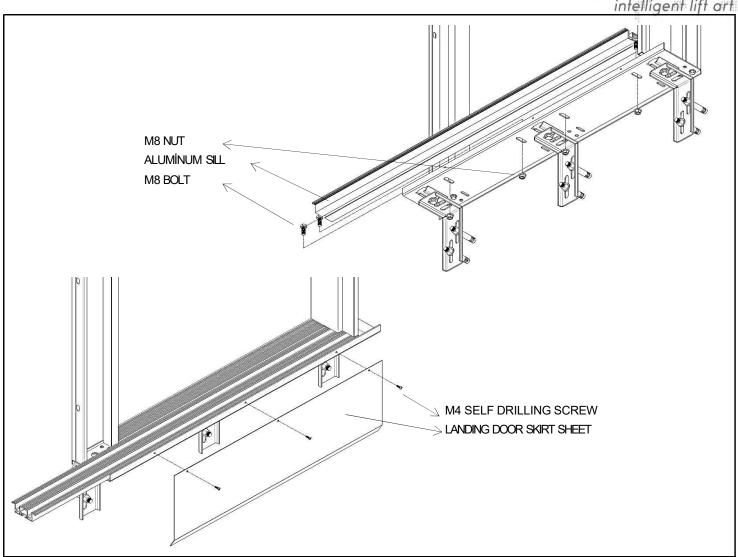


Floor door consoles are fixed to the wall with M12 steel dowels with the dimensions given in the technical details. Then the door frame is fixed to the wall with the M12 bolt from the slots located on the door forehead in a balanced way.

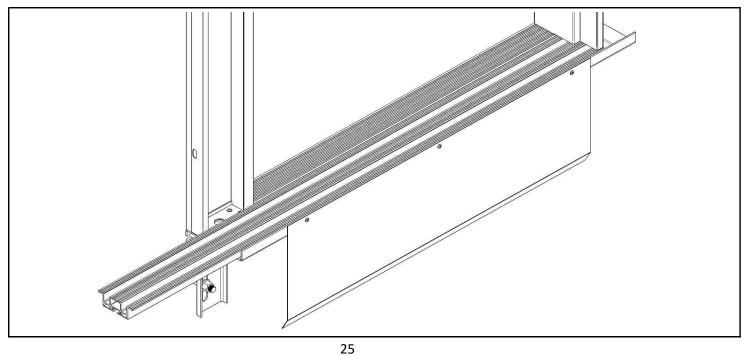




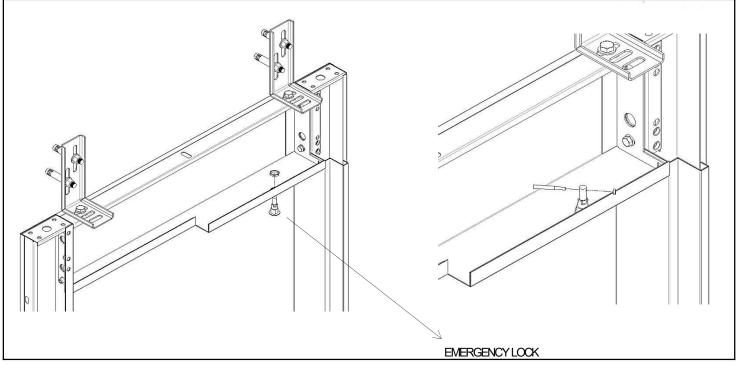




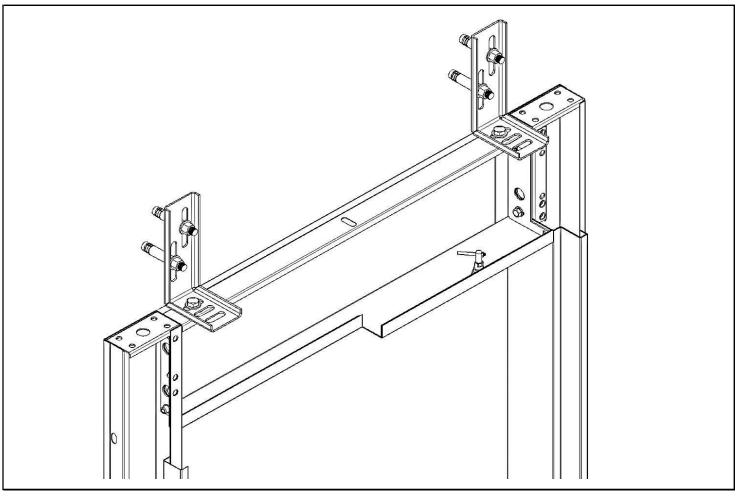
The aluminum threshold is fixed to the door bottom sıll with M8 bolt. The skirt sheet is fixed to the lower threshold of the door with an M4 drill bit screw.





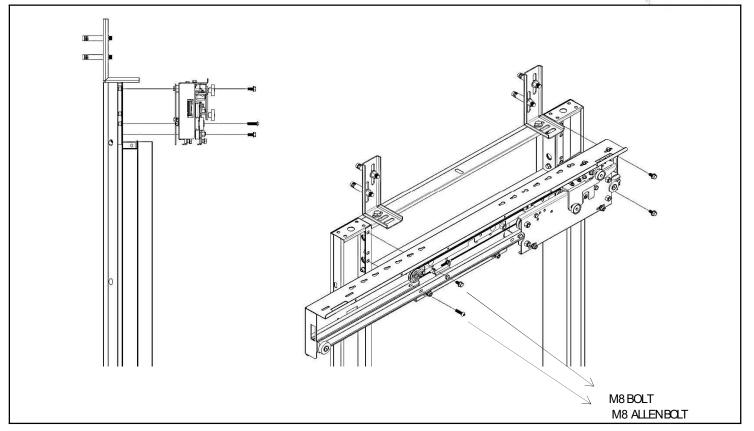


The emergency lock is attached to the slot located on the door forehead.

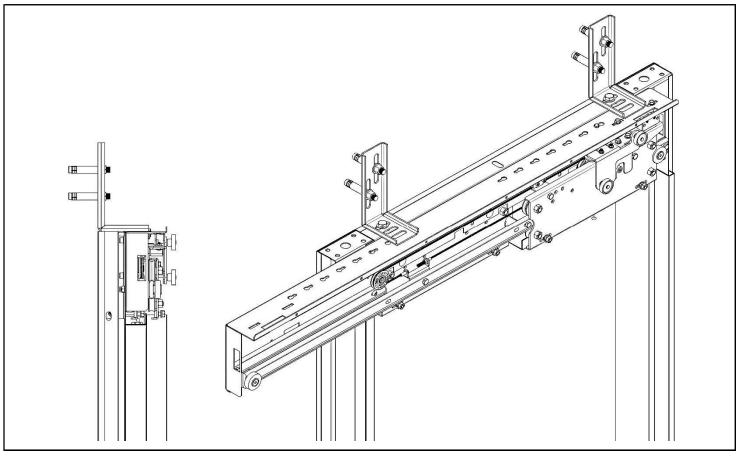


## <u>INSTALLATIO</u>N GUIDE

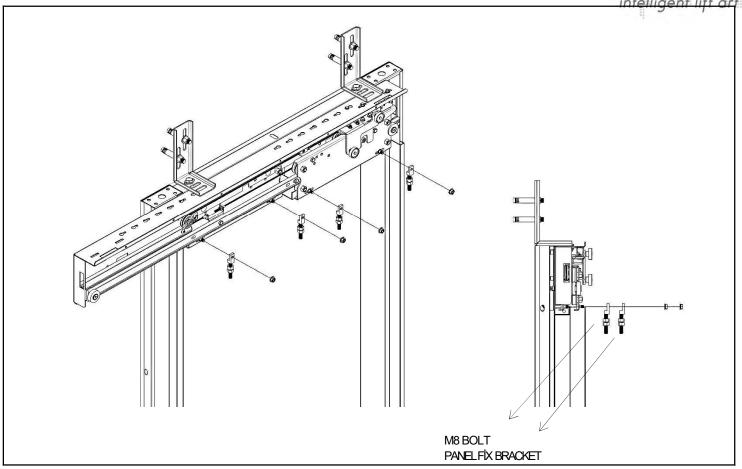




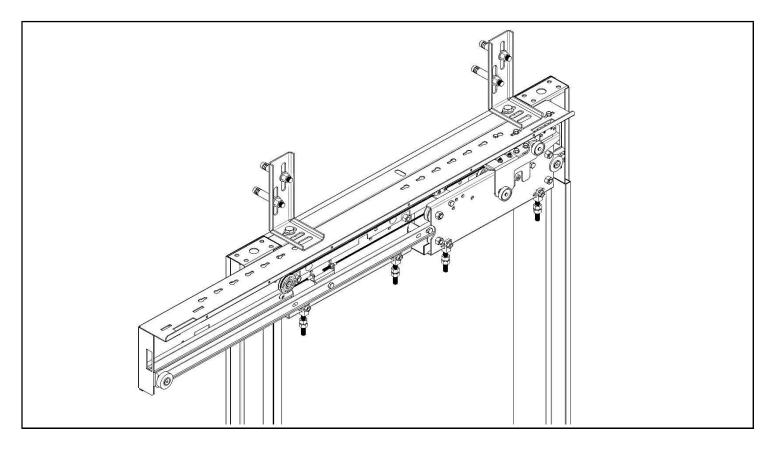
The floor mechanism is fixed to the door frame with M8 bolts as shown in the figure.



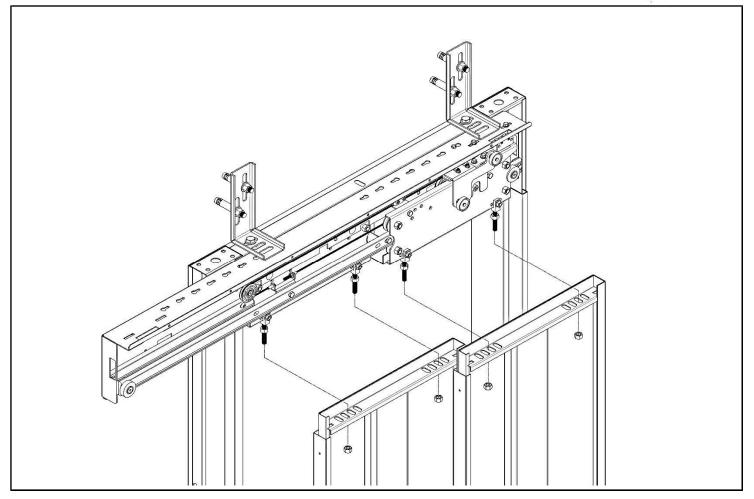




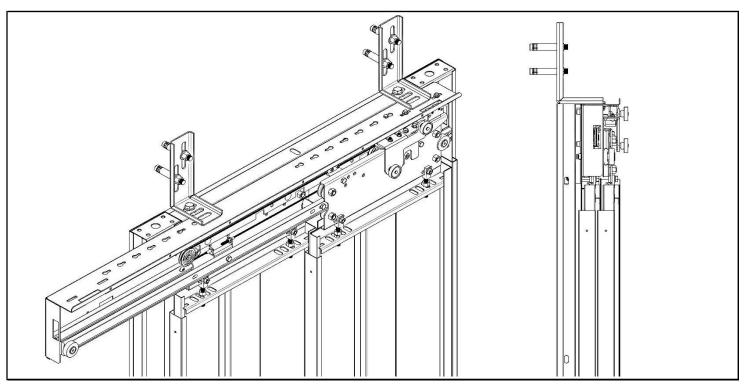
The panel hangers are attached to the panel carriages and fixed with M8 bolts.



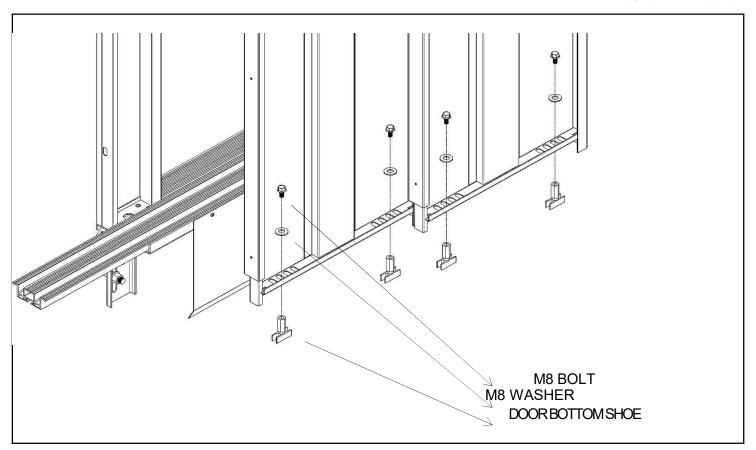




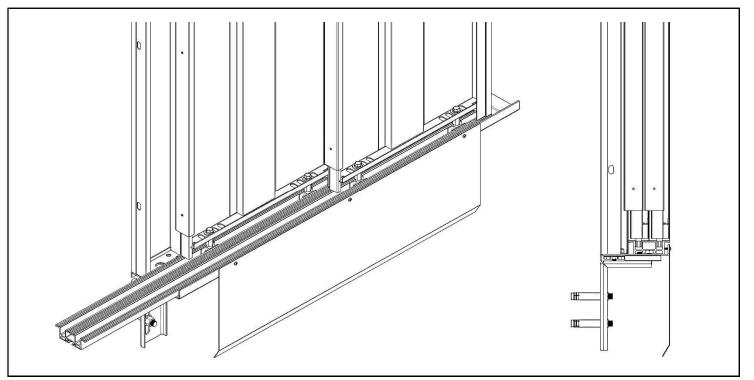
The panels are mounted on the panel car with the panel hangers in the dimensions given in the technical details. The panels can be adjusted in three axes.





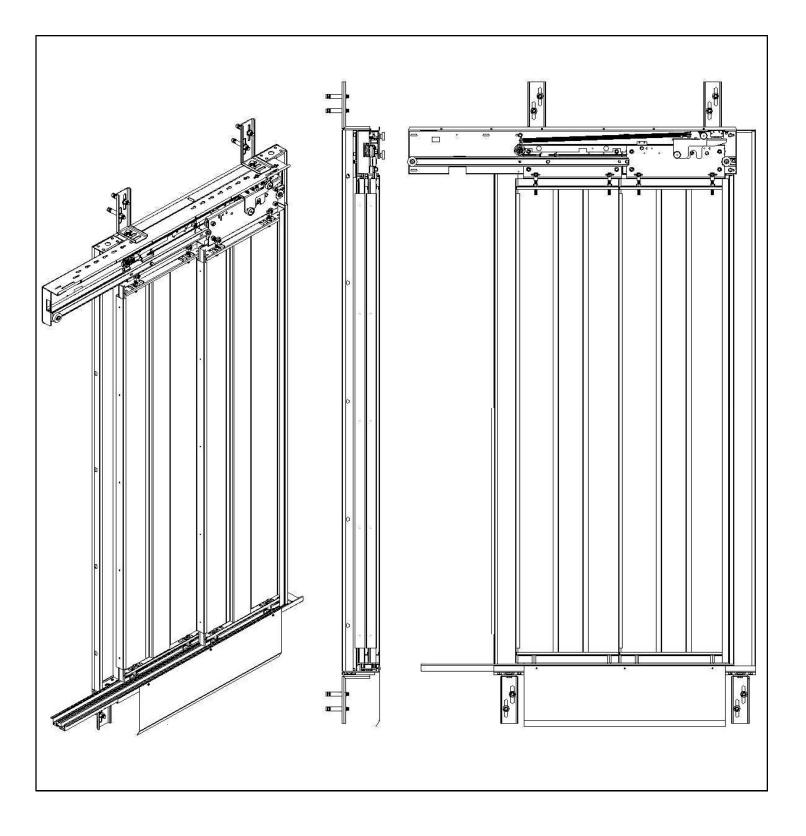


The door skates are first placed inside the aluminum threshold. Then M8 stamps from the slots located on the panel and it is fixed with bolts. Here, too, attention is paid to the fact that the door gaps are the same as the dimensions given in the technical details

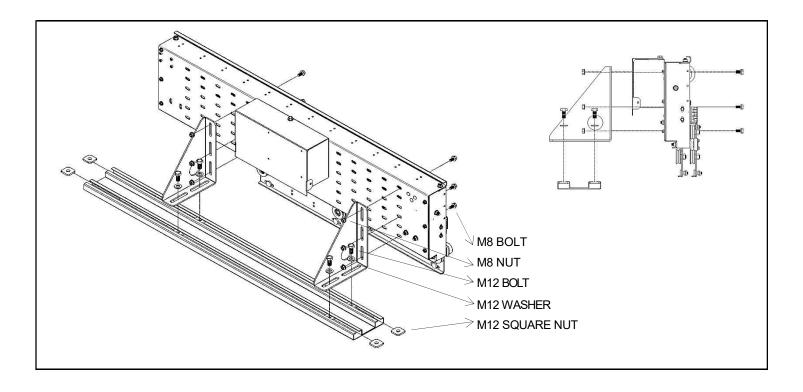




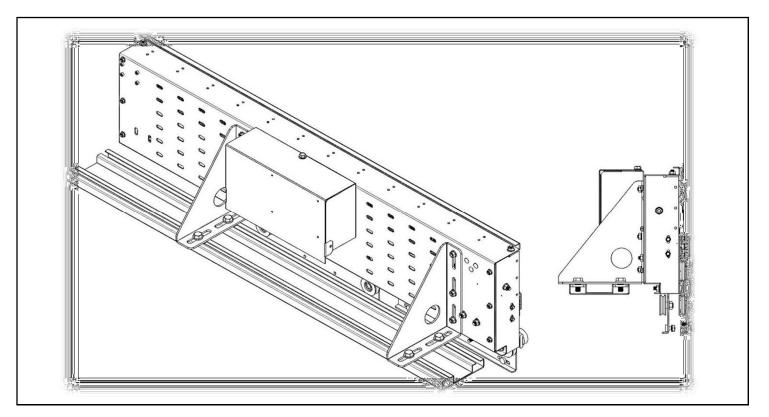
## CABIN DOOR



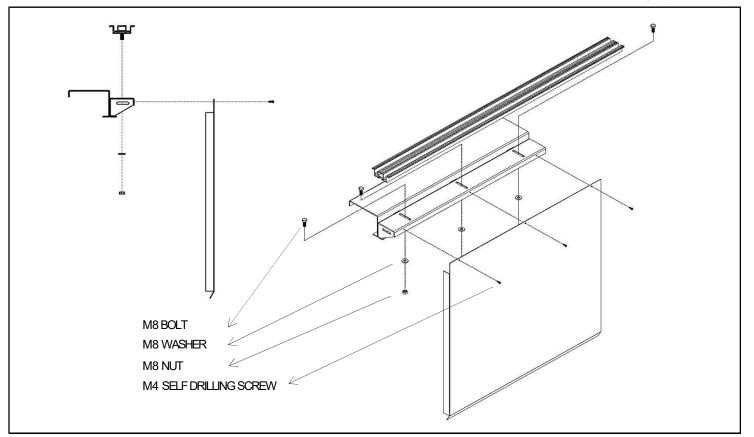




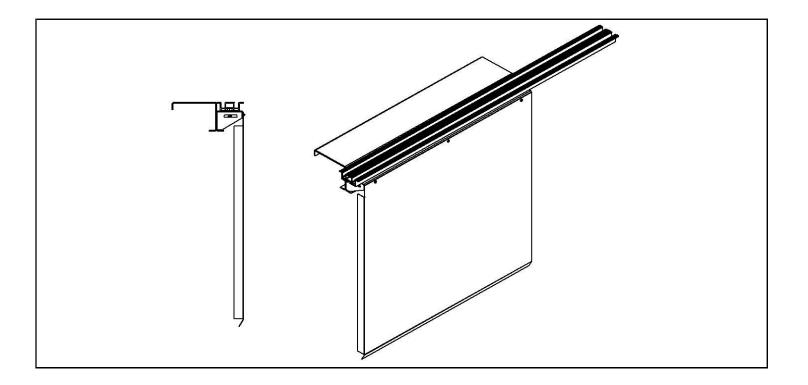
When installing the cabin door, first of all, the M12 square nuts are placed on the mechanism connection slides located on the cabin. The cabin door consoles are fixed on the cabin with M12 washers and bolts. The cabin door operator is fixed to these consoles.



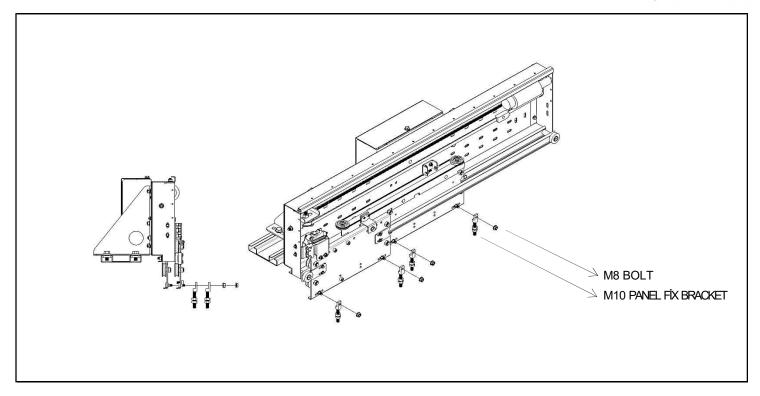




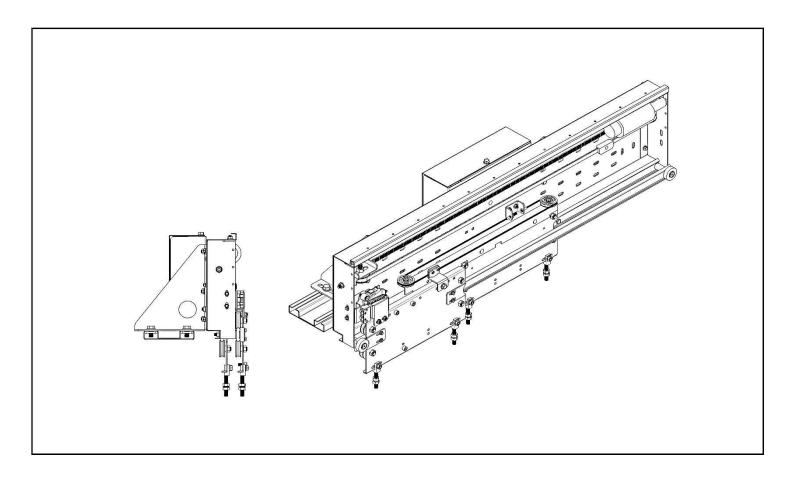
The aluminum threshold and the cabin skirt sheet are fixed to the door sill located on the cabin.



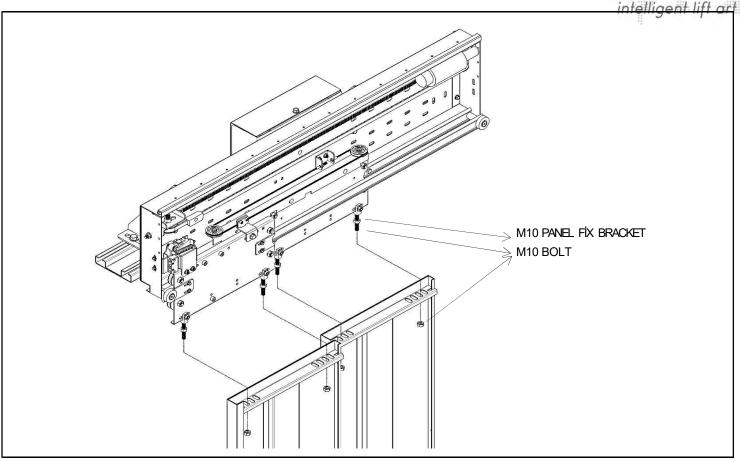




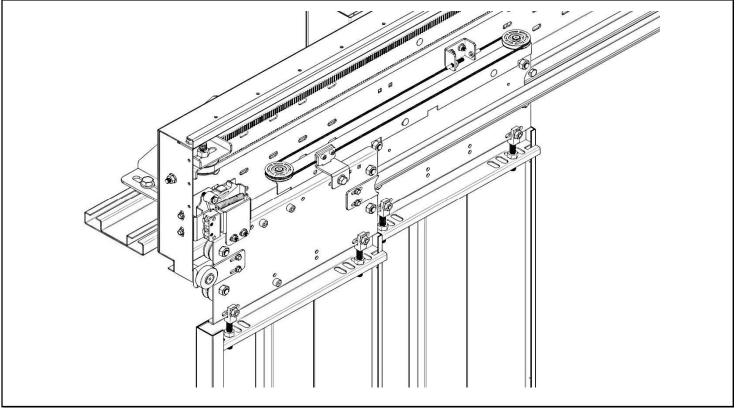
The panel hangers are attached to the panel carriages and fixed with M8 bolts.





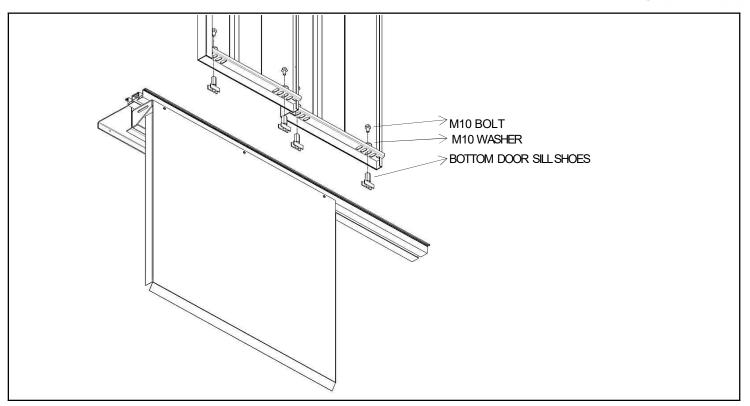


The panels are mounted on the panel car with the panel hangers in the dimensions given in the technical details. The panels can be adjusted in three axes.

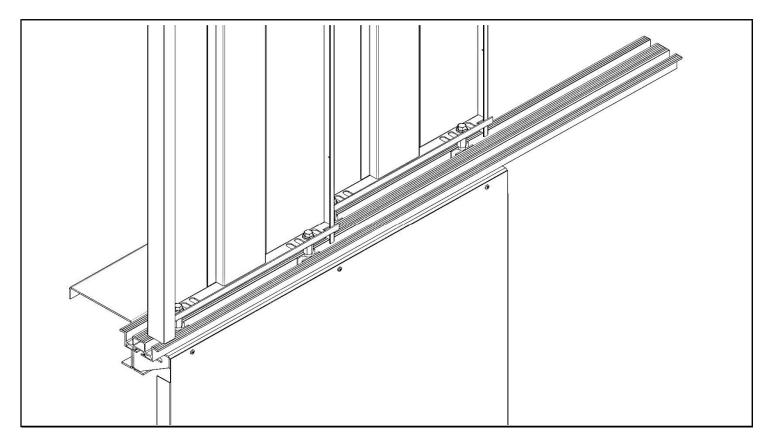




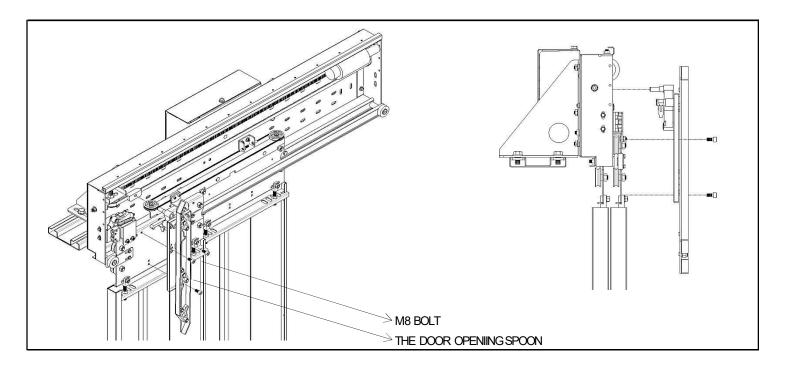




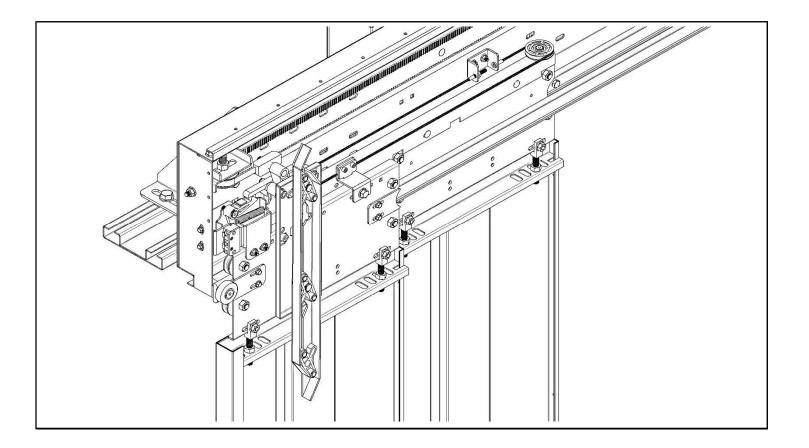
The door skates are first placed inside the aluminum threshold. Then it is fixed with M8 washers and bolts from the slots located on the panel. Here, too, attention is paid to the fact that the door gaps are the same as the dimensions given in the technical details.



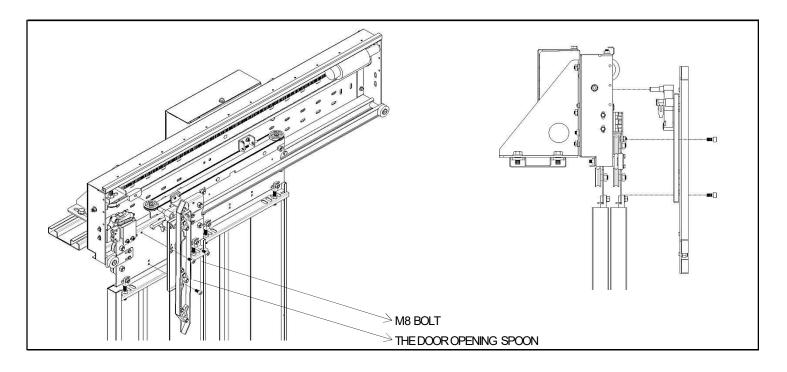




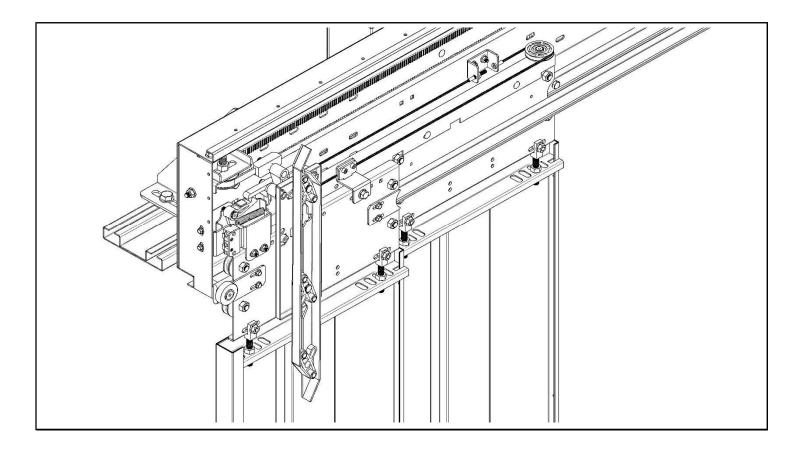
The door opening spoon is fixed on the panel trolley with M8 bolts.



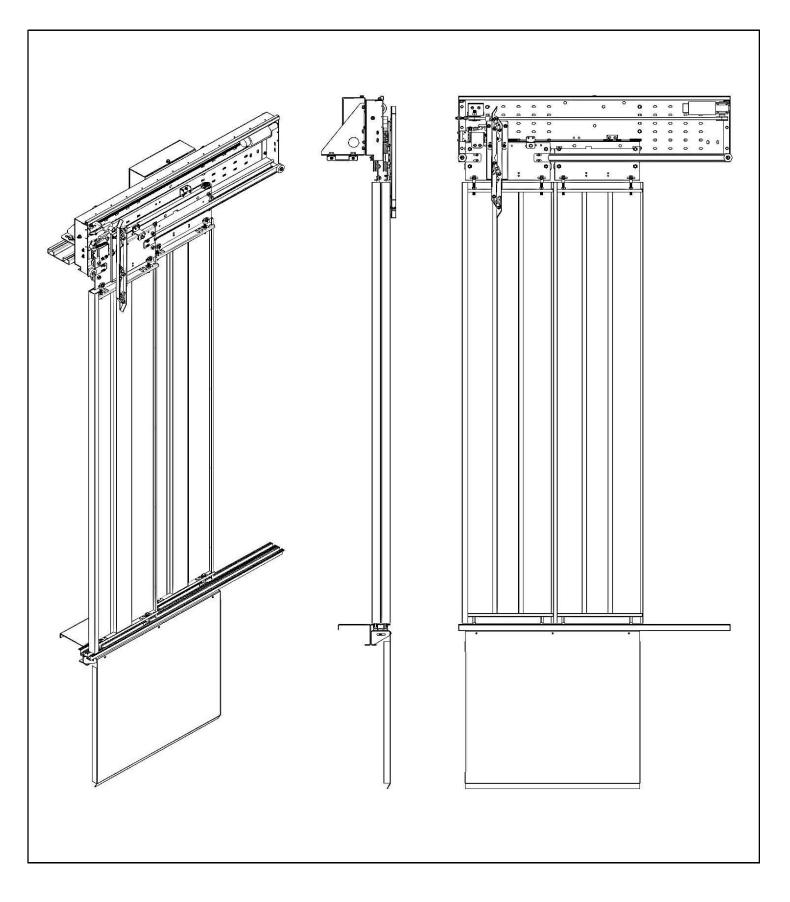




The door opening spoon is fixed on the panel trolley with M8 bolts.



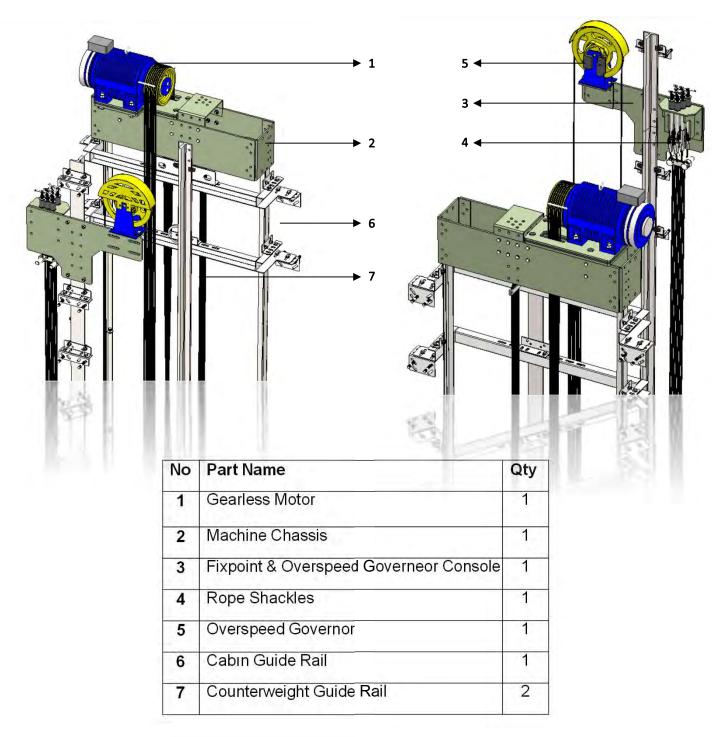






#### 8. GEARLESS MACHINE AND CHASSIS MOUNTING

The gearless motor is mounted in the cavity above the well after the assembly of the guide rails estterminé.

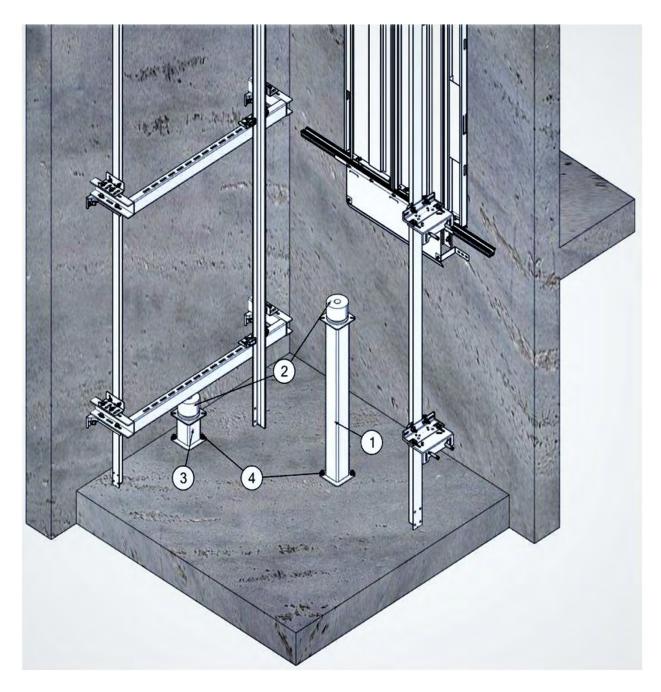


Move all gears related to the assembly of the gearless motor and chassis to the final blast. In order to carry out the transport operation, the electric hoist system must be installed in the elevator shaft.

(Check the vanity capacity for the weight of the material to be transported.)



### 9. INSTALLATION OF CABIN AND AGAINST WEIGHT BUFFERS

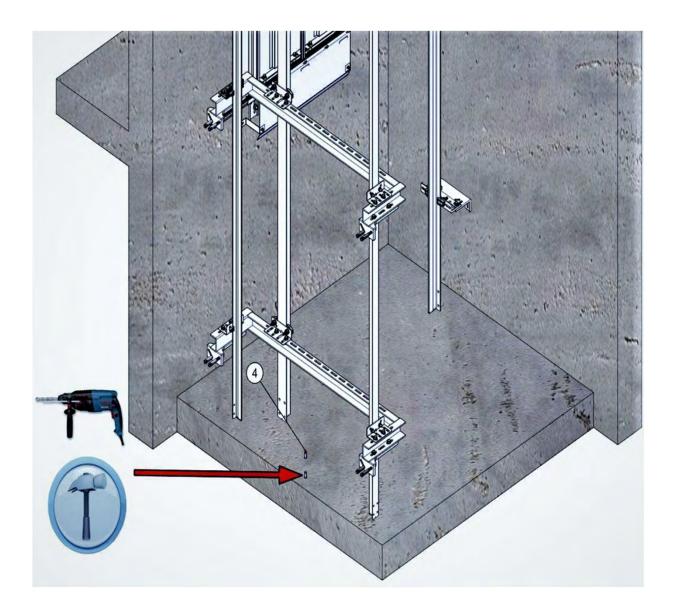


No	Part Name	Qty
1	Buffer Base	1
2	Buffer	2
3	Counterweight Buffer	1
4	Clip-on Steel Anchor M12x110	4



### 9.1 Mounting Counterweight Buffer

Clip-on steel dowels, lift to the bottom of the well.

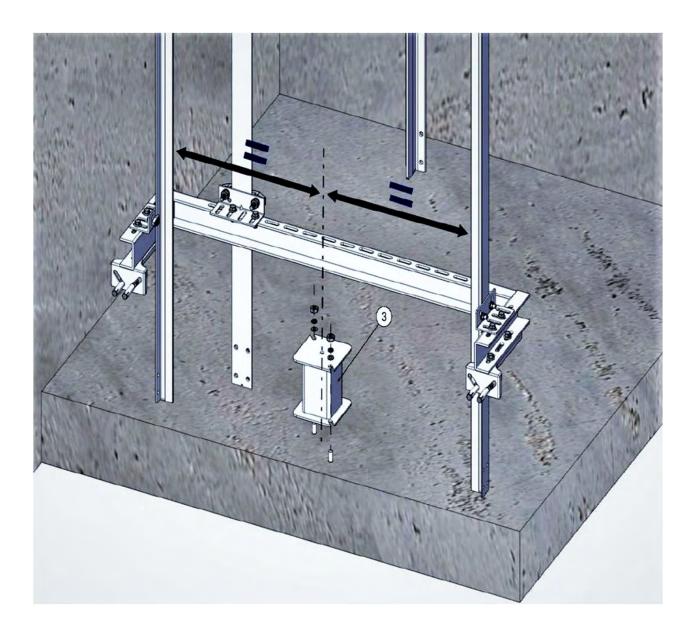


No	Part Name	Qty
4	Clip-on Steel Anchor M12x110	2



## 9.2 Assembly of Counterweight Cushioning Pad

Secure the buffer pad with nuts by passing it through the clip-on steel anchors. The buffer should be fixed to the midpoint of the two guide rails.

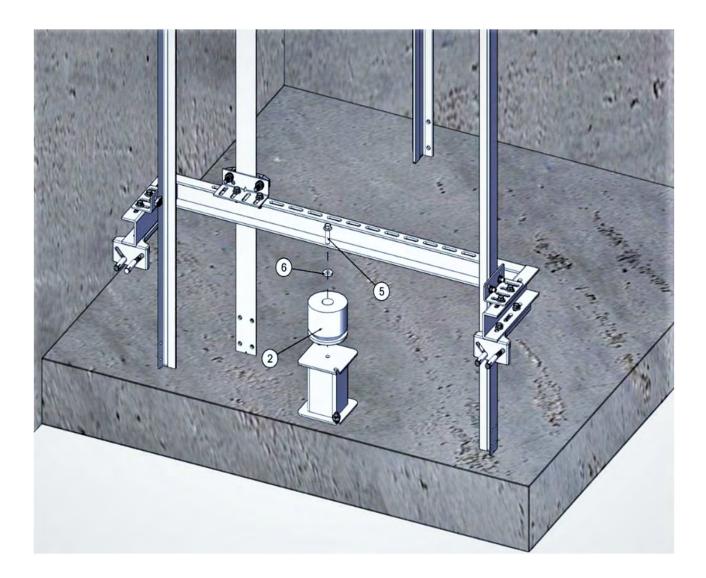


No	Part Name	Qty
3	Counterweight Cushioning	1



### 9.3 Polyurethane Buffer Counter Weight Buffer Calibration Assembly

Fix the polyurethane pad with counterweight buffer pad. To secure the bolt, the bolt hole in the buffer shroud is welded by welding the production nut.

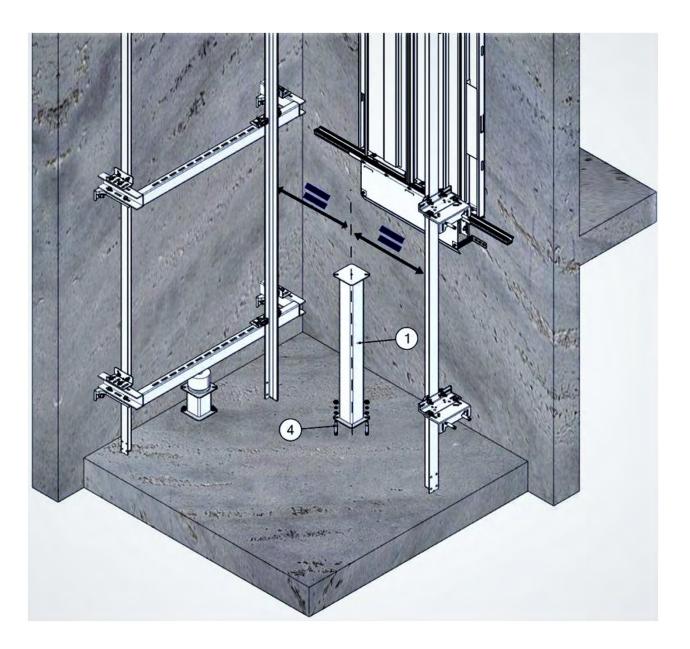


No	Part Name	Qty
2	Buffer	1
5	DIN 6921 Flanged Bolt M12x45	1
6	DIN 7349 M12 Thick Plain Pulley	1



### 9.4 Buffer Installation

Cabin buffer mounting is the same logic as counterweight buffer mounting. Secure the cabin buffer to the bottom of the elevator shaft with clip-on steel dowels.

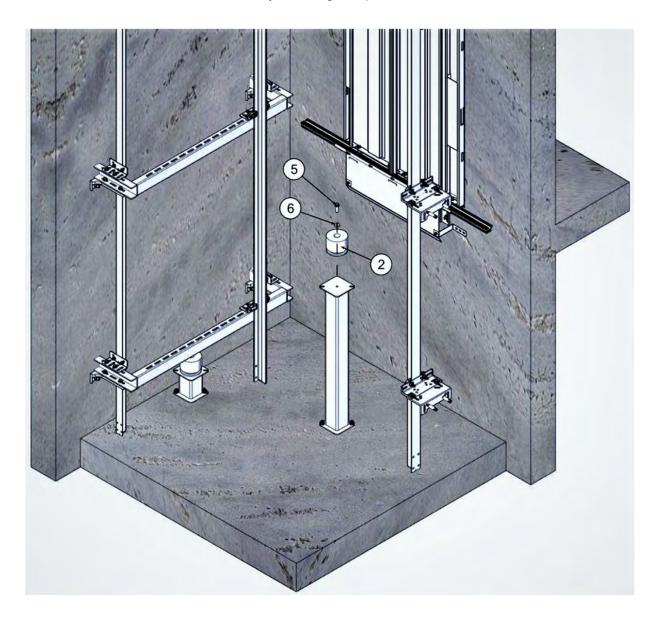


No	Part Name	Qty
1	Cabin Buffer	1
4	Clip-on Steel Anchor M12x110	2



### 9.5 Polyurethane Buffer and Buffer Base Calibration Assembly

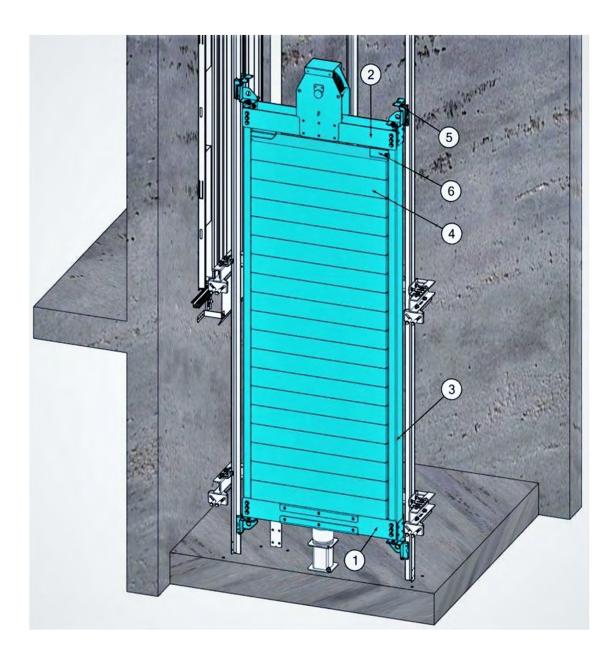
Secure the polyurethane buffer to the cabin with buffer pad. To secure the bolt, the bolt hole in the buffer shroud is welded by welding the production nut.



No	Part Name	Qty
2	Polyurethane Buffer	1
5	DIN 6921 Flanged Bolt M12x45	1
6	DIN 7349 M12 Thick Plain Pulley	1



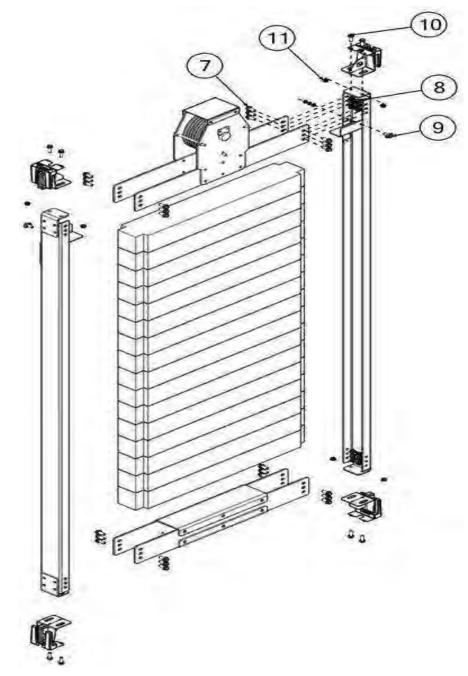
### **10. COUNTERWEIGHT CHASSIS MOUNTING**



No	Part Name	Qty
1	Lower Carcass	1
2	Upper Carcass	1
3	Side Pole	2
4	Weight Stuff	19
5	Skate	4
6	Counterweight Fixpunt Device	2



## 10.1 Counterweight Weight Exploded View



No	Part Name	Qty
7	DIN 6921 Flanged Bolt M12x30	24
8	DIN 6923 Flanged Nut M12	24
9	M1 Casting Nail	2
10	DIN 6921 Flanged Bolt M10x35	8
11	DIN 6921 Flanged Bolt M10x35	8



## 10.2 Buffer Weighting Method of Counterweight

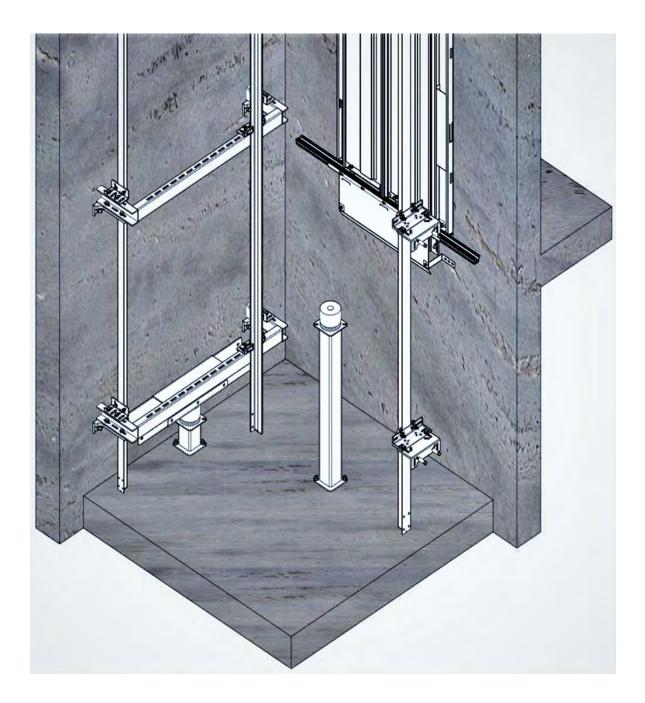


No	Part Name	Qty
1	Lower Carcass	1



### 10.3 Placement of Counterweight Undercarriage on the Buffer

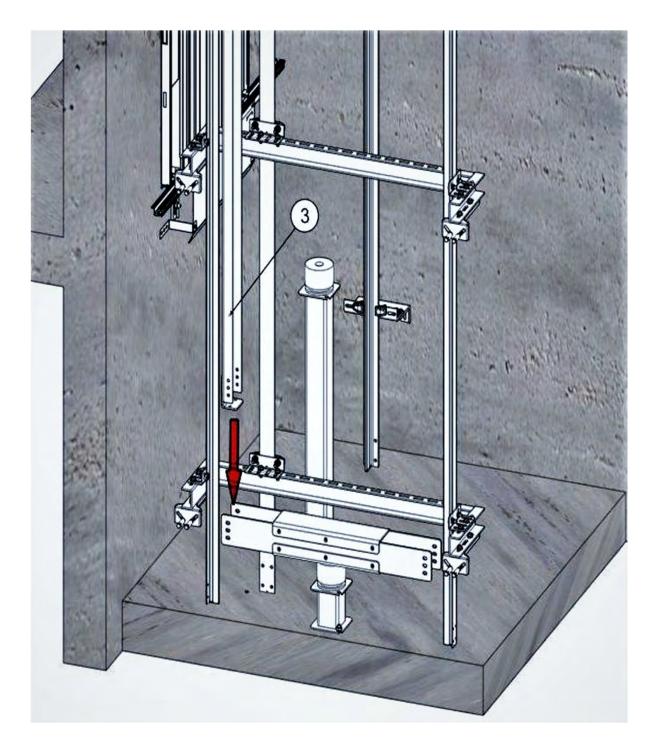
After placing on the lower carcass padding, check that the lower carcass is level with the water level. It is recommended to use a balancing device on the right and left side of the buffer so that the undercarriage can be balanced.





## 10.4 Counterweight Right Side Direction Placement Method

Place the counterweight on the right side of the right side of the lower carcass.

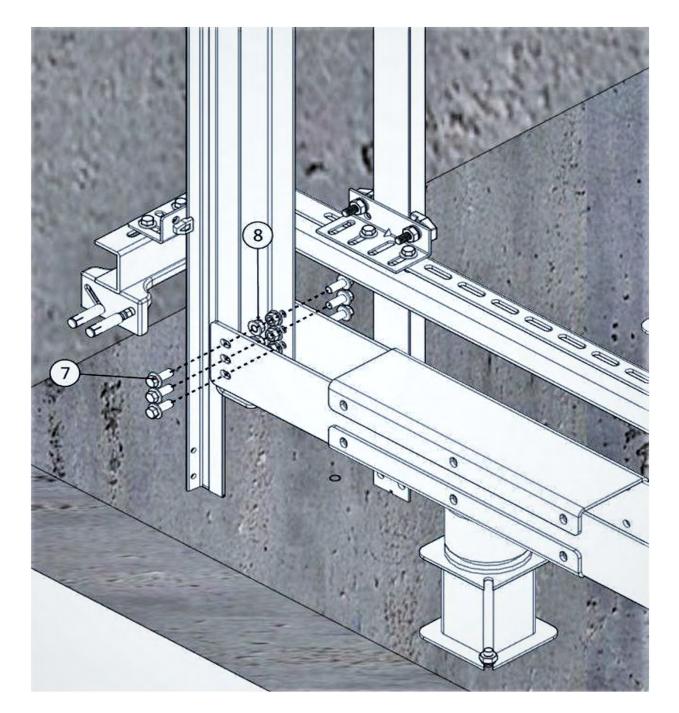


No	Part Name	Qty
3	Side Pillar	2



## 10.5 Counterweight Right Side Rear Lower Frame Assembly

Fix counterweight with right side post, lower frame bolt and nuts.

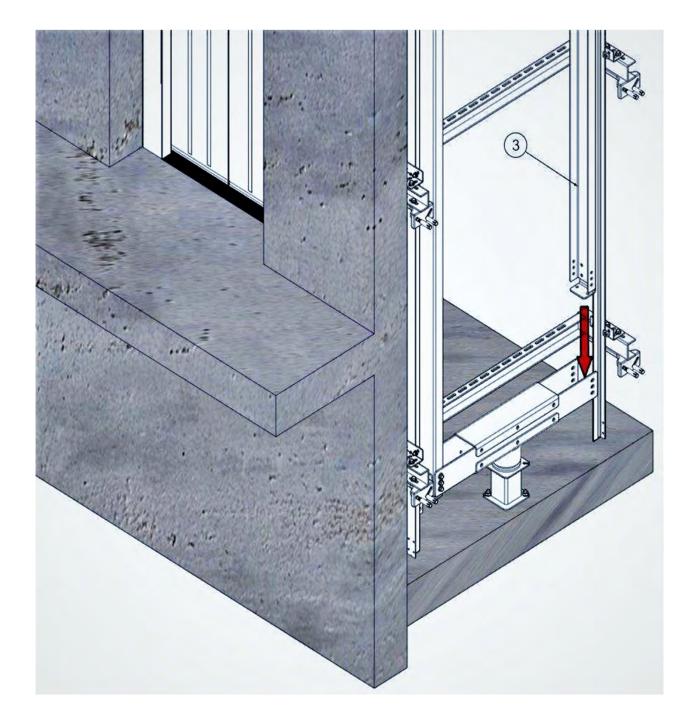


No	Part Name	Qty
7	DIN 6921 Flanged Bolt M12x30	6
8	DIN 6923 Flanged Nut M12	6



### 10.6 Counterweight Left Side Strain Placement Method

The counterweight should be placed so that the left side stalk is on the left side of the lower carcass.

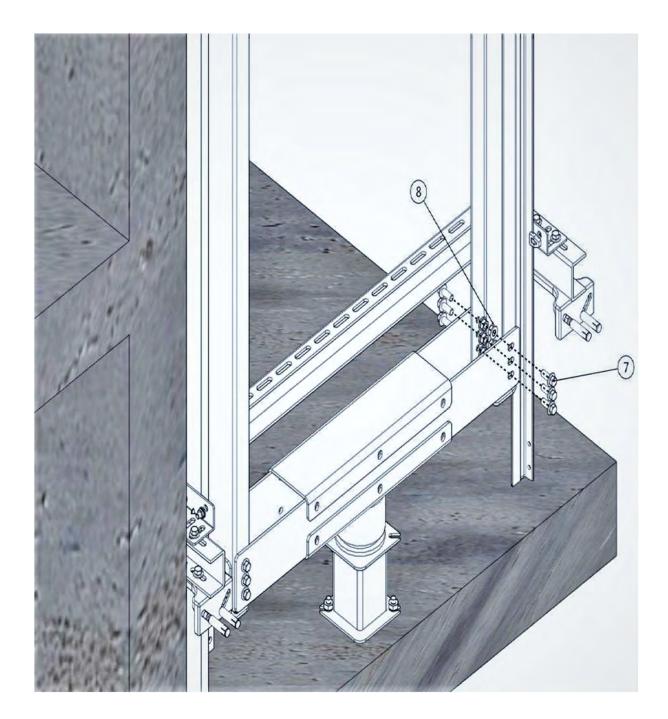


No	Part Name	Qty
3	Side Pillar	1



### 10.7 Counterweight Left Side Rear Lower Carcass Assembly

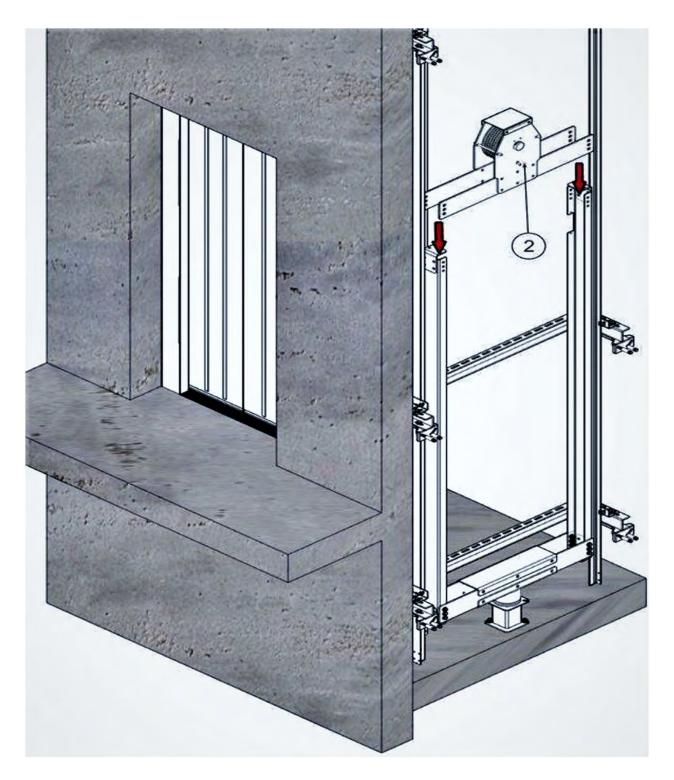
Fix the counterweight with the left side post, lower frame bolt and nuts.



No	Part Name	Qty
7	DIN 6921 Flanged Bolt M12x30	6
8	DIN 6923 Flanged Nut M12	6



## 10.8 Upper Carcass Loading Method

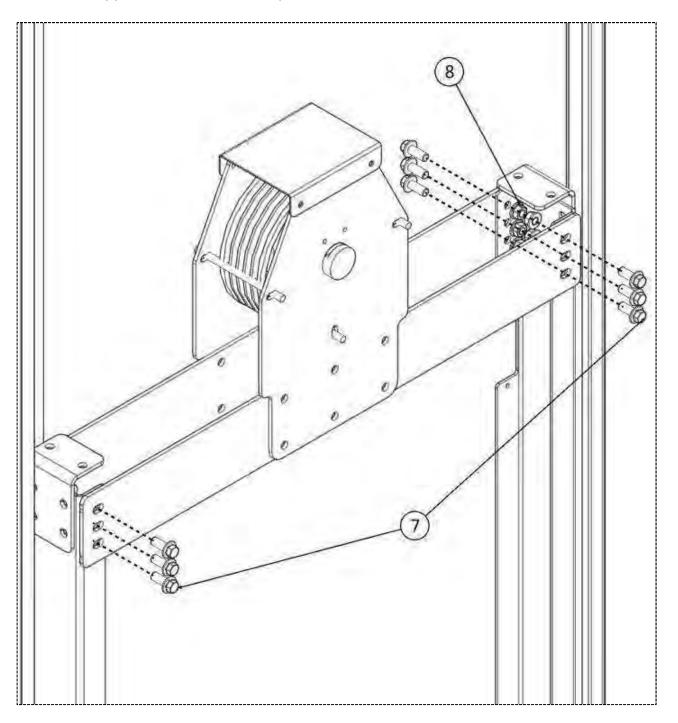


No Part Name		Qty
2	Upper Carcass	1



### 10.9 Counterweight Mounting of Upper Carcass With Side Pole

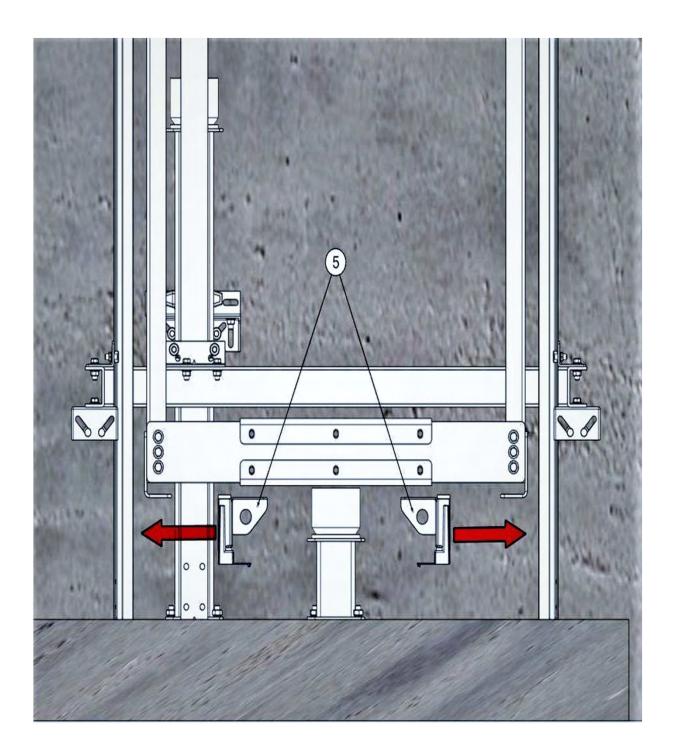
Secure the upper carcass to the side posts with bolts and nuts.



No	Part Name	Qty
7	DIN 6921 Flanged Bolt M12x30	12
8	DIN 6923 Flanged Nut M12	12



## 10.10 Placement of Counterweight Underlays

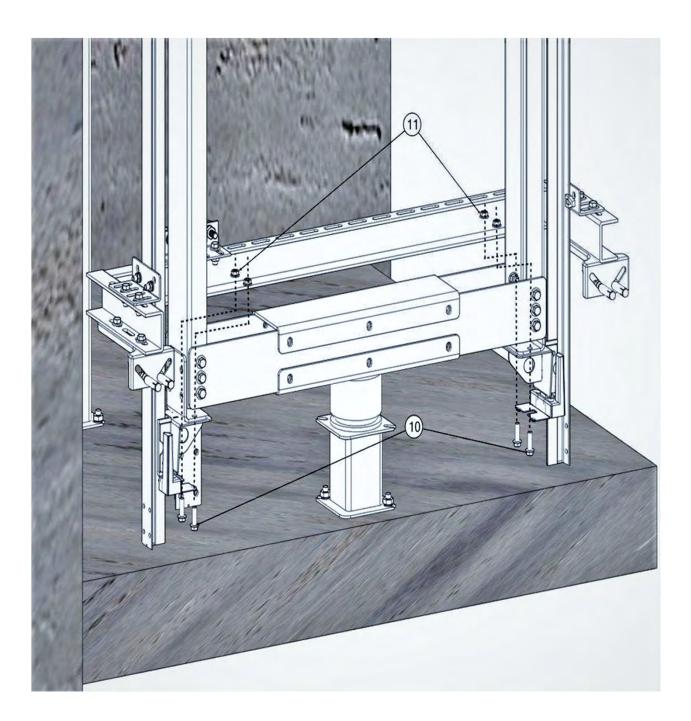


No	Part Name	Qty
5	Skate	2



### 10.10 Counterweight Assembly of Lower Skates

Fix the lower skates to the side posts with bolts and nuts. Set the distance between the skates and the track to be 1 mm.

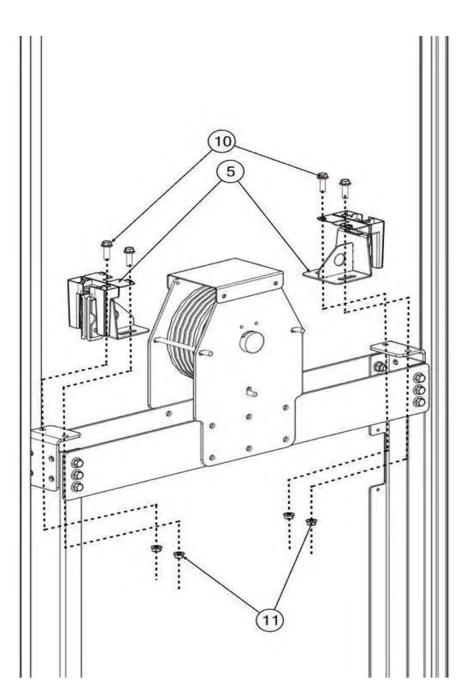


N	0	Part Name	Qty
1	0	DIN 6921 Flanged Bolt M10x35	4
1	1	DIN 6923 Flanged Nut M10	4



### 10.11 Counterweight Upper Skating Assembly

Secure the upper skates to the side posts with bolts and nuts. Set the distance between the skates and the track to be 1 mm.

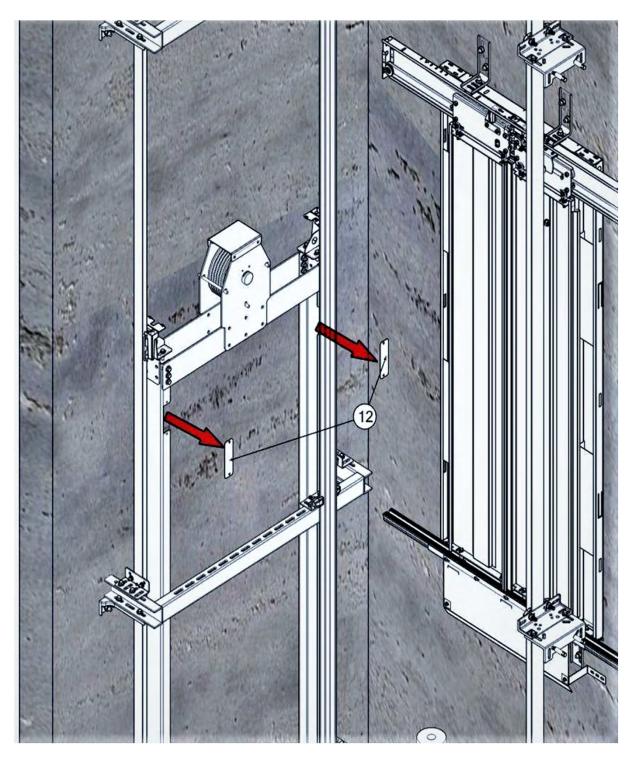


No	Part Name	Qty
5	Skate	2
10	DIN 6921 Flanged Bolt M10x35	4
11	DIN 6923 Flanged Nut M10	4



### 10.12 Removal of the Cover Plates of the Counterweight Carcass

Side pole cover plates are shipped assembled from production. Remove the side pole cover sheets.

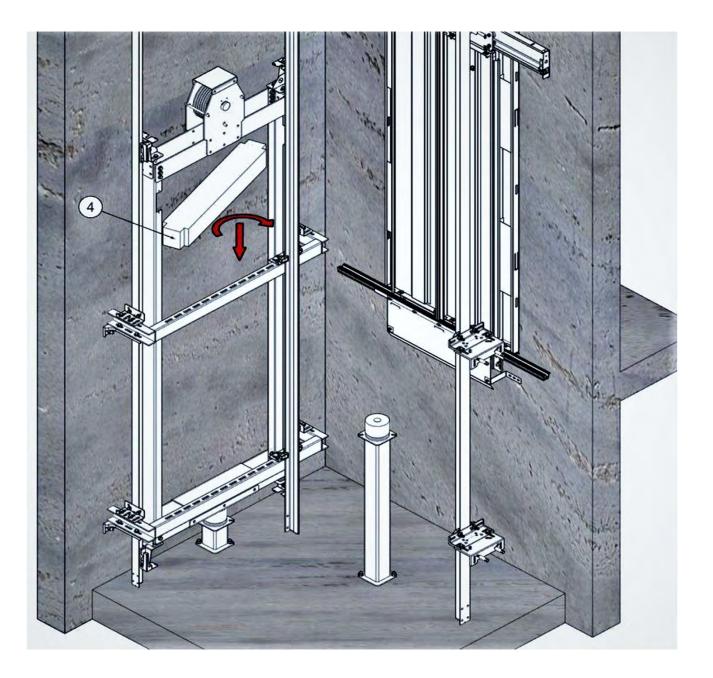


No	Part Name	Qty
12	Side Pillar Cover Sheet	2



### **10.13 Placement Method of Weight Stuffs in the Weighted Carcass**

In the first place, do not fill in the full of the weight fillings. Place a number of weight fillers to hold the suspension in place. (Example: 4-5 units) After the cabinet is assembled, fill up the fillings.

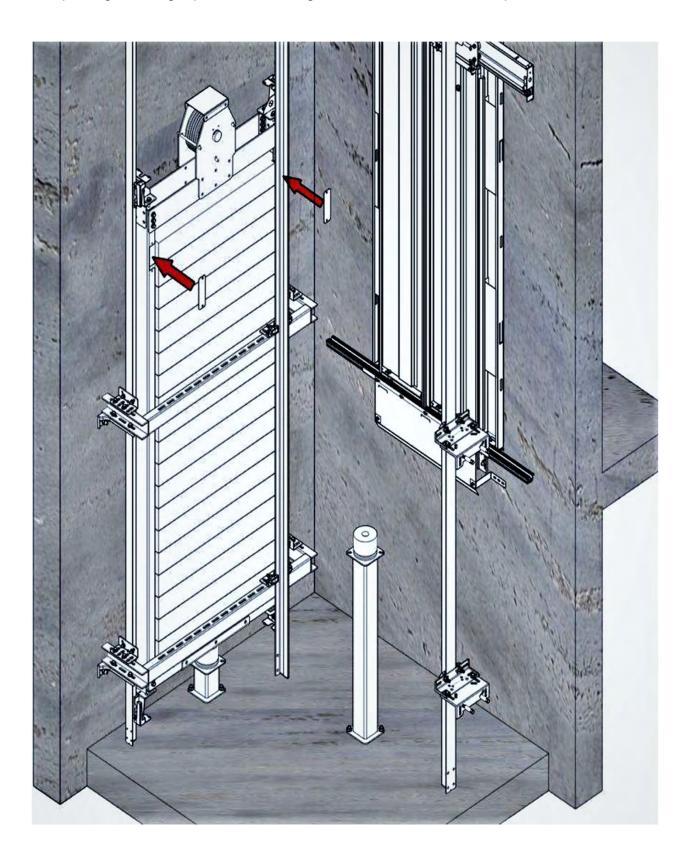


No	Part Name	Qty
4	Weight Stuff (Barit)	2



## 10.14 Mounting of Cover Plates of Counterweight Frame Carcass

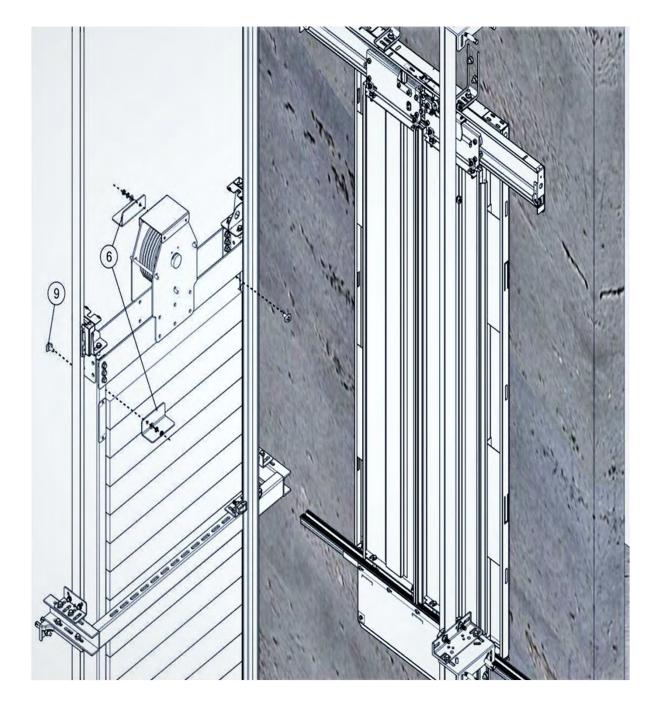
After placing the weight packs in the weight frame, secure the cover plates with bolts.





## 10.15 Counterweight Installation

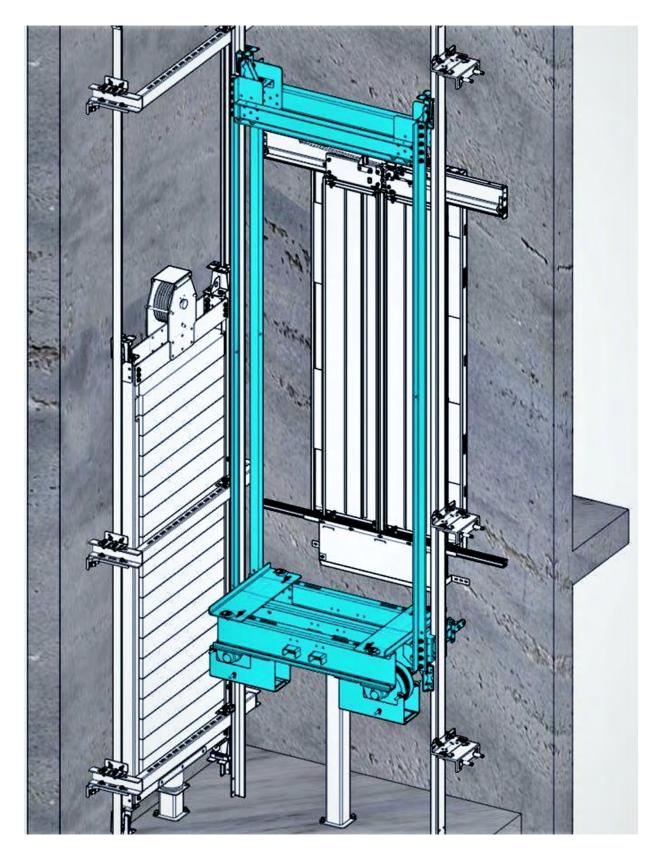
After fixing the cover plates with bolts, install the weight filler fixing sheet.



No	Part Name	Qty
6	Counterweight Fixpunt Sheet	2
9	M1 Casting Nail	2



### 11. INSTALLATION OF CABIN SUSPENSION







#### 11.2 Cabin Suspensi rt

Sheet

No

1

2

3

4

9

10

13

Cabin Suspension P	arts	
Part Name	Qty	
Lower Suspension	1	
Top Suspension	1	
Bracket	4	(9)
Guide Shoe	4	10
Pulley	2	
Pulley Protection	2	
Cabin Protection	2	

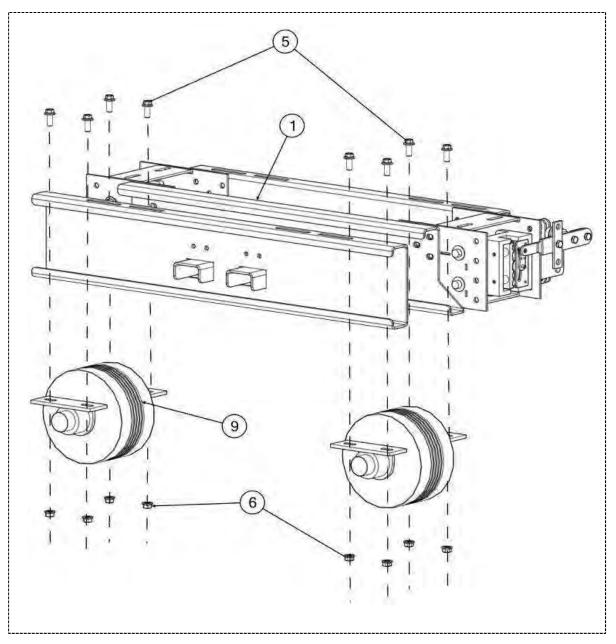
6	5
υ	9



### **11.3 Lower Suspension Mounting of Pulleys**

Secure the pulleys to the lower suspension with bolts and nuts before taking the lower

suspension to the lift well.



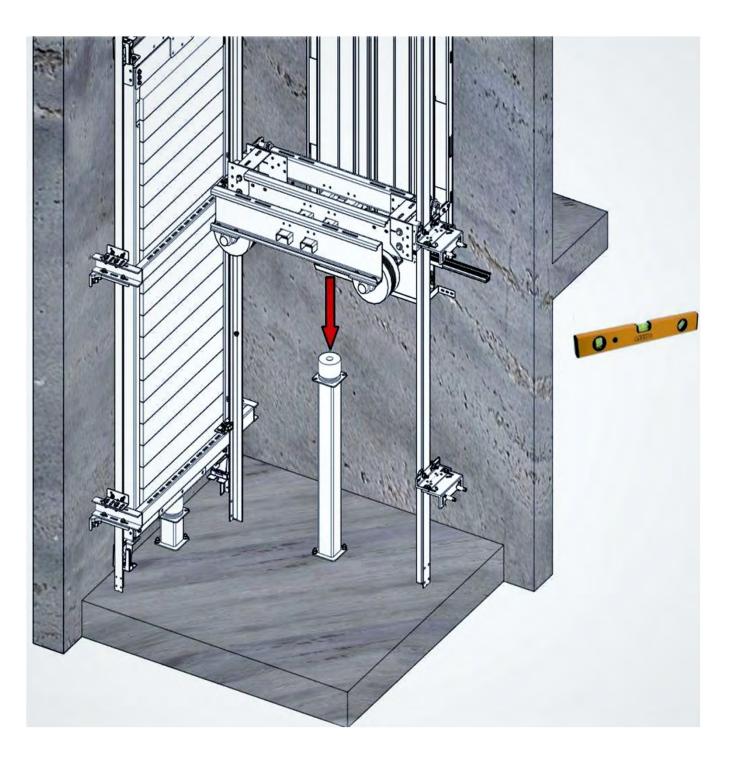
No	Part Name	Qty
1	Lower Suspension	1
5	DIN 6921 Flanged Bolt M12X30	8
6	DIN 6923 Flanged Nut M12	8
9	Pulley	2



#### 11.4 Placement of Lower Suspension on Cabin Buffer

It is recommended to place the lower suspension between the cabin guide rail after installation of the first cabin guide rail.

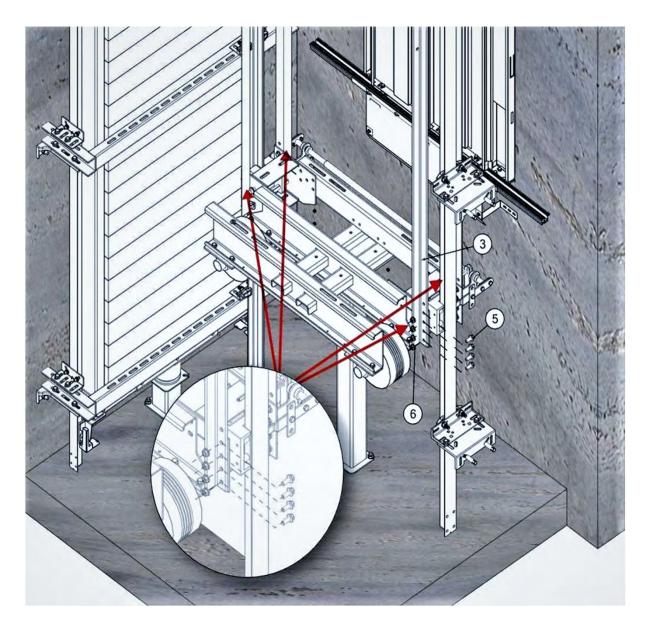
After placing the lower suspension on the buffer, check that the lower suspension is in balance with the water balance. It is advisable to use a balancing device on the right and left sides of the buffer so that the bottom suspension can be balanced.





## 11.5 Mounting of the Brackets to the Lower Suspension

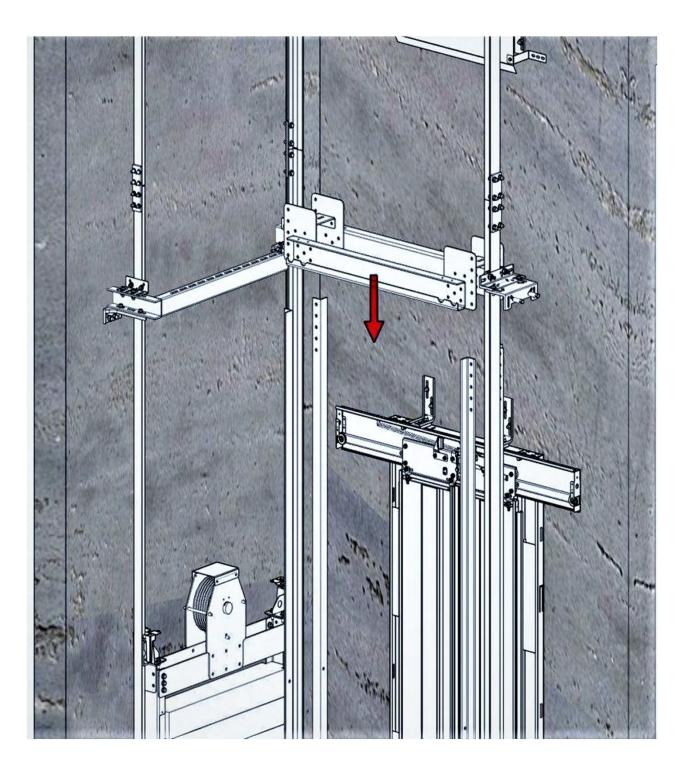
Secure the brackets to the lower suspension with bolts and nuts.



No	Part Name	Qty
3	Bracket	4
5	DIN 6921 Flanged Bolt M12X30	16
6	DIN 6923 Flanged Nut M12	16



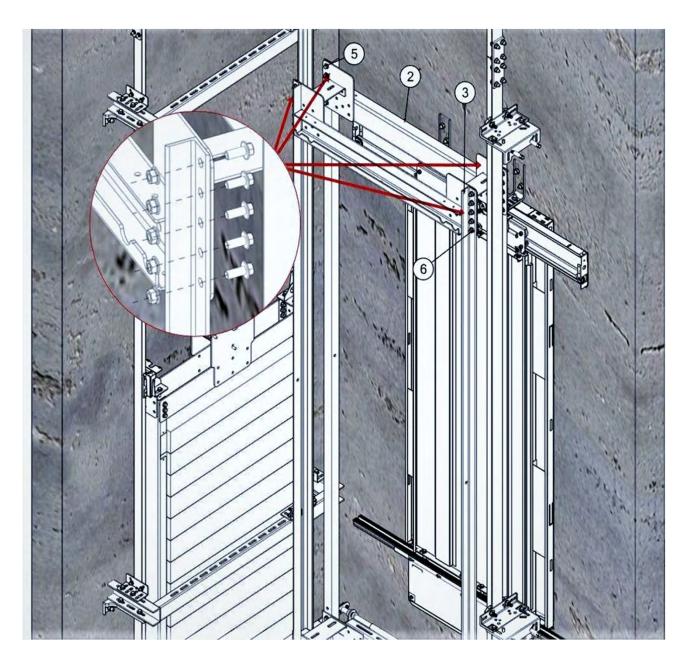
## 11.6 Placement of Upper Suspension





## 11.7 Mounting of Upper Suspension on Corner Brackets

Secure the brackets to the upper suspension with bolts and nuts

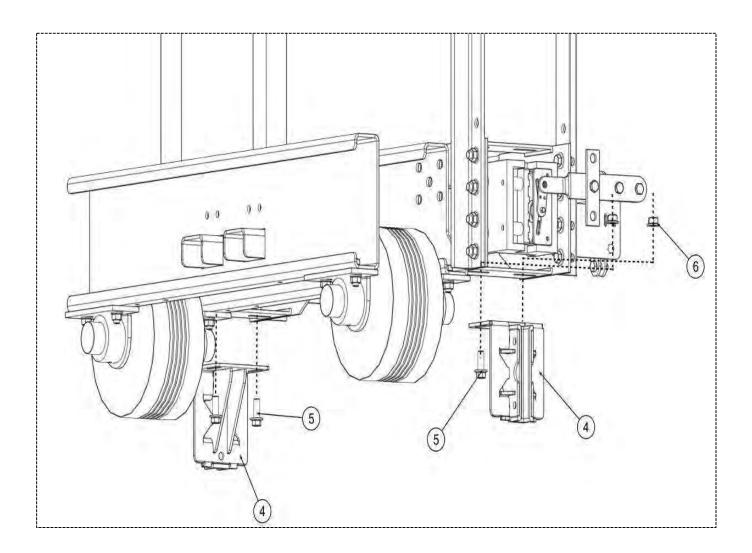


No	Part Name	Qty
2	Top Suspension	1
3	Bracket	4
5	DIN 6921 Flanged Bolt M12X30	20
6	DIN 6923 Flanged Nut M12	20



### 11.8 Sub-Suspension Mounting of the Skates

Secure the skates to the lower suspension with bolts and nuts. Install the skate with a 1 mm gap between the skate and the guide rail.

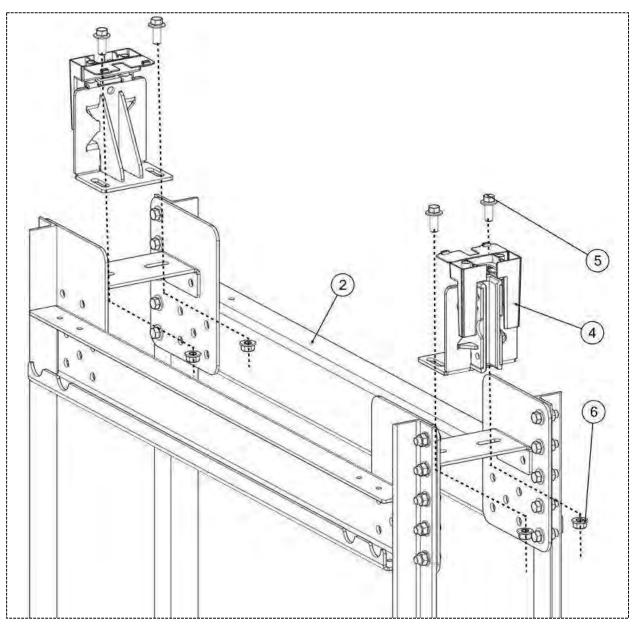


No	Part Name	Qty
4	Skate	2
5	DIN 6921 Flanged Bolt M12X30	4
6	DIN 6923 Flanged Nut M12	4



### 11.9 Cabin Guide Rail Shoes Mounting

Secure the skates to the lower suspension with bolts and nuts. Install the skate with a 1 mm gap between the skate and the guide rail.

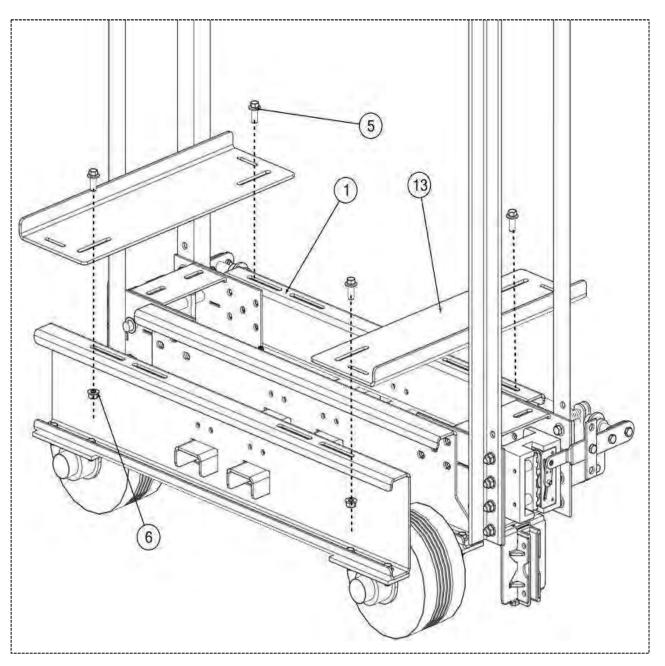


No	Part Name	Qty
2	Top Suspension	1
4	Skate	2
5	DIN 6921 Flanged Bolt M12X30	4
6	DIN 6923 Flanged Nut M12	4



## 11.10 Lower Suspension Mounting of Car Stabilizing Sheet

Secure the car fixing plates to the lower suspension with bolts and nuts.

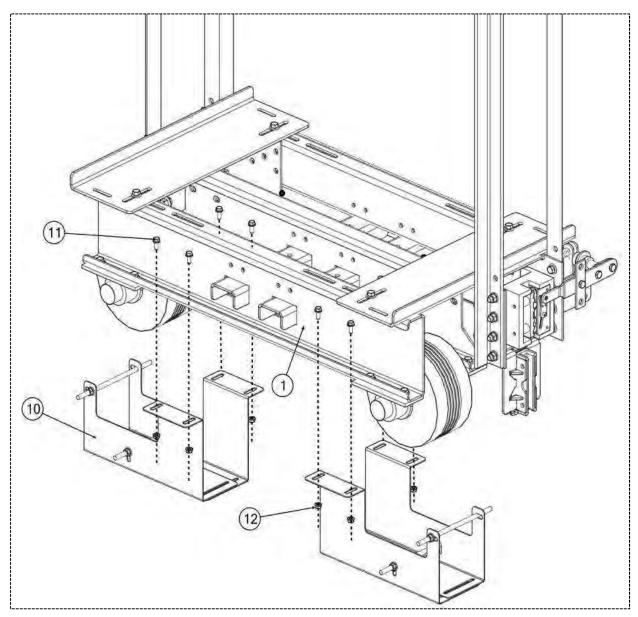


No	Part Name	Qty
1	Lower Suspension	1
5	DIN 6921 Flanged Bolt M12X30	4
6	DIN 6923 Flanged Nut M12	4
13	Cabin Fixpunt Sheet	2



#### **11.11 Mounting of Pulley Protection Sheet With Lower Suspension**

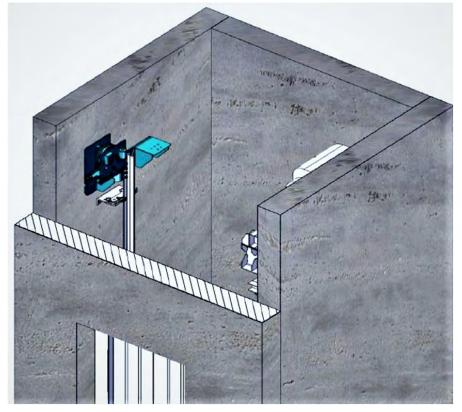
It is recommended that the system should be installed after steel wire rope assembly. Secure the hoop retaining plates to the lower suspension with bolts and nuts.

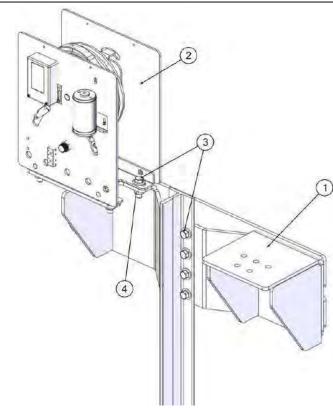


No	Part Name	Qty
1	Lower Suspension	1
10	Pulley Protection	2
11	DIN 6921 Flanged Bolt M8x20	8
12	DIN 6923 Flanged Nut M8	8



## 12. OVER SPEED GOVERNER (OSG) MOUNTING



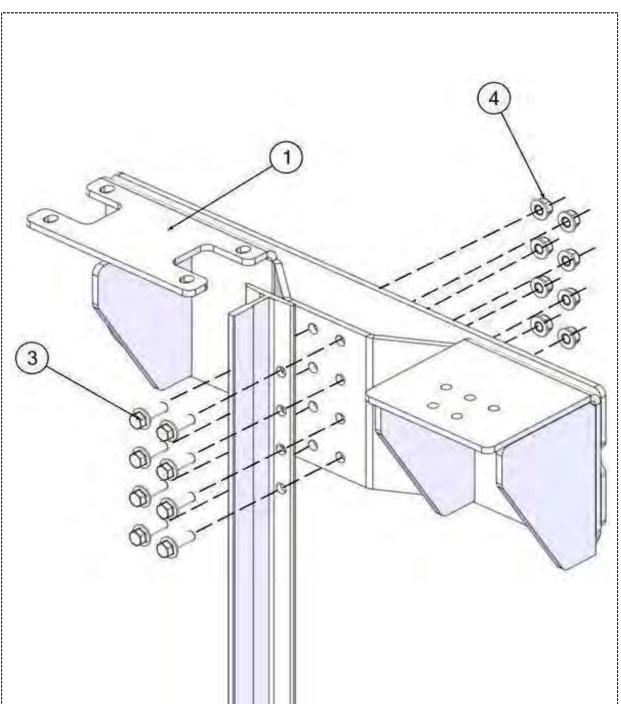


No	Part Name	Qty
1	Over Speed GovernerCase	1
2	Over Speed Regulator	1
3	DIN 6921 Flanged Bolt M12x35	12
4	DIN 6923 Flanged Nut M12	12



## 12.1 Over Speed Governer Case Installation

Secure the overspeed governor case with bolts and nuts on the cabin guide rail.



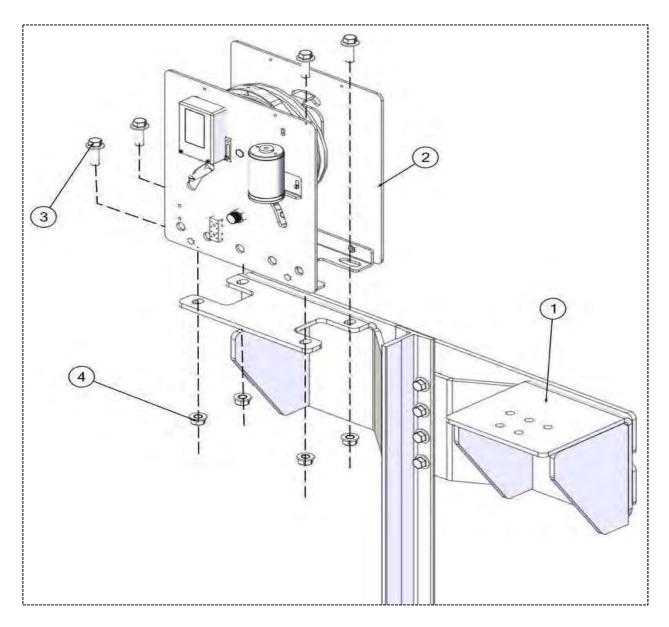
No	Part Name	Qty
1	Over Speed Governer Case	1
3	DIN 6921 Flanged Bolt M12x35	8
4	DIN 6923 Flanged Nut M12	8



### 12.2 Over Speed Governer Assembly

Use the Governerinstallation guide located in the Governerbox for detailed information.

Secure the overspeed governor to the Governercase with bolts and nuts.

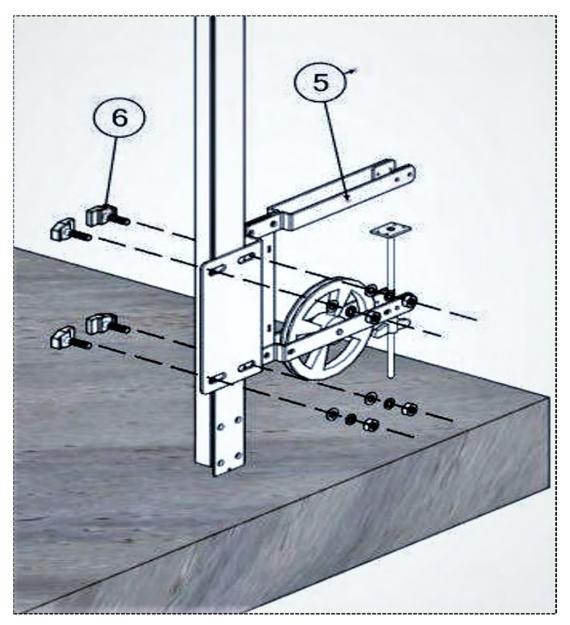


No	Part Name	Qty
1	Over Speed GovernerCase	1
2	Over Speed Regulator	1
3	DIN 6921 Flanged Bolt M12x35	4
4	DIN 6923 Flanged Nut M12	4



#### 12.3 Installation of Governer Rope Stretcher

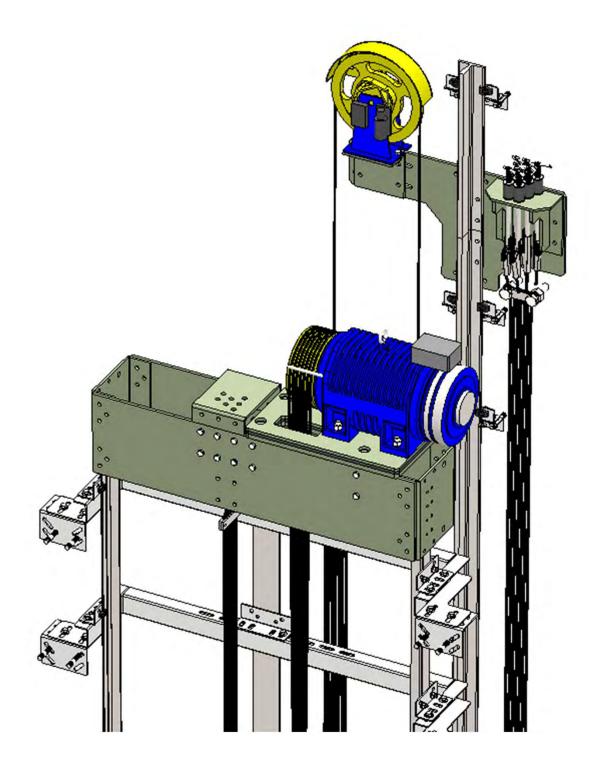
Secure the Governerrope tensioning pulley with casting tabs on the cabinet guide rail. Do not forget to remove the safety screw at the elevator brake lever after Governerrope connections are made.



No	Part Name	Qty
5	M2 Casting Nail Group	4
6	GovernerRope Stretcher	1



### **13. HANG ROPE CONNECTIONS**

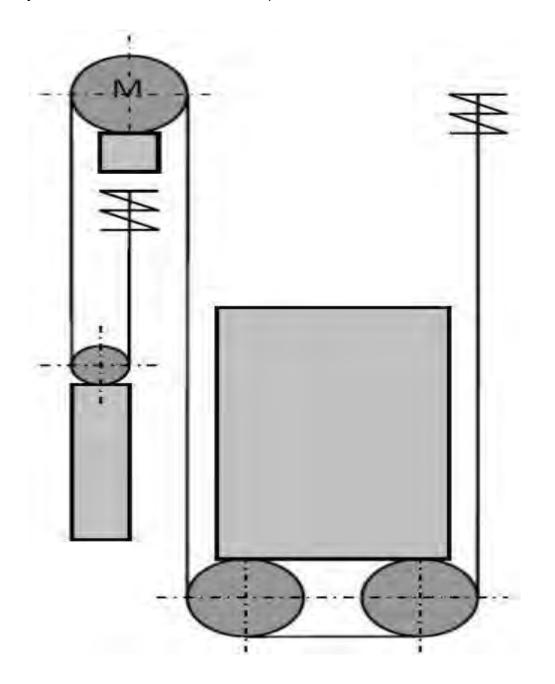




#### 13.1 Determination of Steel Wire Rope Length

Bring the counterweight only to the contact position without giving weight to the tampon. Lift the car frame with the electric hoist system up to the top floor level. Attach the steel ropes to the carcasses at these levels.

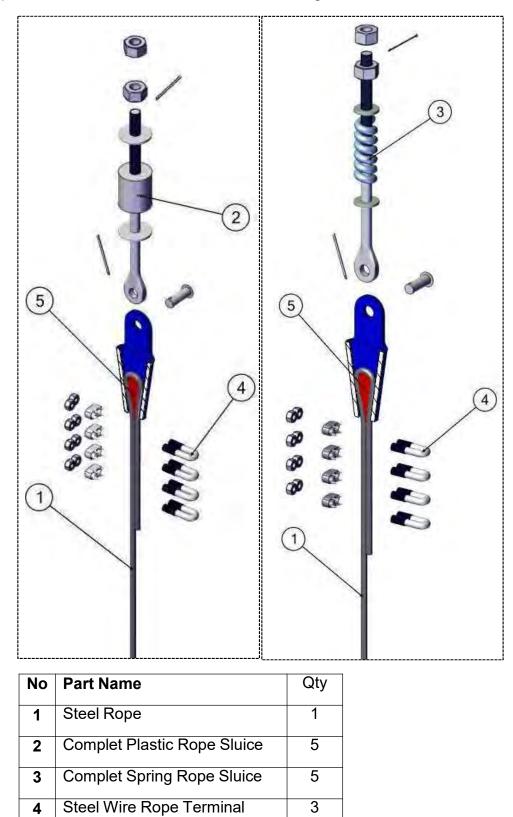
It is advisable to check that the engine drive pulleys without suspension pulleys have the same axle by cutting the thread from the third channel of the gearless motor drive pulley before the system is connected to the steel rope.





### 13.2 Assembly of Spring and Plastic Rope Bottles

Be careful that there is a plastic rope infusion on the Governerside of the system and a spring rope infusion on the side of the motor without gear.



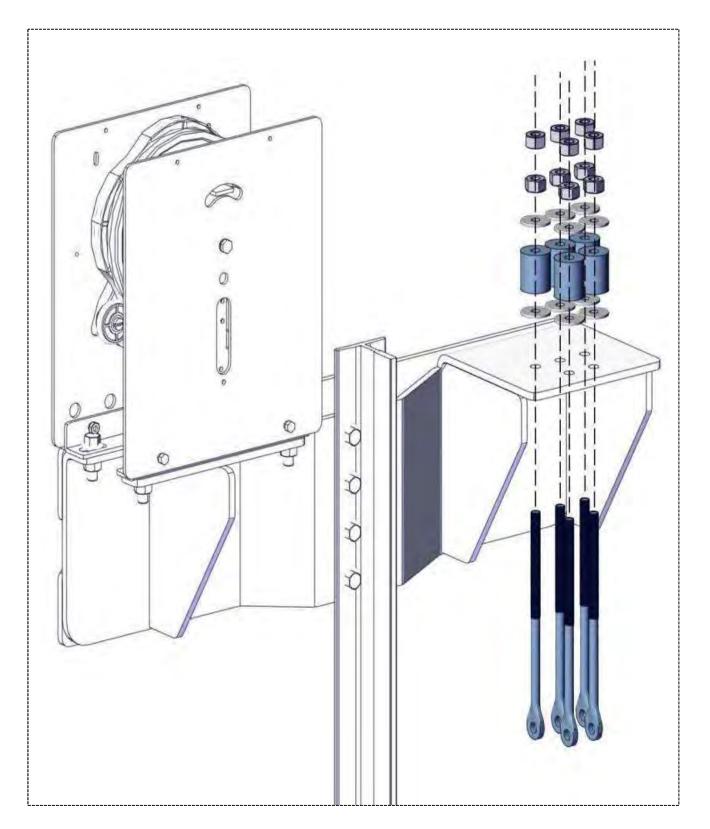
1

Rope Chamfer

5

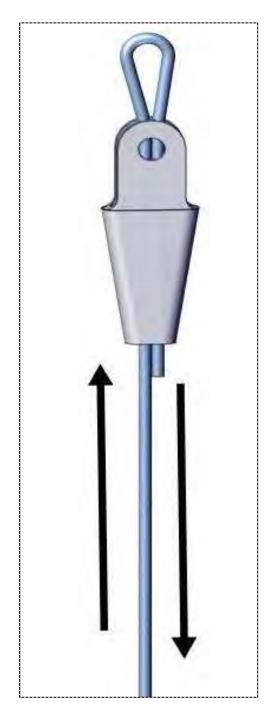


## 13.3 Installation of Plastic Rope Bottles into GovernerCase





## 13.4 Connection of Steel Wire Rope to Rope Socket



The condition of the ropes should be checked.

Consider ropes worn out and torn off.

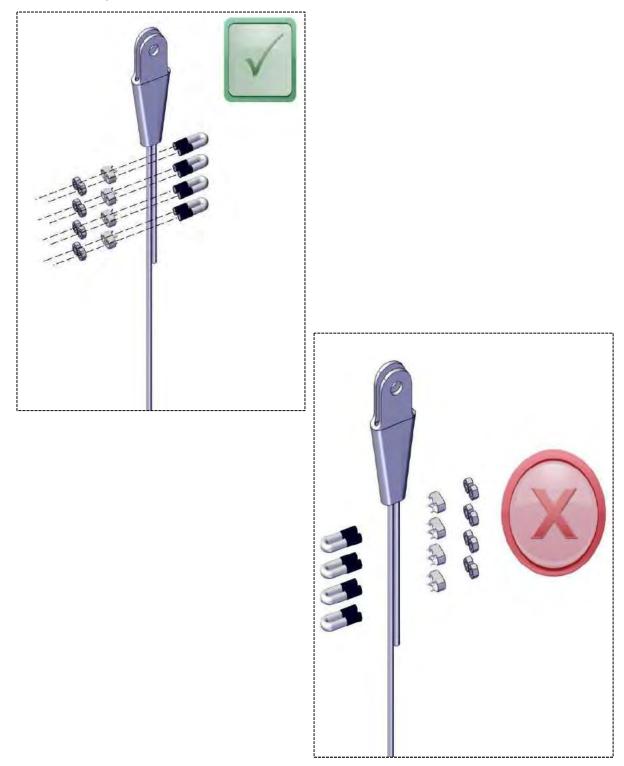
The wear at 1 meter of the rope requires the entire rope to change.





#### 13.4 Installation of Steel Half Terminals

Pay attention to the terminal connection direction of the steel rope so that it does not come off the rope terminals.

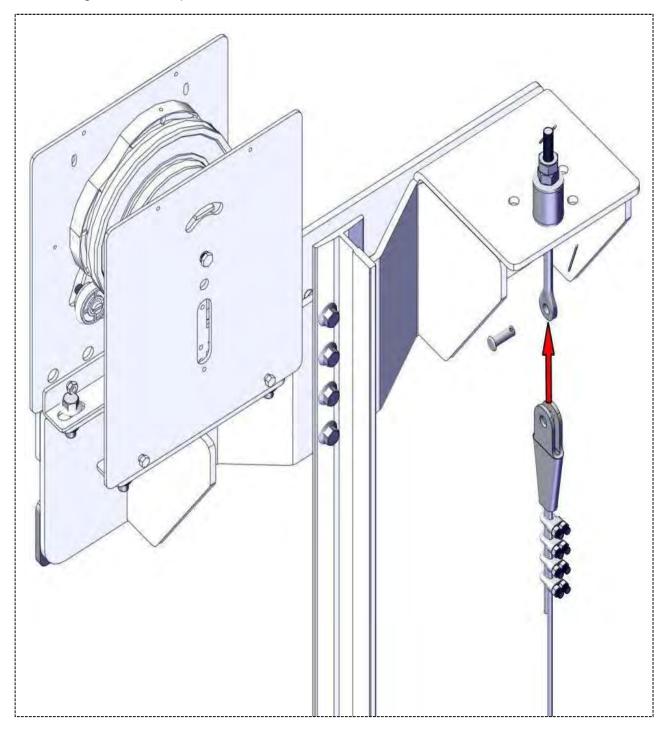






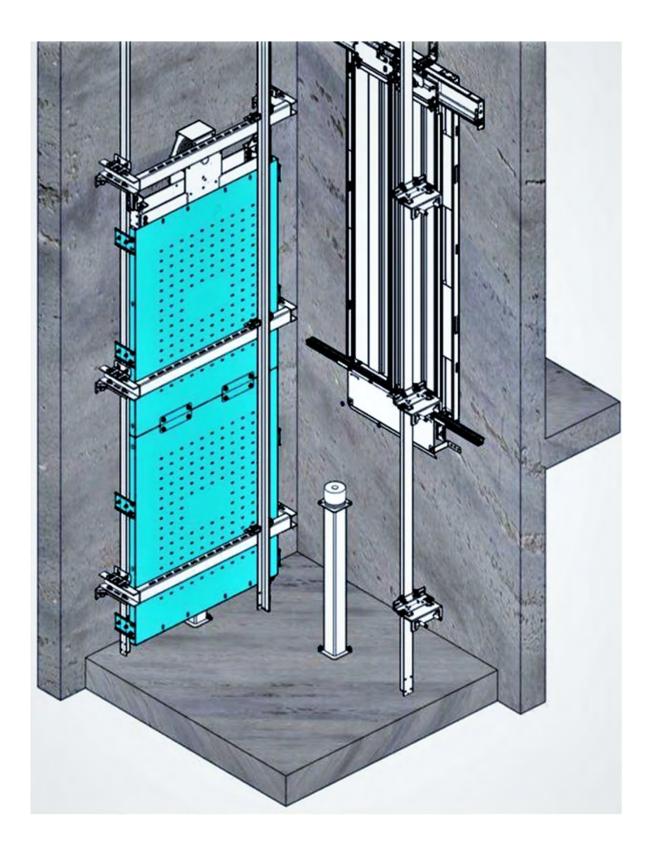
## 13.5 Steel Wire Rope Governer Installation

Do not forget to wear rope bottle coins!





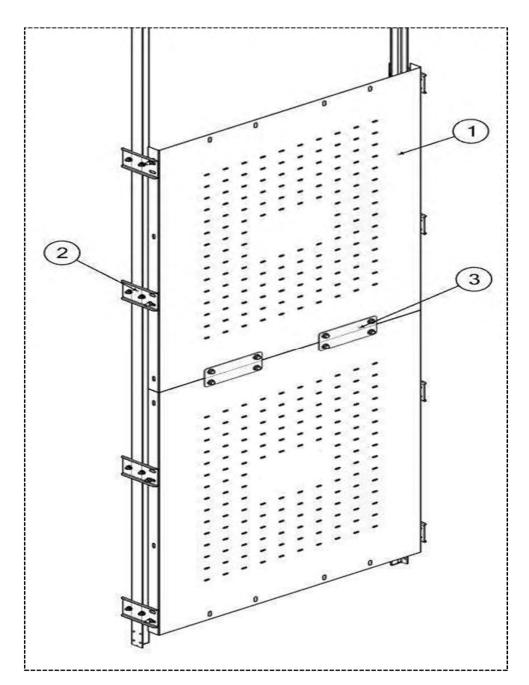
## 14. SEPARATOR INSTALLATION





### 14.1 Seperator Parts

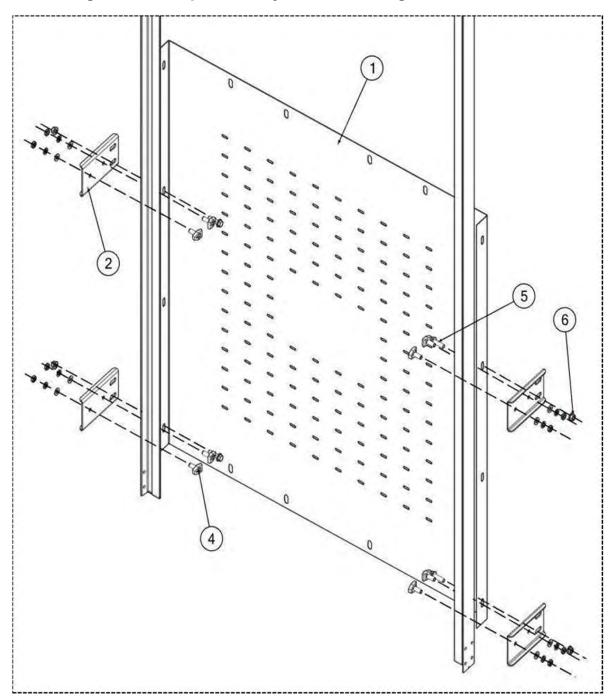
The separator must be installed in such a way that the maximum height from the bottom of the well is 300 mm and the height of the protective sheet is minimum 2500 mm. (EN 81)



No	Part Name	Qty
1	Seperator	2
2	Side Fixpunt Sheet	8
3	Middle Fixpunt Sheet	2



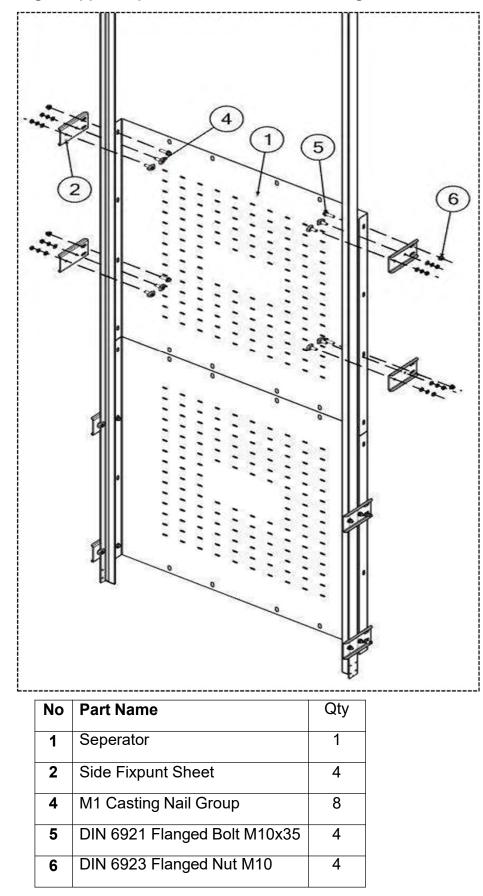
## 14.2 Mounting of Lower Seperator Tray on Counterweight Guide Rails



No	Part Name	Qty
1	Seperator	1
2	Side Fixpunt Sheet	4
4	M1 Casting Nail Group	8
5	DIN 6921 Flanged Bolt M10x35	4
6	DIN 6923 Flanged Nut M10	4

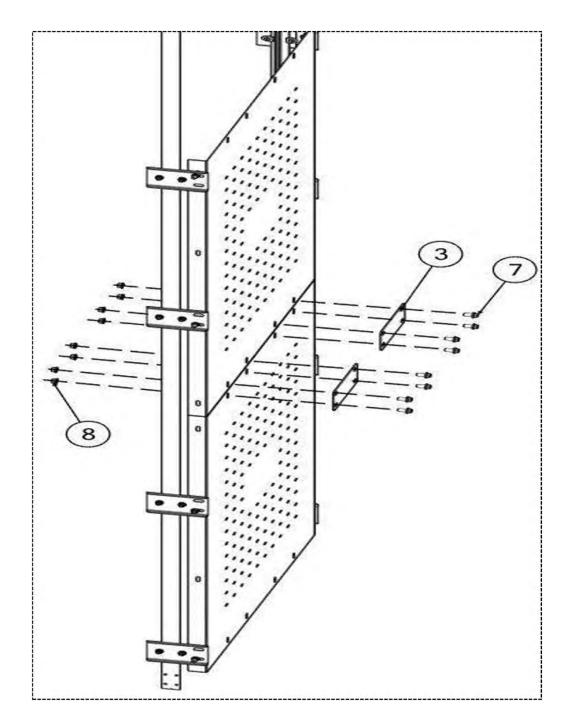


### 14.3 Mounting of Upper Seperator Sheet on Counterweight Guide Rails





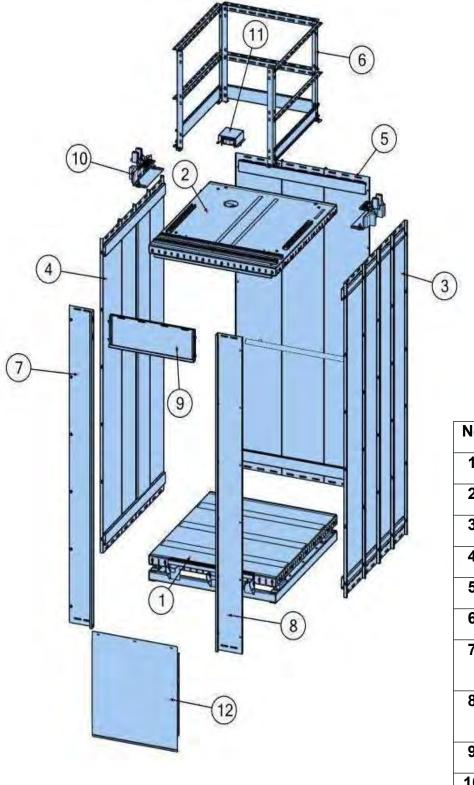
## 14.4 Installation of Medium Support Sheet



No	Part Name	Qty
3	Middle Support Sheet	2
7	DIN 6921 Flanged Bolt M12x25	8
8	DIN 6923 Flanged Nut M12	8



### 15.1 Cabin Parts

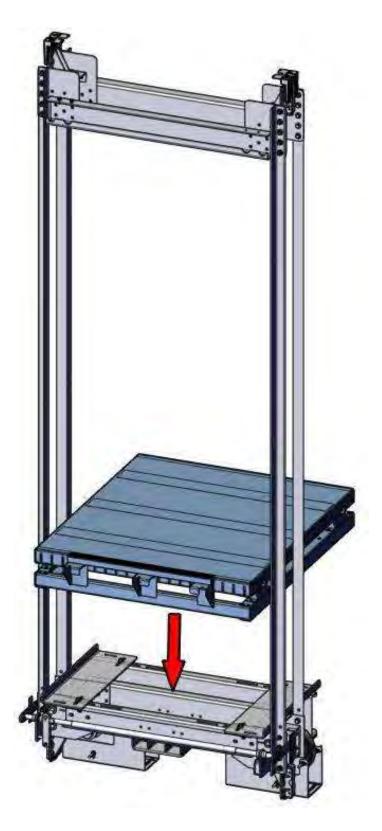


No	Part Name	Qty
1	Cabin Base	1
2	Ceiling	1
3	Right Panel	1
4	Left Panel	1
5	Rear Panel	1
6	Railing	1
7	Introduction Left Panel	1
8	Introduction Right Panel	1
9	Lintel	1
10	Cabin Fixpunt Sheet	2
11	Ventilation Fan	1
12	Skirt Sheet	1



## 15.2 Lower Suspension Placement of Cabinet Base

At the begining you must put the cabin floor in the suspension.





## 15.3 Cabin Base Assembly

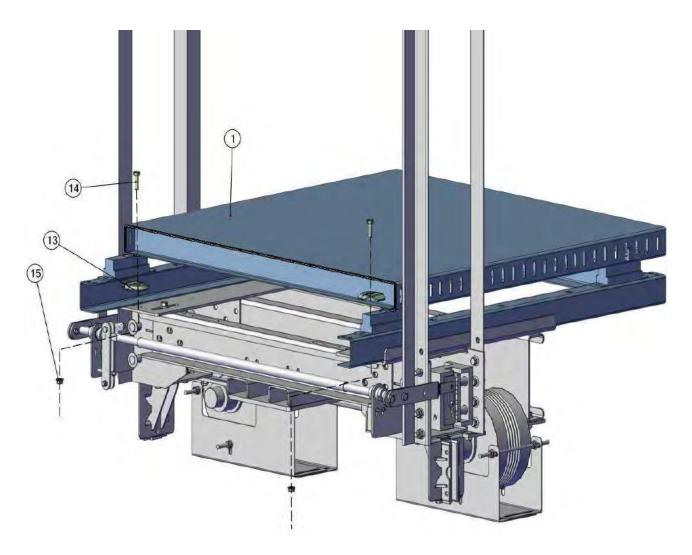
After placing the car base in the suspension, check to see if it is on a balance.





### 15.4 Mounting of Cabinet Bottom Front Suspension to Lower Suspension

Once you have placed the cabin floor, secure the cabin floor to the lower suspension with two sheet nails from the front.

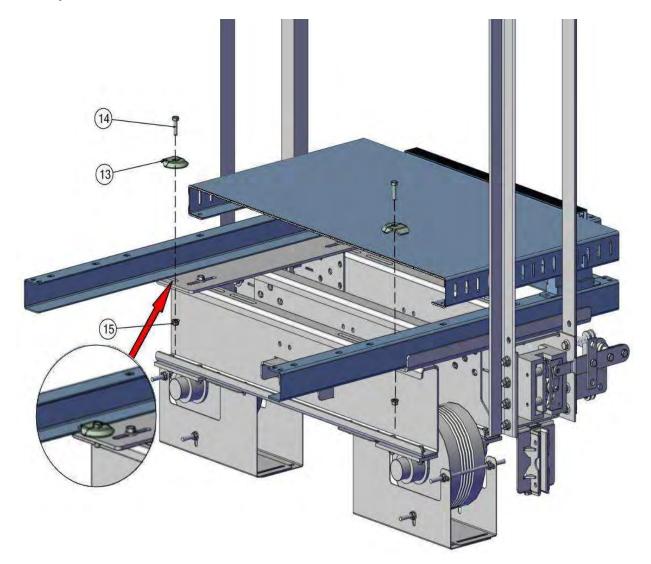


No	Part Name	Qty
1	Cabin Base	1
13	Sheet Nail	2
14	DIN 6921 M10x35 Bolt	2
15	DIN 6923 Flanged Nut M10	2



### 15.5 Mounting of the floor cabin through on back side suspension

Once you have secured the car base from the front, do the same for the rear.

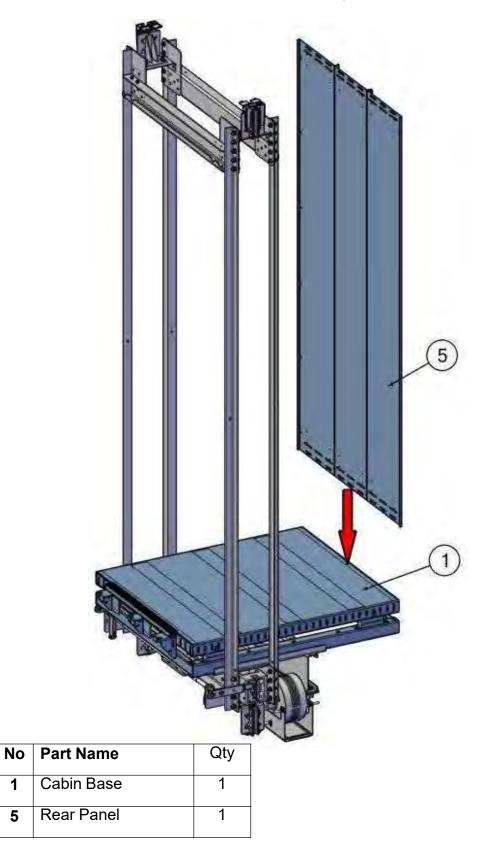


No	Part Name	Qty
13	Sheet Nail	2
14	DIN 6921 M10x35 Bolt	2
15	DIN 6923 Flanged Nut M10	2



### 15.6 Placement of Rear Panel on Cabin Base

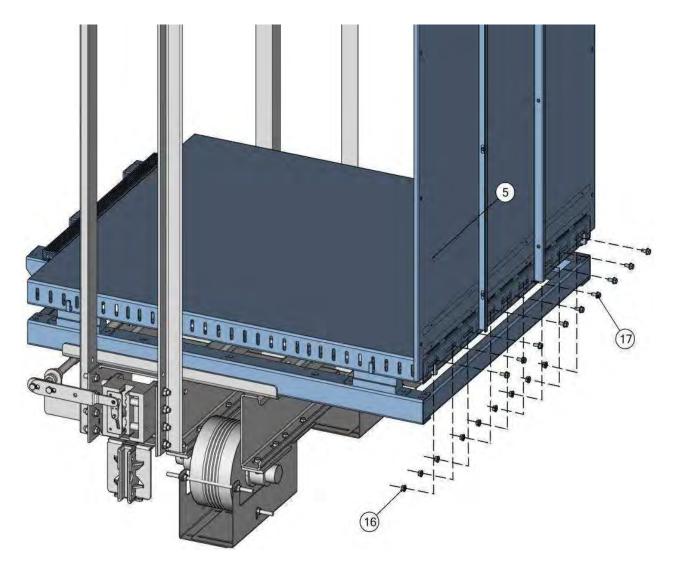
Place it in the tabs on the cabinet base with the rear panel.





## 15.7 Mounting of Rear Panel to Cabin Base

Secure it with bolts and nuts to the base of the cab with rear panel.

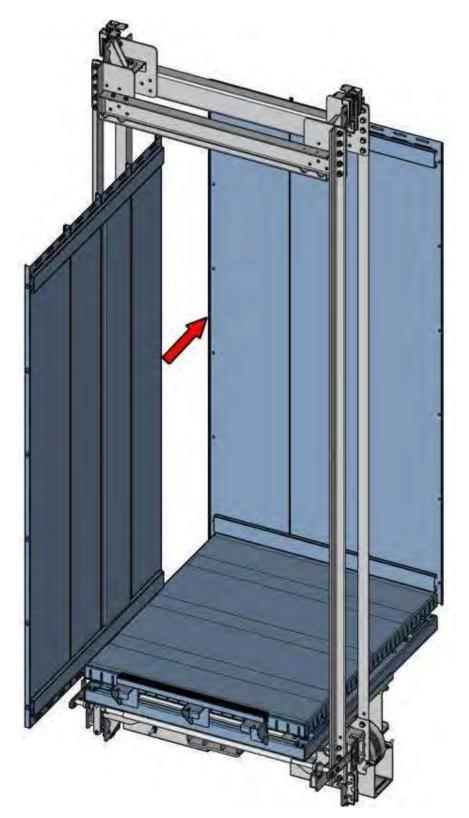


No	Part Name	Qty
5	Rear Panel	1
16	DIN 6923 Flanged Nut M8	9
17	DIN 6921 Flanged Bolt M8x16	9



### 15.8 Placement of the Left Panel on the Floor of the Cabin

Place it in the tabs on the floor of the cabin with the left panel.

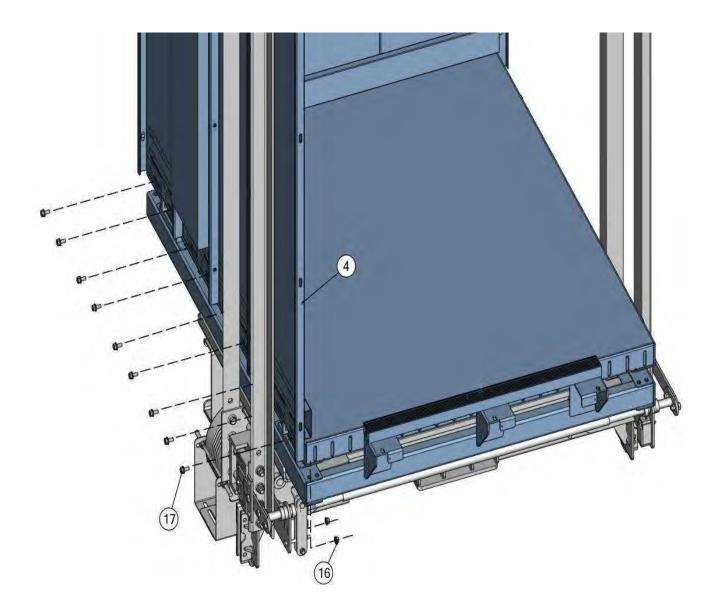






### 15.9 Mounting the Left Panel to the Cabin Base

Please fix the left panel to floor with nuts and screws

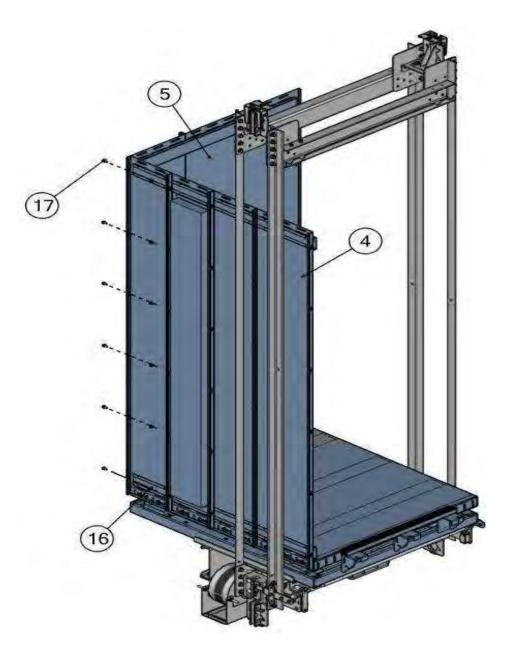


No	Part Name	Qty
4	Left Panel	1
16	DIN 6923 Flanged Nut M8	9
17	DIN 6921 Flanged Bolt M8x16	9



#### 15.10 Joining the Rear and Left Panel

Once the left panel is secured to the base of the cabinet, secure it from the side using bolts and nuts with rear panel and left panel.

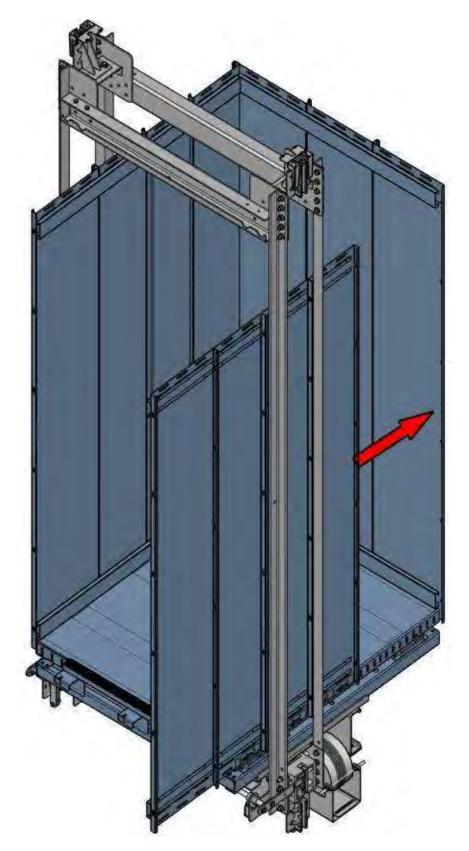


No	Part Name	Qty
5	Rear Panel	1
4	Left Panel	1
16	DIN 6923 Flanged Nut M8	6
17	DIN 6921 Flanged Bolt M8x16	6



### 15.11 Placement of Right Panel on Cabin Base

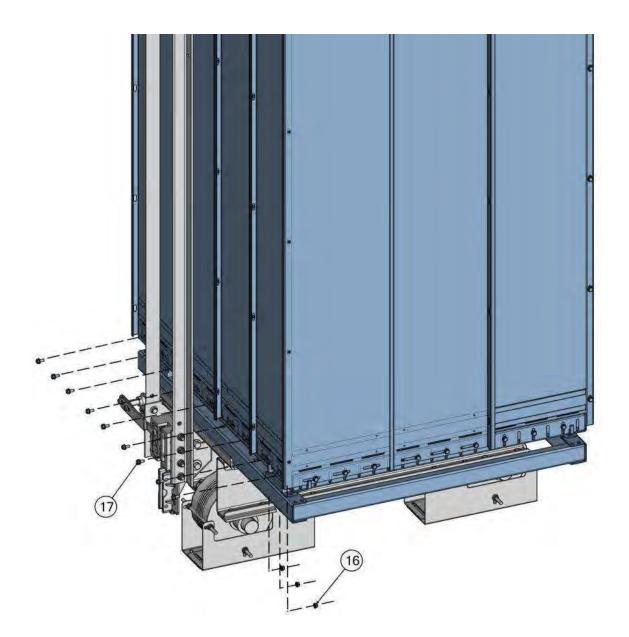
Place it in the nails on the cabinet base with right panel.





### 15.12 Mounting of Right Panel to Cabin Base

Place it in the nails on the cabinet base with right panel. Then secure it to the base of the cab with bolts and nuts and right panel.

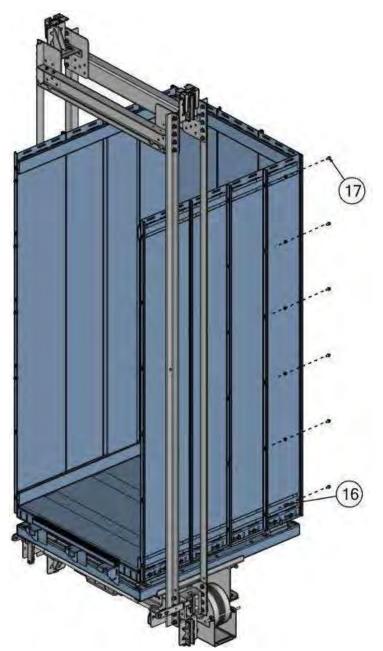


No	Part Name	Qty
16	DIN 6923 Flanged Nut M8	9
17	DIN 6921 Flanged Bolt M8x16	9



### 15.13 Joining the Rear and Right Panel

Once the right panel is secured to the base of the cabinet, secure it from the side using bolts and nuts with rear panel and right panel. After installation, check that the tops of the panes are at the same level.

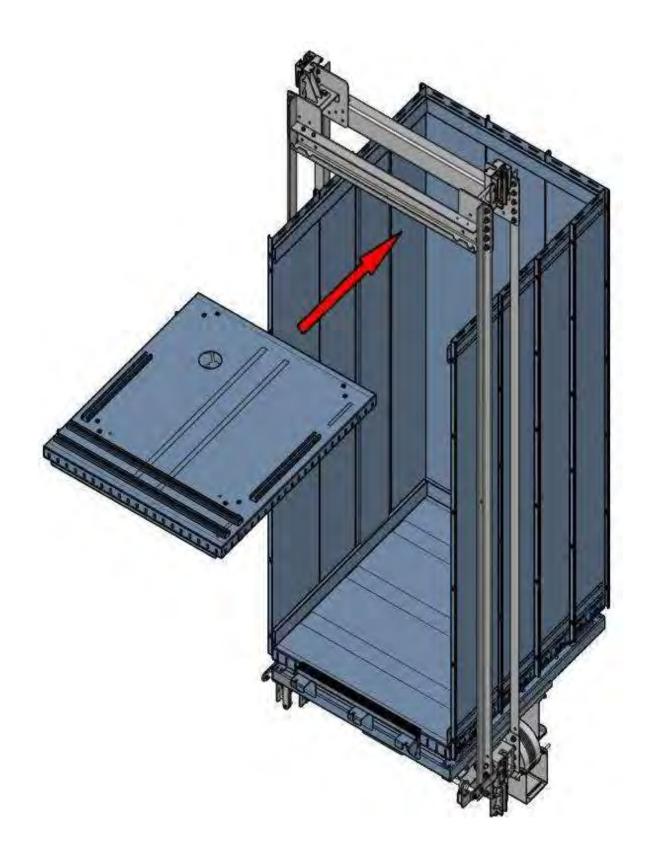


No	Part Name	Qty
16	DIN 6923 Flanged Nut M8	6
17	DIN 6921 Flanged Bolt M8x16	6





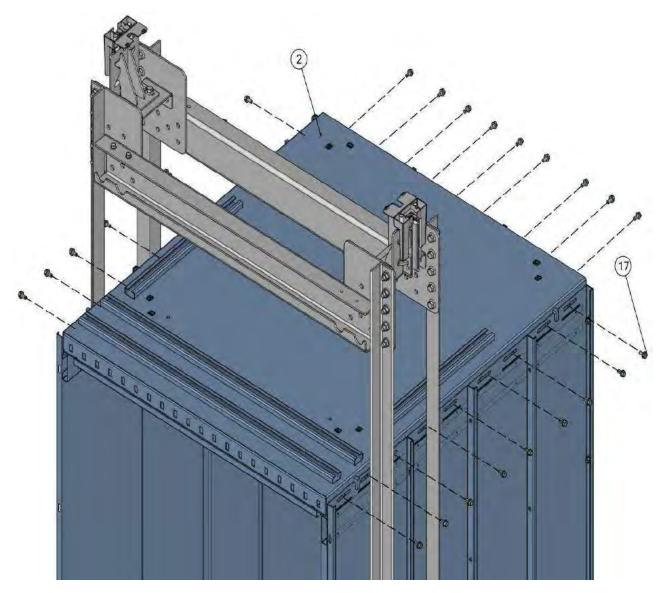
### 15.14 Placement of Cabinet Roof on Panels





### 15.15 Mounting Panels on the Floor

Once the right, left and rear panels are assembled, the cabinet ceiling is assembled. Secure the cab roof with bolts. M8 caged nuts, tassel; are assembled from production.

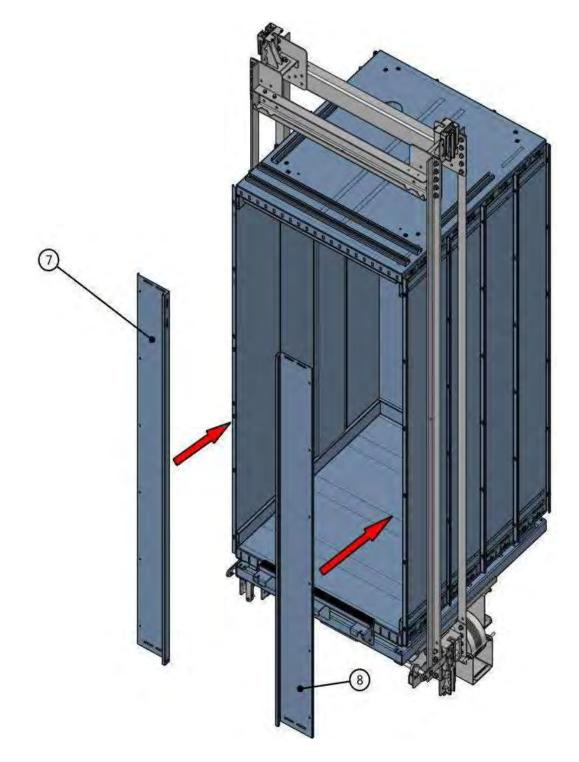


No	Part Name	Qty
2	Ceiling	1
17	DIN 6921 Flanged Bolt M8x16	27





## 15.16 Placement of Entry Panels

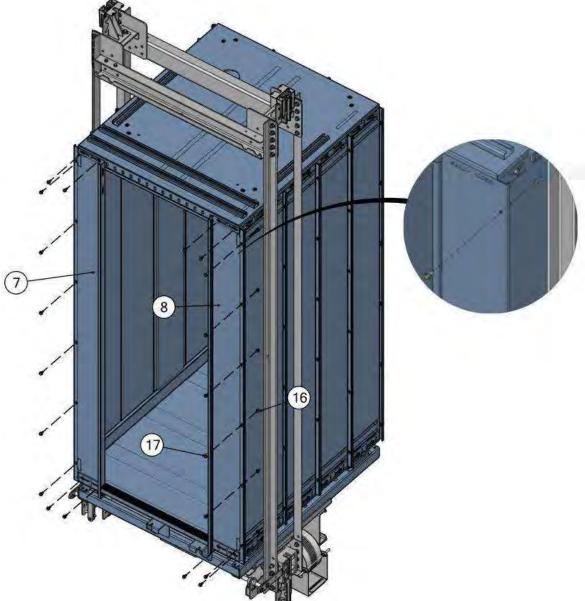


No	Part Name	Qty
7	Entrance of Left Panel	1
8	Entrance of right panel	1



### 15.17 Installation of Input Panels

Before installing the access panels, make sure that the upper levels are in the same level as the other panels. Then install the right inlet panel and left inlet panel using nuts and bolts.

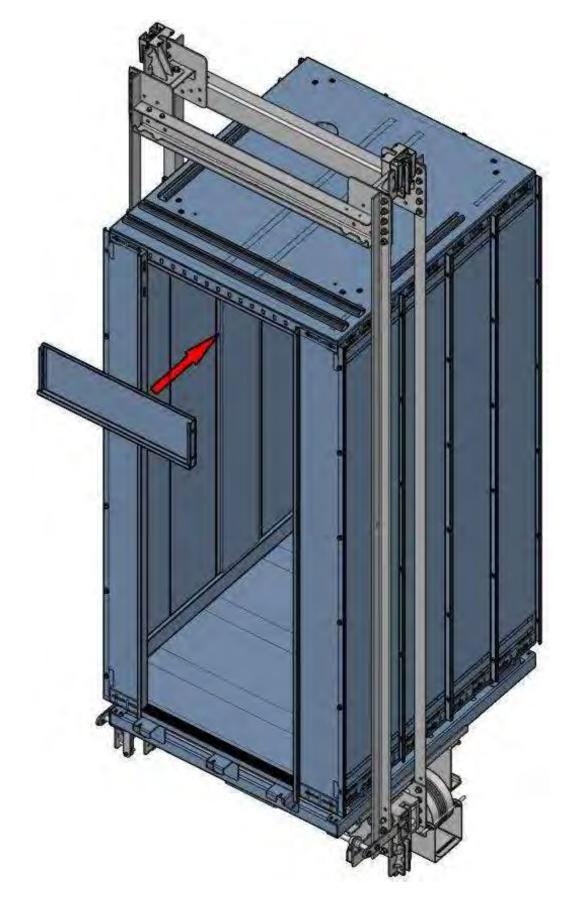


No	Part Name	Qty
7	Entrance Left Panel	1
8	Entrance Right Panel	1
16	DIN 6923 Flanged Nut M8	20
17	DIN 6921 Flanged Bolt M8x16	20





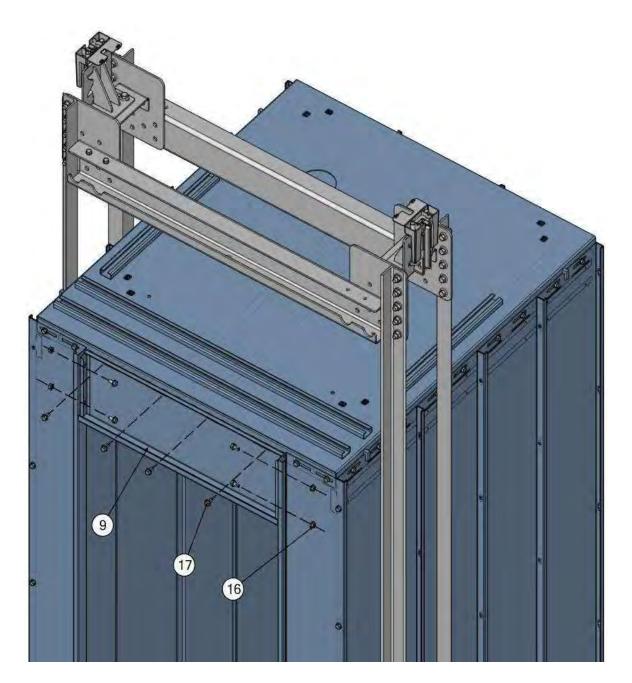
# 15.18 To Mounting Upper Sill





#### **15.19 Upper Threshold Assembly**

Secure the upper threshold between the right and left inlet panes and the cabinet roof using the nuts and bolts as shown in the picture. Before tightening the bolts, check whether your upper thigh is on the balance.



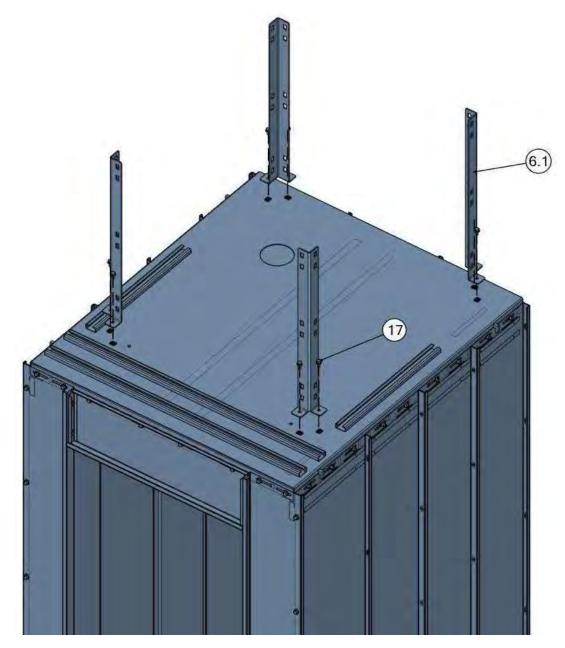
No	Part Name	Qty
9	Lintel	1
16	DIN 6923 Flanged Nut M8	4
17	DIN 6921 Flanged Bolt M8x16	8



## 15.20 Installation of Railing Poles

Fix the guard posts on the ceiling with bolts, which are visible on the ceiling.

M8 caged nuts, tassel; are assembled from production.

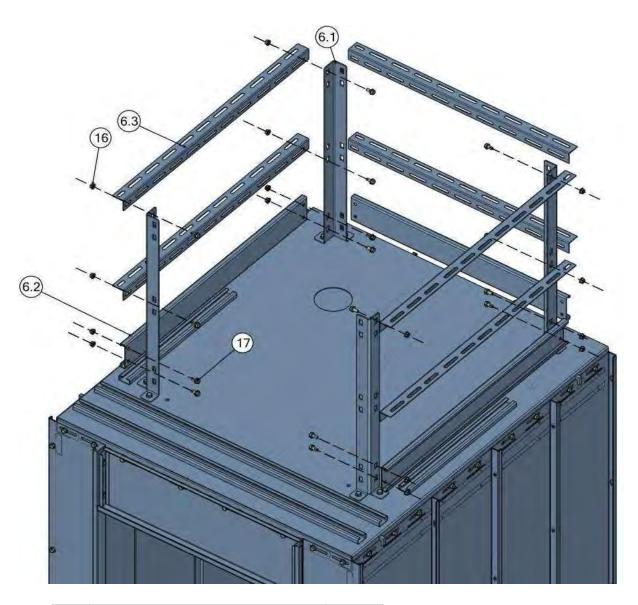


No	Part Name	Qty
6.1	Guardrail Pillar	4
17	DIN 6921 Flanged Bolt M8x16	8



## 15.21 Mounting of Railing Support and Kickers

After installing the railing poles, fix the kickstand and the supporting rails to the railing poles using bolts and nuts.

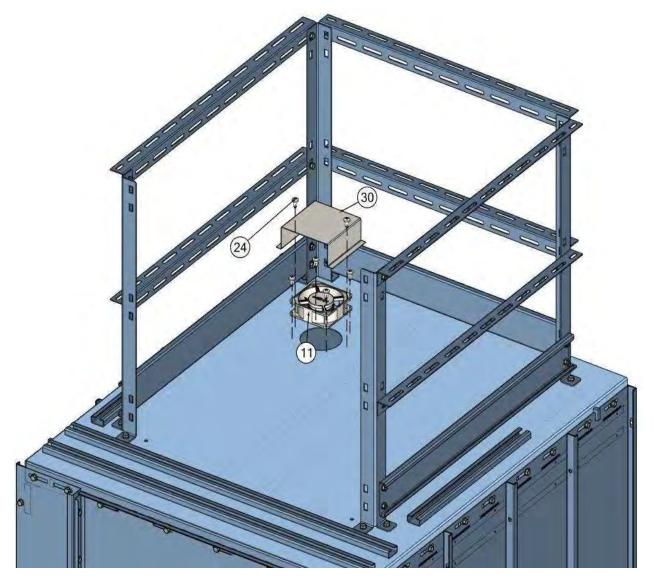


No	Part Name	Qty
6.1	Guardrail Pillar	4
6.2	Kickplate	3
6.3	Support Sheet	6
16	DIN 6923 Flanged Nut M8	24
17	DIN 6921 Flanged Bolt M8x16	24



#### 15.22 Ventilation Fan Installation

Secure the ventilation fan to the roof of the cabin using four metal screws and a drill. Then fix the fan protection sheet to the roof of the cabin using two

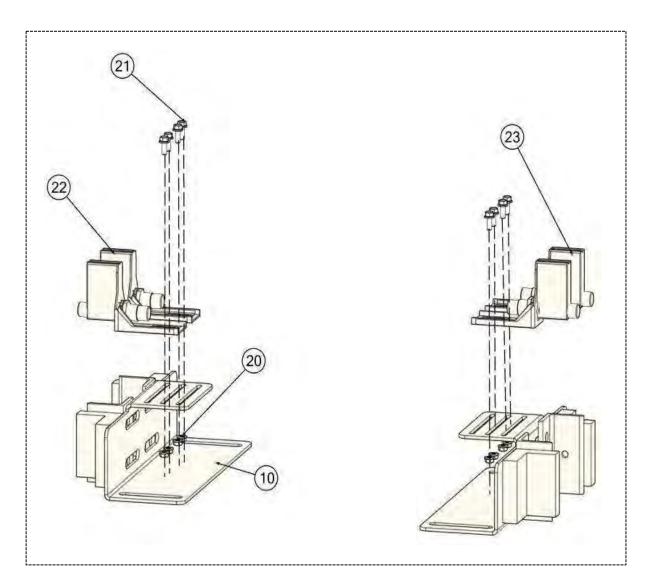


No	Part Name	Qty
11	Fan	1
24	3,9x13 YSB Screw	6
30	Fan Protection Sheet	1





## 15.23 Mounting of Mono Stabil and Bi-Stabil Switches on Cabin Fixing Plates

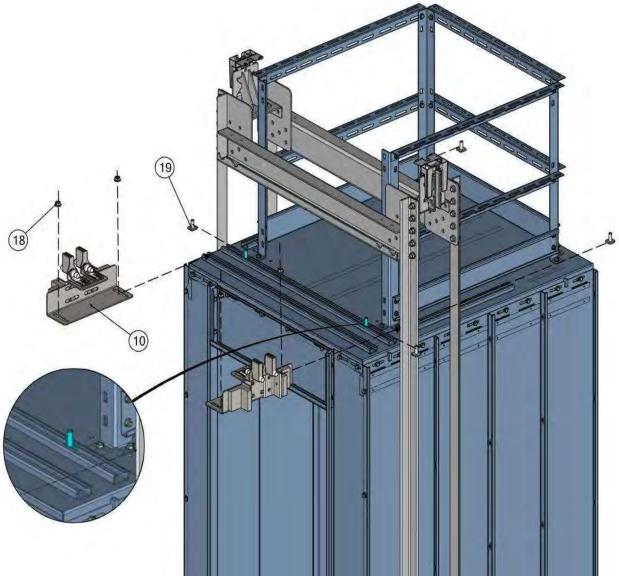


No	Part Name	Qty
10	Cabin Fixpunt Sheet	2
20	DIN 6923 Flanged Nut M6	8
21	DIN 6921 Flanged Bolt M6x16	8
22	Mono Stabil Switch	2
23	Bi-Stabil Switch	2



#### 15.24 To Mounting Cabin Fixpunt of Sheet

During mounting of the car fixing plates, place two M12x30 Square Bolts in the top of the cabin. It should be used when mounting the cabinet door, when mounting the cabinet door mechanism.

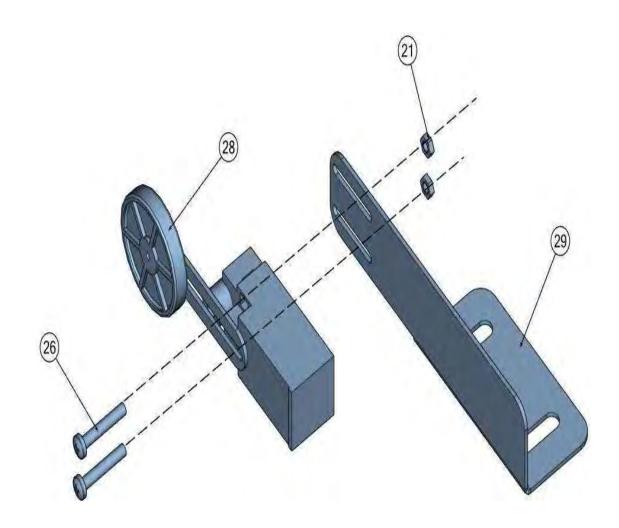


No	Part Name	Qty
10	Cabin Fixpunt of Sheet	2
18	DIN 6923 Flanged Nut M12	4
19	M12x30 Square Bolt	6





# 15.25 Limit Switch Arms Mounting

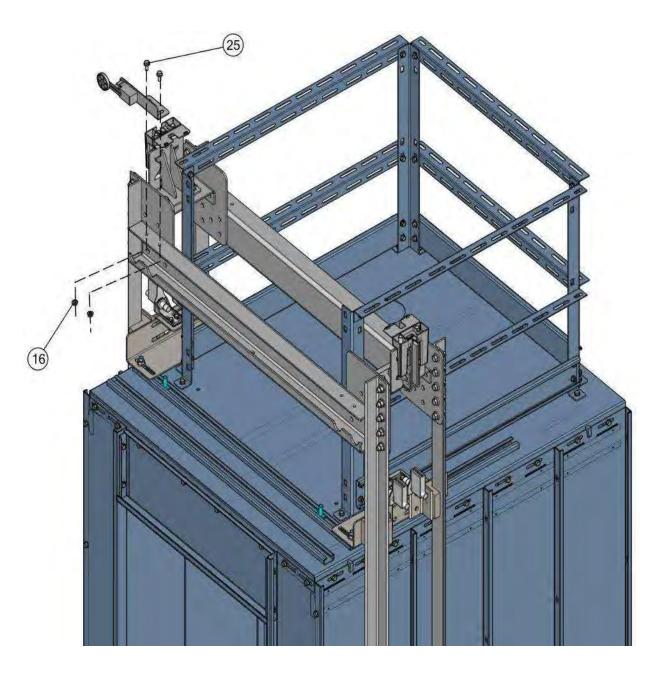


No	Part Name	Qty
21	ISO 4036 M5 Nut	2
26	ISO 7045 M5x30 Bolt	2
28	Limit Switch	1
29	Switch Fixpunt Sheet	1



## 15.26 Limit Switch Arms Mounting Upper of Cabin

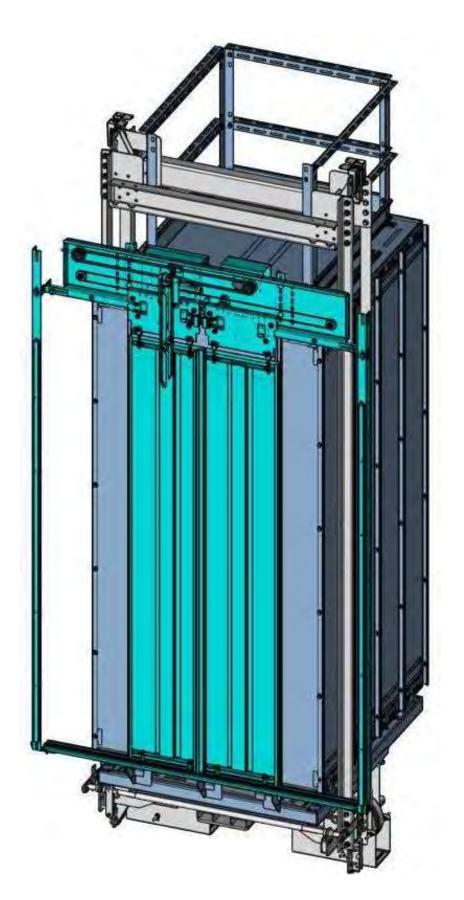
Secure the limit switch to the upper suspension with bolts and nuts.



No	Part Name	Qty
16	DIN 6923 Flanged Nut M8	2
25	DIN 6921 Flanged Bolt M8x16	2

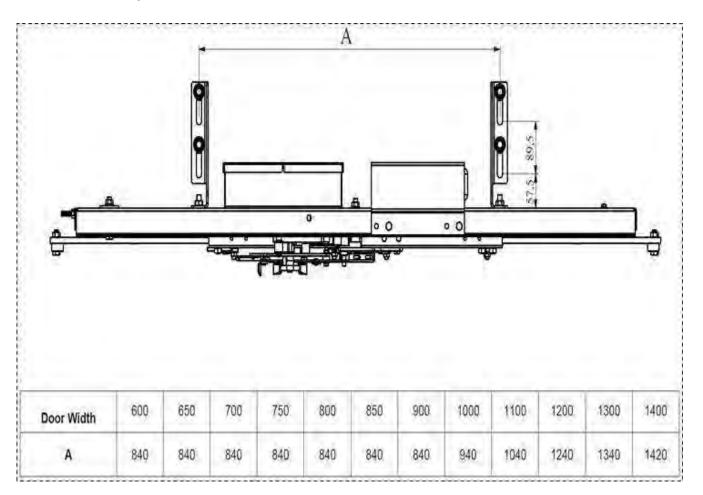


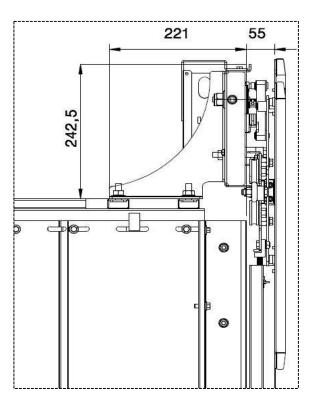
## 16. TO MOUNTING CABIN OF DOOR





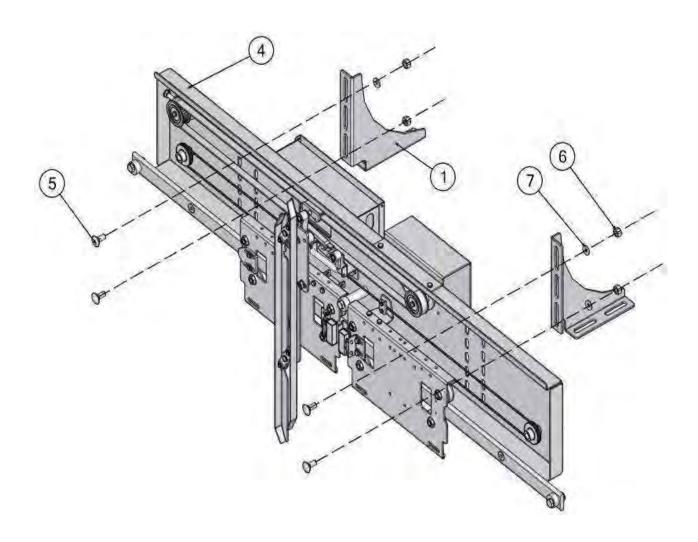
## 16.1 Cabin Operation Installation Brackets







# 16.2 To Mounting of The Cabin Brackets



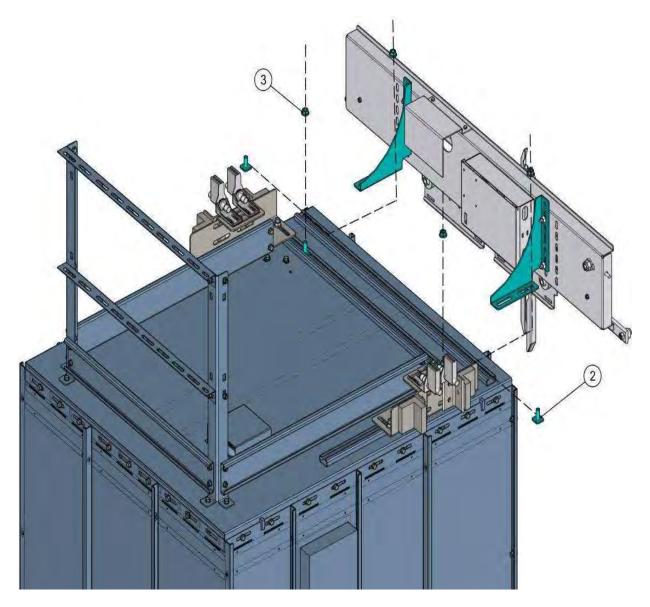
No	Part Name	Qty
1	Brackets	2
4	Cabin Mechanism	1
5	M10x25 YBDD Bolt	4
6	M10 Nut	4
7	5/6 Thick Plain Stamp 25x10.5x3 mm	4



## 16.3 To Mounting Mechanism of the Cabin to the Cabin

We had previously placed two square bolts in the skids above the cabin.

Now fix the cabinet mechanism by placing the other square bolts on the sleds.

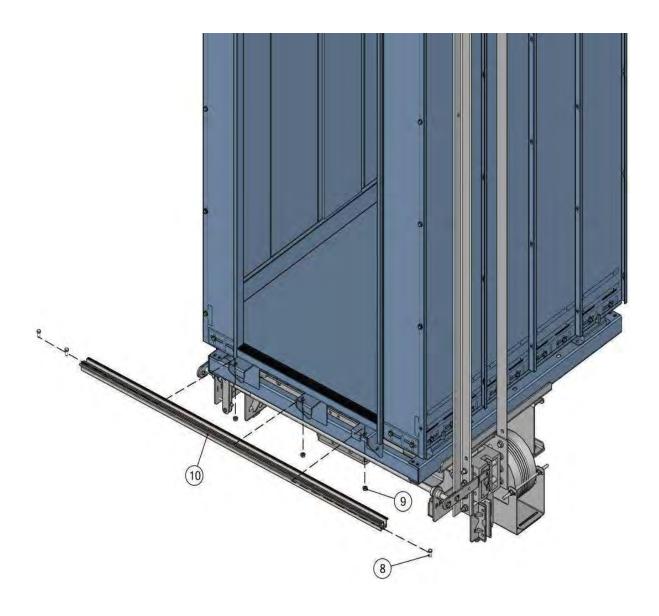


No	Part Name	Qty
2	M12x30 Square Bolt	4
3	DIN 6923 Flanged Nut M12	4



#### **16.4 To Mounting Threshold**

Secure it to the cabinet bottom brackets with the bottom bolt, bolts and nuts.



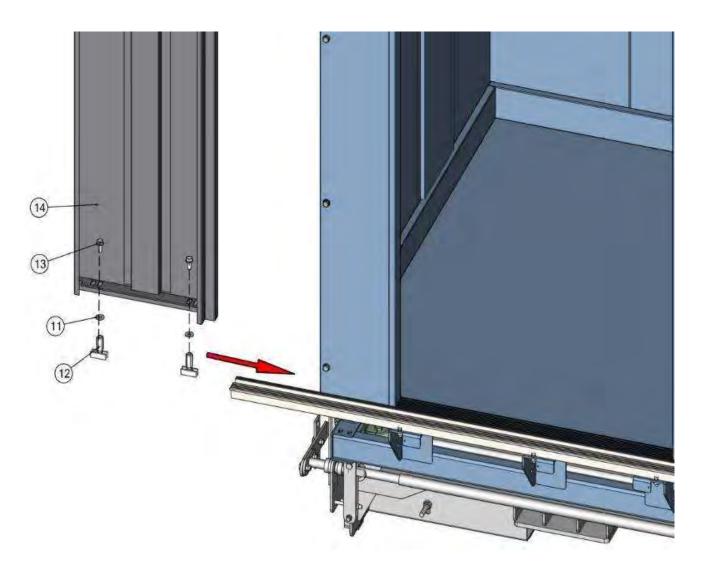
No	Part Name	Qty
8	DIN 6921 M8x20 Bolt	3
9	DIN 6923 Flanged Nut M8	3
10	Lower Threshold	1



#### 16.5 To Mounting Cabin Door Panels

Door panels can be adjusted in three axes.

Panels must be parallel to the lower threshold for the door to work comfortably and quietly.



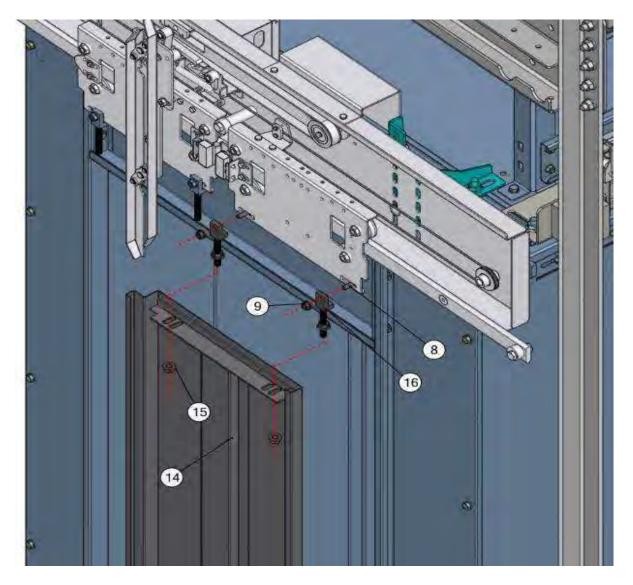
No	Part Name	Qty
11	3/8 Thin Flat Stamp 20x8.5x2.5 mm	4
12	Butterfly (Door Patten)	4
13	DIN 6921 Flanged Bolt M8x16	4
14	Cabin Door Panel	2



#### 16.6 To Mounting Cabin Door Panels Cabin Operators

Before connecting the door panels to the mechanism, attach the panel connection shaft to the car. Between door frame and panel: 5 mm,

Between the bottom of the panel and the threshold: 5 mm.

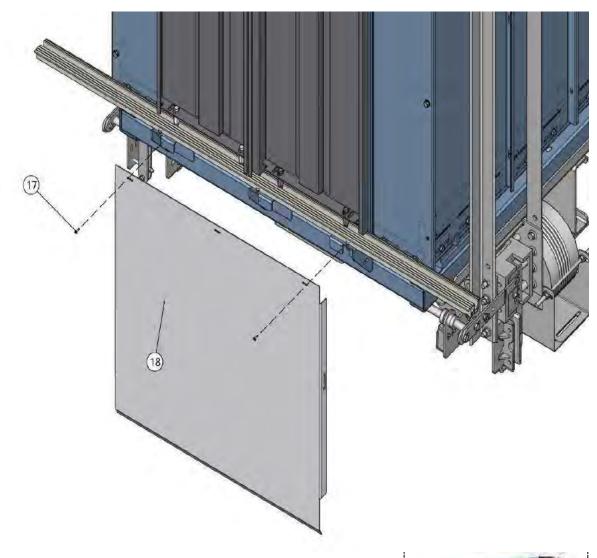


No	Part Name	Qty
8	DIN 6921 M8x20 Bolt	4
9	DIN 6923 Flanged Nut M8	4
14	Cabin Door Panel	2
15	DIN 6923 Flanged Nut M10	8
16	M10x80 Panel Mounting Shaft	4



## 16.7 To Mounting of The Cabin Skirt

Secure the cabinet skirt sheet to the cabinet with the sheet metal screws.



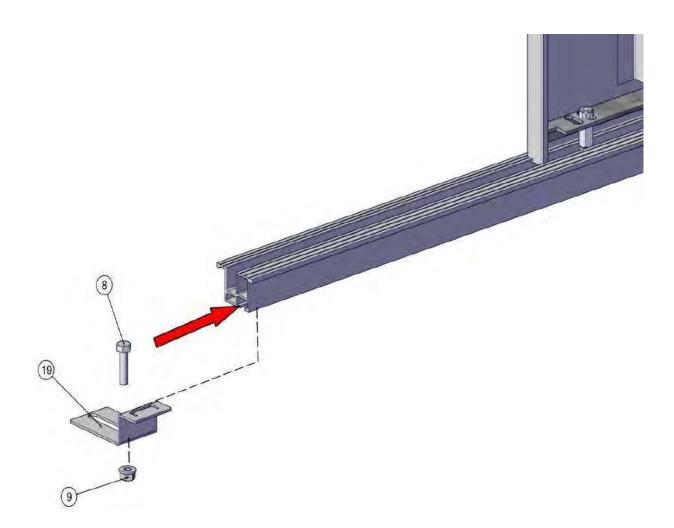
No	Part Name	Qty
17	3,9x13 YSB Screw	3
18	Cabin Skirt Sheet	1





## 16.8 To Mounting Photocell to the Cabin Door Panels

Photocell Stabilization Bottom Stabilization Secure the sheet with bolts and nuts on the bottom edge.



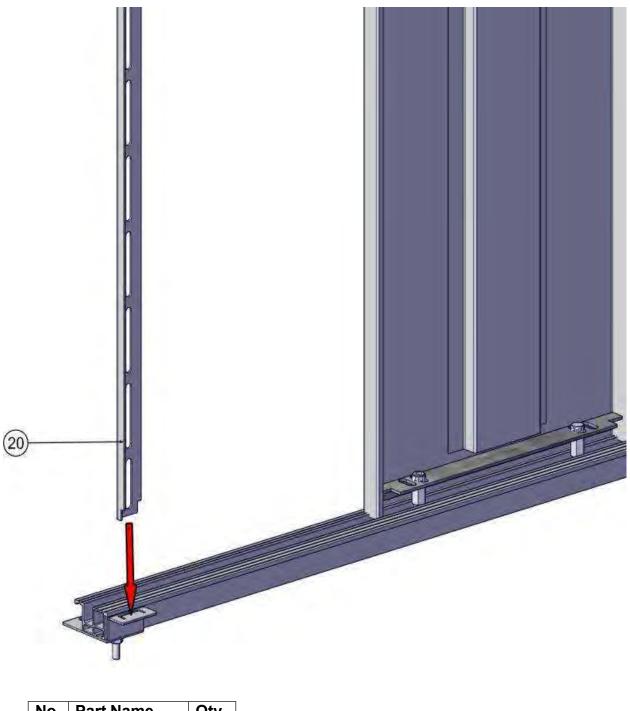
No	Part Name	Qty
8	DIN 6921 M8x20 Bolt	1
9	DIN 6923 Flanged Nut M8	1
19	Photocell Pillar Bottom Mounting Sheet	1





#### 16.9 To Mounting Photocell to the Cabin Door Panels

Photocell Stabilization Bottom Stabilization Place the photocell stalk after fixing the sheet to the lower threshold.

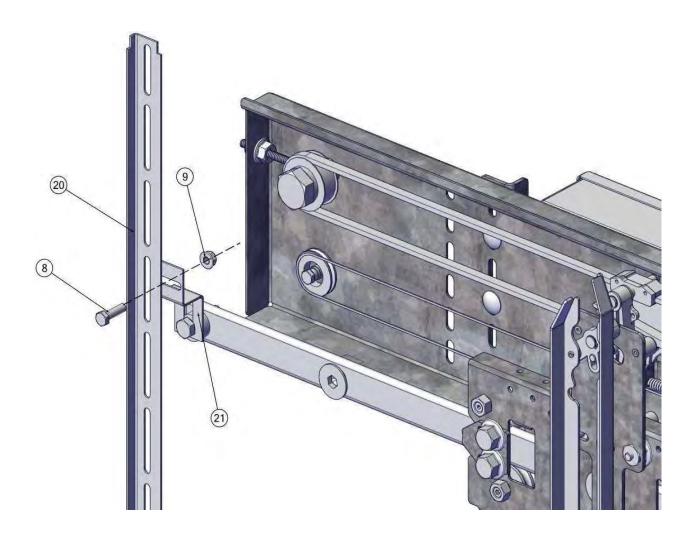


No	Part Name	Qty
20	Photocell Pillar	1



#### 16.10 To Mounting Photocell to the Cabin Door Mehanism

Photocell Stabilizer Upper Stabilization Fix the cassette to the mechanism using the bolt on the mechanism. Then mount the photocell bracket.



No	Part Name	Qty
8	DIN 6921 M8x20 Bolt	1
9	M8 DIN 6923 Flanged Nut M8	1
20	Photocell Pillar	1
21	Photocell Pillar Top Fixing Sheet	1



## 16.11 To Mounting Fix the Photocell to the Photocell Pole

Fix the photocell to the photocell pole using the fittings located in the photocell box.



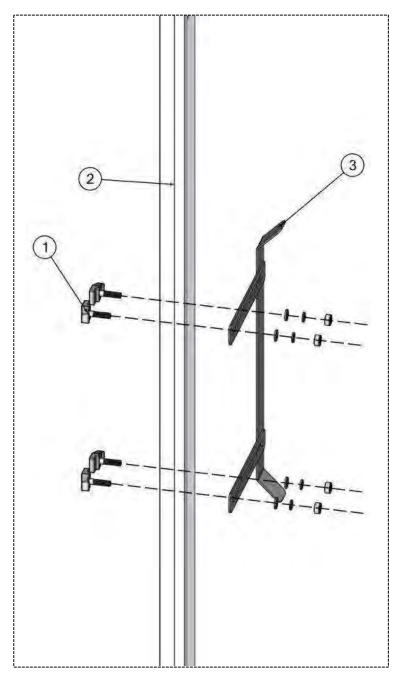
No	Part Name	Qty
22	Photocell	1



### **17. SWITCH CONNECTING ARMS**

Secure the switch cut sheets to the cabinet guide rails using casting nails.

Adjust the position of the switch plates according to the first and last position of the lift cabin.

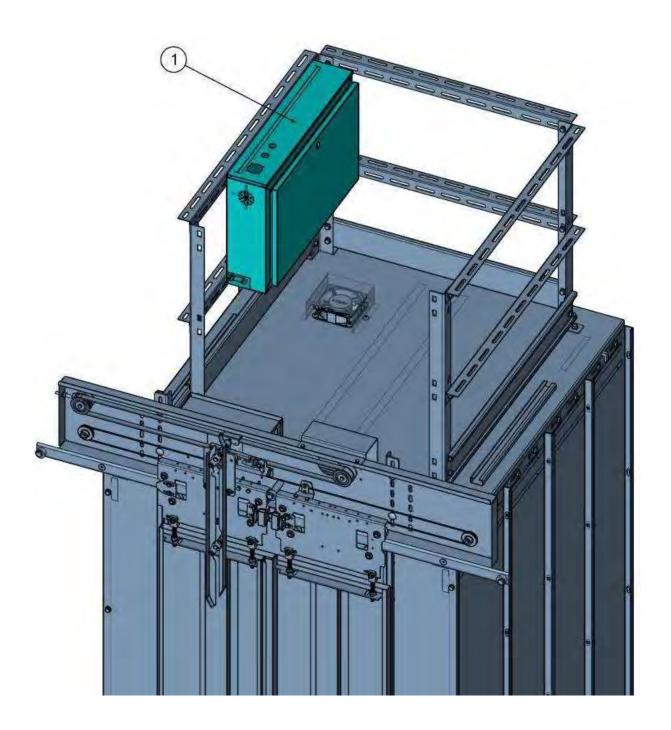


No	Part Name	Qty
1	M2 Casting Nail	8
2	Cabin Guide Rail	1
3	Switch Arm Sheet	2





### **19. TO MOUNTING REVISION BOX INSTALLATION**



	No	Part Name	Qty
-	1	On-Cab Series Revision Box	1



#### **23. CONTROL CRITERIA**

No	CONTROL CRITERIA	YES	NO

- 1 In the elevator shaft; ventilation, cleaning, water and humidity control?
- 2 Are the skates tested along the elevator shaft? (Distance between guide rails and skate gaps)
- 3 Is the tension on your suspension ropes checked?
- **4** Governerrope, is tension checked?
- 5 The elevator brakes, the safety screw removed? (The safety screw must be removed for the brake to work.)
- 6 Has the regulator-safety control been done?
- 7 Was the cabinet overload system checked?
- 8 Are the guide rails, bolts and nuts checked?
- **9** Has the gearless engine, bolts and nuts been checked?
- 10 Does the cabin and floor mechanism work in harmony?
- 11 Is the mounting position of the switch sheet metal suitable?
- **12** Is the distance between the limit switch and the switch cut sheet appropriate?
- **13** Is the rope ladder fitted?
- **14** Has the polyurethane buffers been checked?
- **15** Is there equipment in the elevator shaft that does not belong to the lift?