



Installation & Service Manual  
**EasyLift**

INSTALLATION & SERVICE MANUAL – EASYLIFT – UK VERS 1.5



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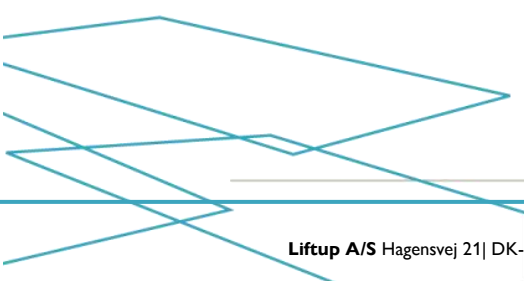
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Further information can be found on our support site:  
<https://support.liftup.dk>

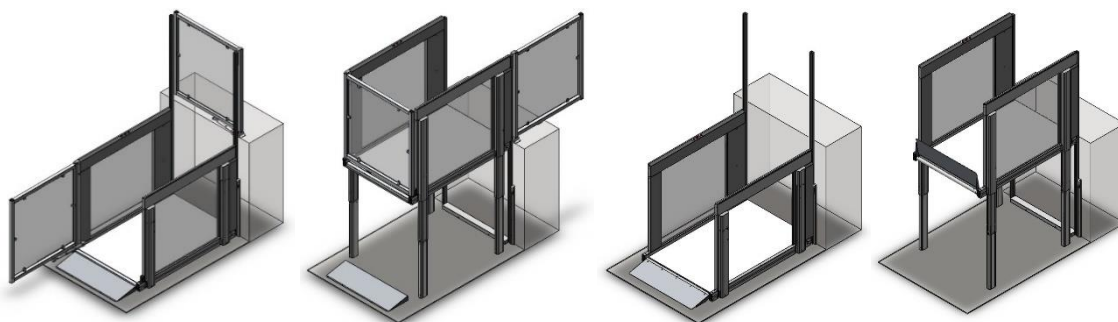


# 1. Unpacking and moving the EasyLift

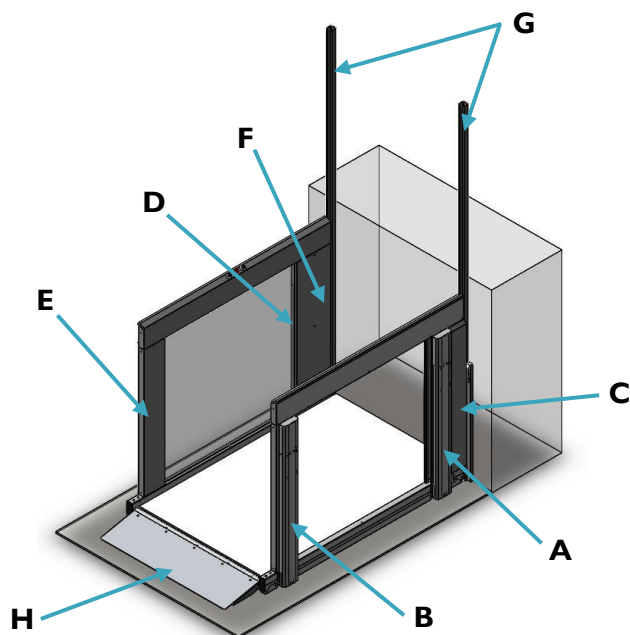
## 1.1 Definition

In order to simplify the reading of this manual, or any conversation with us, it is important to set some basic definitions in place. The EasyLift is a lifting platform capable of transferring a wheelchair or disabled people between two levels (max. 1250 mm).

In this manual “EasyLift lifting platform” will be mentioned as “lift”.



The lift can be supplied with doors or automatic ramp/roll-off protection. As an option it can be equipped with a Vertical Safety Barrier. Also as an option the doors on EasyLift 1100 can be supplied with locks (indoor version only).



### Right-hand side of the lift

- A: Primary Master Actuator
- B: Primary Slave Actuator
- C: Primary Control Board (jumpers are on this side)

### Left-hand side of the lift

- D: Secondary Master Actuator
- E: Secondary Slave Actuator
- F: Secondary Control Board
- G: RH side and LH side wall profiles
- H: Automatic ramp (can also be a door).

## 1.2 Unpacking and moving the lift

After opening the wood or carton pallet, you need to remove all packaging around the lift.



The lift is equipped with batteries. Even if the power supply is not connected to the lift, the lift can move. To start moving the lift you need to make some changes on the safety circuit of the product as it is by default delivered with all safety functions active.

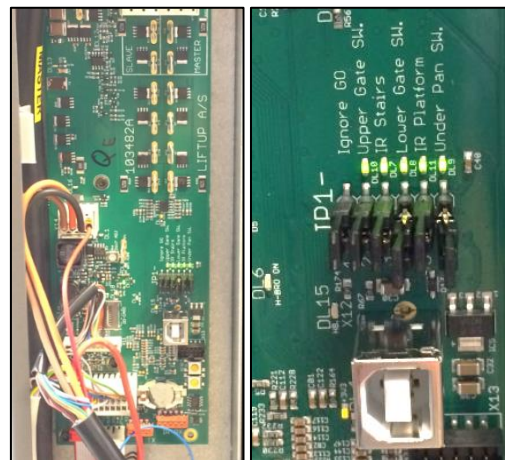


Remove the cover for the control box to access the primary control board (always right-hand side of the lift).

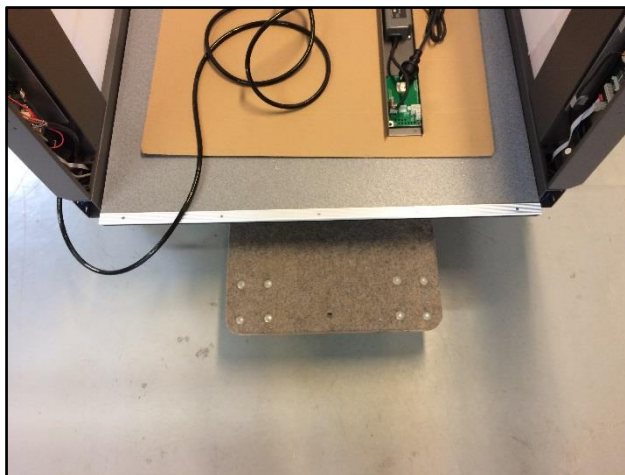
In order to move the product, place a jumper on:

- Upper Gate SW
- Under Pan SW

If you now release the emergency button, you should have all green LED's on (see photo).



Use the UP button on the platform to move the product upwards.  
Use e.g. a fork lift to remove the lift from the wooden pallet.  
During transport of the product, remember to activate the emergency button.



Once at site, it is helpful to move the lift on a rolling table.



**NOTE:** Remember to always push the emergency button after moving the lift as it may try to return to another position (Auto-return function).

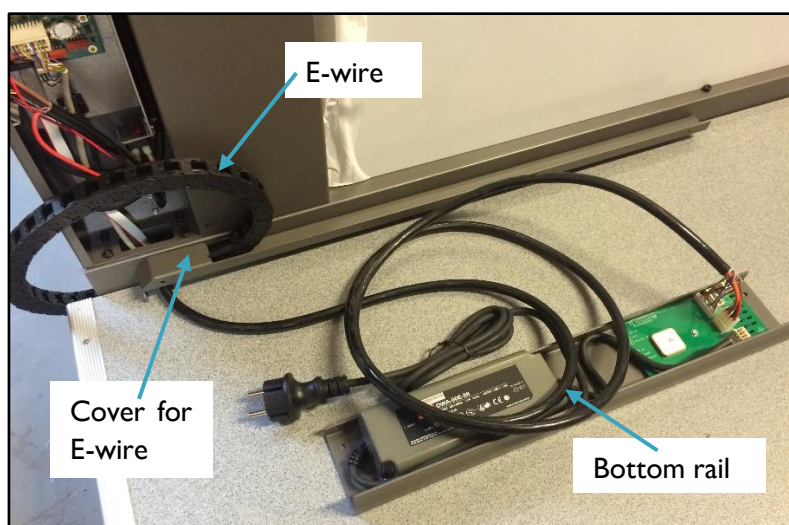
## 2. Attachment to building



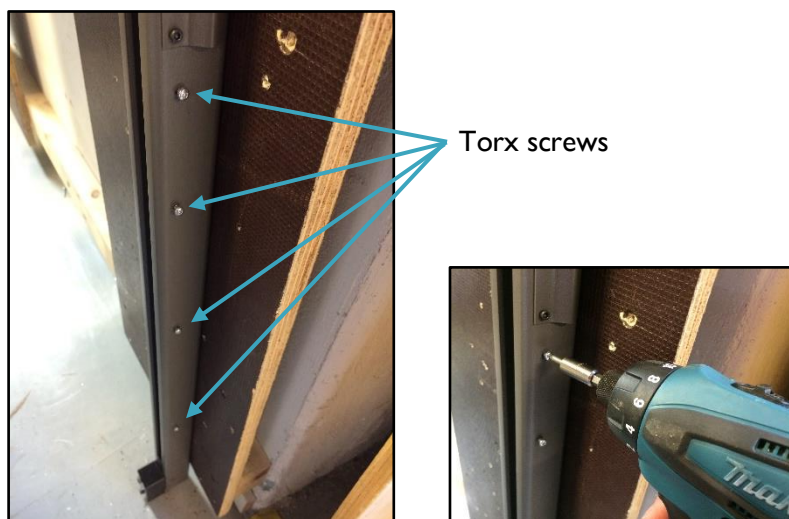
**ATTENTION!** Remember to push the emergency stop button, before you start working underneath the lifting platform.

### 2.1 Mounting of bottom rail (control board)

The bottom rail is delivered with the control board mounted, and ready for connection. Before mounting the bottom rail to the floor, the cable from the lift, running through the E-wire must be mounted.



Bottom rail is delivered with cable connected to E-wire and cover for E-wire.



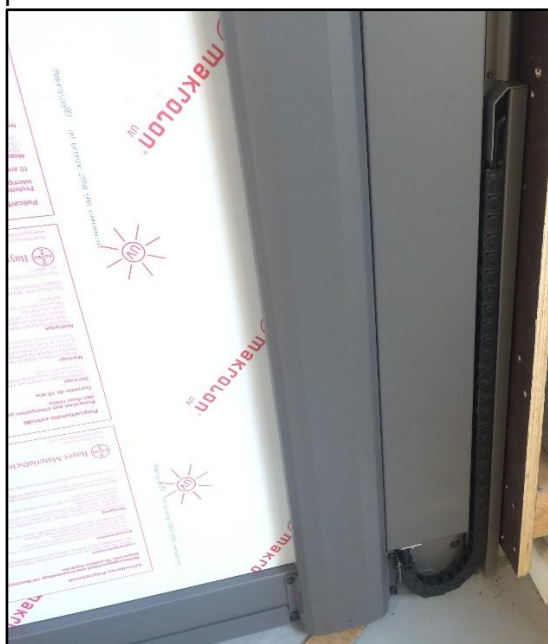
Unscrew four Torx screws from the RH side wall profile.

The Torx screws are for mounting of cover for E-wire.



Place cable, running from lift through E-wire, inside the cover for E-wire. Mount cover for E-wire to the RH side wall profile\*.

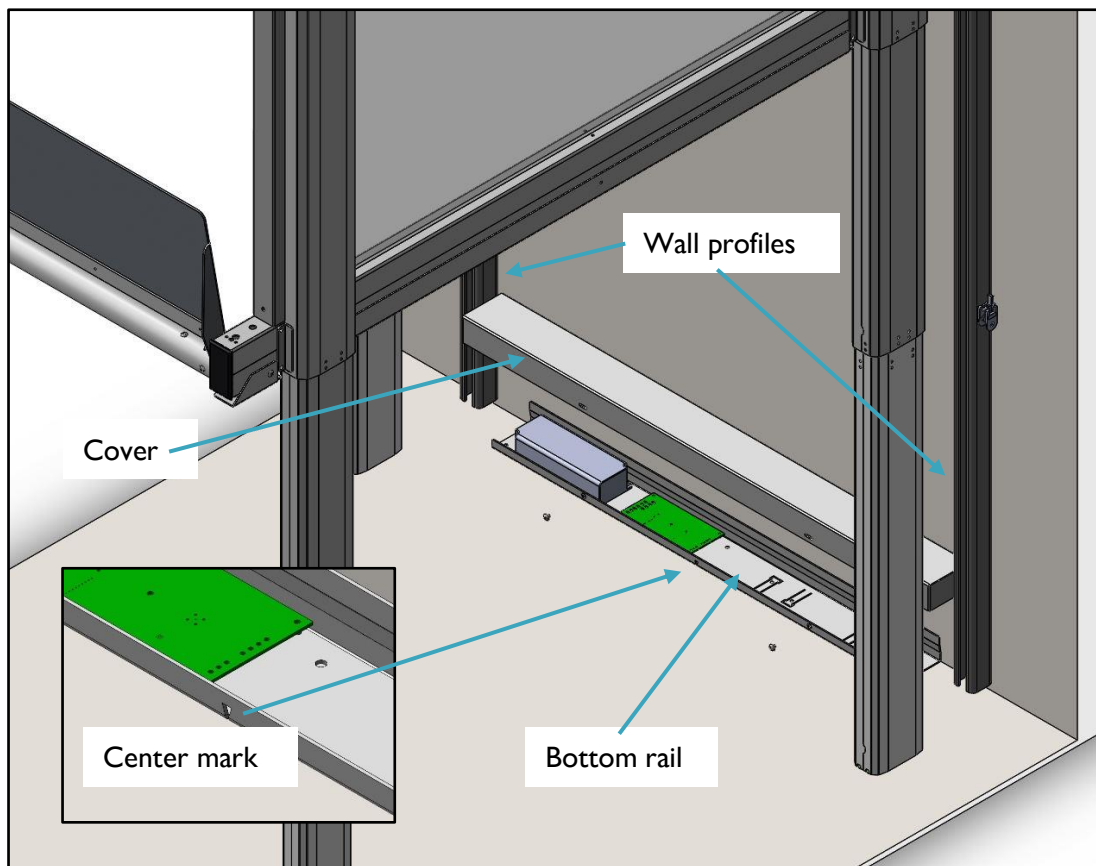
\* If the lift is placed next to a wall on the right-hand side, do this before mounting the wall profile to the wall.



E-wire correctly mounted and lift mounted to wall profiles.

The bottom rail must be fitted to the floor, towards the adjoining wall, just below the lift. The bottom rail must be placed exactly between the two wall profiles. After fitting the bottom rail to the floor, connect the cables from lift, door\*, ramp\* and/or safety barrier\* as described in chapter 3, and mount the cover to protect the control unit.





\*Supplementary equipment

## 2.2 Connection to the external protective earthing system

Protection against electric shock is provided by:

A: Protection by enclosures.

The power supply converting from mains to the charger, is housed in an IP 67 enclosure, and equipped with class II transformer using double reinforced insulation.

This transformer does not normally have to be equipped with a protective earth connection.

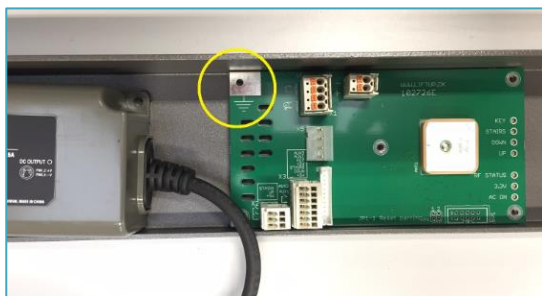
The remaining Low Voltage power circuits are housed inside the metal structure of the lift.

B: Protection by PELV. (Protective Extra-Low Voltage)

All circuits on the lift are supplied from 24 Volts batteries and converted by SMPS's fulfilling PELV. The lift, including the metal structure shall, depending on national safety regulations, be connected permanently to the protective earthing system with a minimum 18AWG / 0.75mm<sup>2</sup> wire.



Cable for Earth Ground, 2m  
(art.no. 103919)



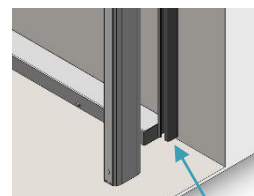
Connect the cable for earth ground here  
(Easylift V3)

### 2.3 Attachment with wall profiles only

The lift is normally delivered almost fully assembled. The two wall profiles need to be fitted to the adjoining wall to ensure a stable performance.

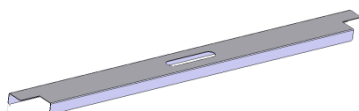
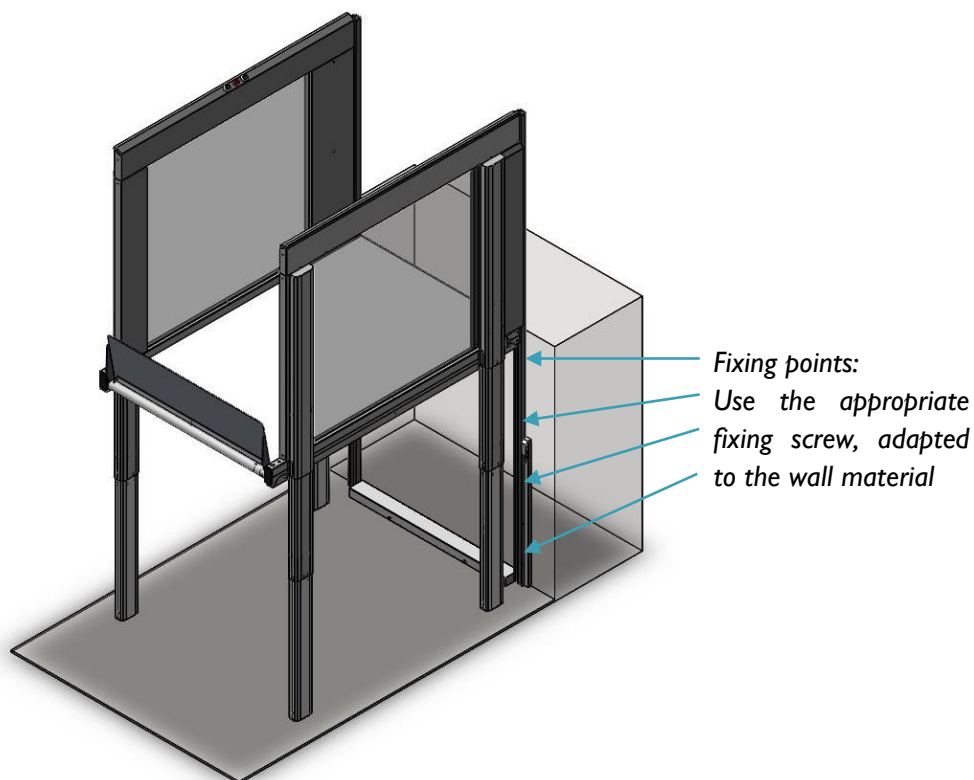
Approach the lift to the wall and place the wall profiles from the top level. Use service mode (see chapter 5) to run the lift to top position.

The length of the wall profiles must be elevation height +1100 mm, and you should always have 10 mm of clearance in the bottom between the wall profiles and the floor.



10mm

Once the lift is in the position as the picture below, you can fix the wall profiles (left and right) to the wall.



Remember to use the mounting guides or respect the following distance between wall profiles: 800 mm between wall profiles for the EasyLift 800, 900 mm for the EasyLift 900 and 1100 mm for the EasyLift 1100.



**ATTENTION!** Make sure that the wall profiles are 100% vertically mounted, and the distance between them is exact.

## 2.4 Attachment with wall profiles and door; EasyLift 800/900

The lift is normally delivered almost fully assembled. The two wall profiles need to be fitted to the adjoining wall to ensure a stable performance.

Approach the lift to the wall and place the wall profiles (the example below is with a door mounted on the left-hand side).

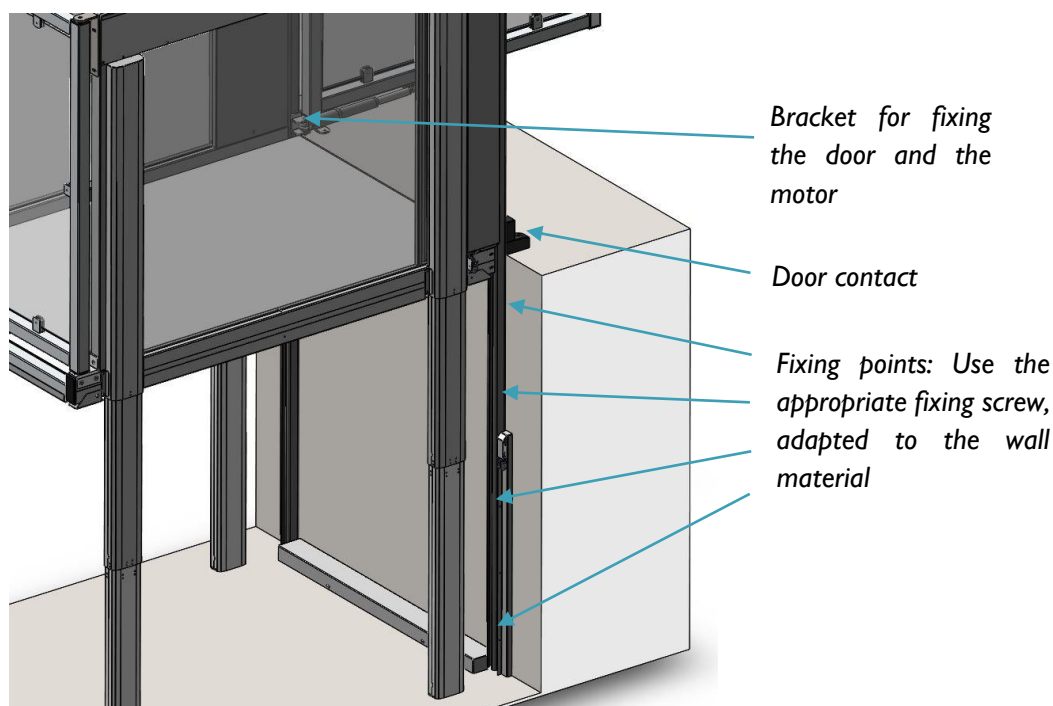
The bracket for the door actuator is attached on the left-hand side and the door contact is attached on the right-hand side. When both wall profiles are attached they should have a clearance of 10 mm between floor and profile. (If not, you need to cut the wall profile to size). Use service mode (see chapter 5) to run the lift to top position.



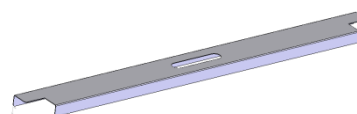
Once the lift is in the position as the picture below, you can fix the wall profiles (left and right) to the wall.



**ATTENTION!** Make sure that the wall profiles are 100% vertically mounted, and the distance between them is exact.



Remember to use the mounting guides or respect the following distance between the wall profiles: 800 mm between wall profiles for the EasyLift 800 and 900 mm for the EasyLift 900.

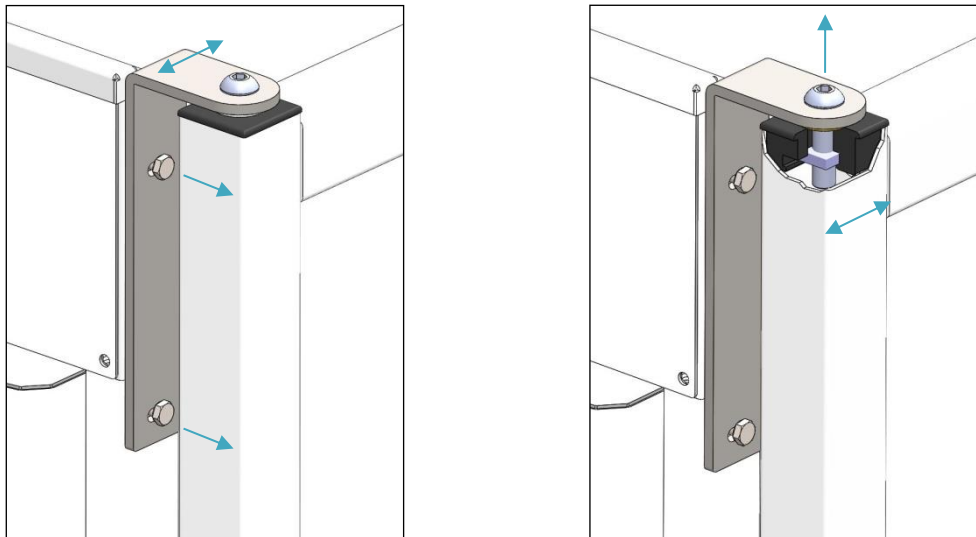


Once the wall profiles are fixed you can run the lift down again.

The door can now be fixed as shown below:



The door can be adjusted to fit the electronic switch on the other side of the door by means of the two bolts holding the top bracket, or by loosening the Allen screw at the top of the bracket.



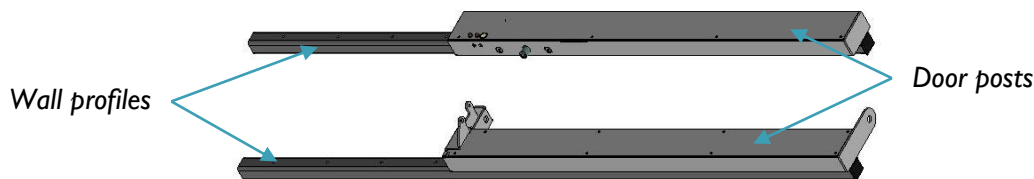
Connect the door to the actuator by using the supplied metal clip fitting.

The door can be adjusted in the closing direction by loosening the nut. Then turn the head of the actuator to the desired position and tighten the nut.

It is of utmost importance that the door is adjusted carefully so that it will activate the two electronic contact pins correctly.



## 2.5 Attachment with wall profiles and door; EasyLift 1100



The lift is normally delivered almost fully assembled. The door posts are attached to the two wall profiles, and just need to be fitted to the adjoining wall/floor to ensure a stable performance.

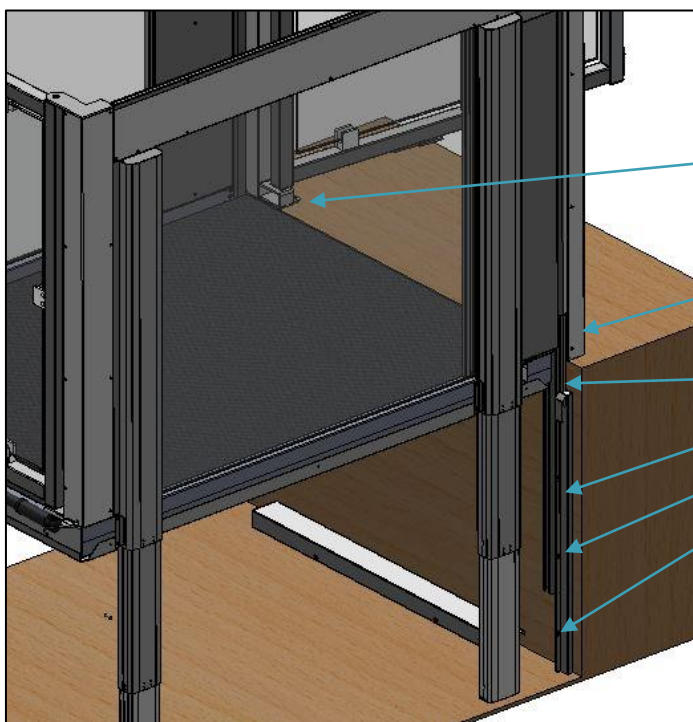
Approach the lift to the wall and place the wall profiles. (The example below is with a door mounted on the left-hand side of the lift).

Use service mode (see chapter 6) to run the lift to top position.



**ATTENTION!** Make sure that the wall profiles are 100% vertically mounted, and the distance between them is exact.

Once the lift is in the position as the picture below, you can fix the wall profiles (left and right) to the wall.



*Bracket for fixing the door and the actuator*

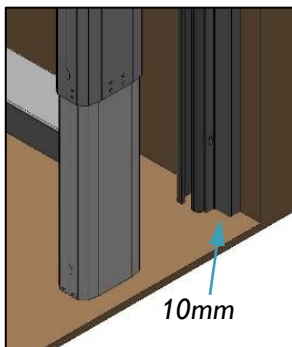
*Door contact built into the corner*

*Fixing points: Use the appropriate fixing screws, adapted to the wall material*

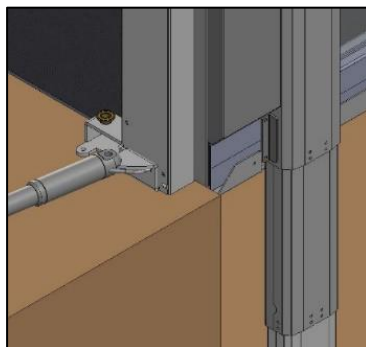
Respect the distance 1100 mm between wall profiles for the EasyLift 1100.

Once the wall profiles are fixed, you can run the lift down again.

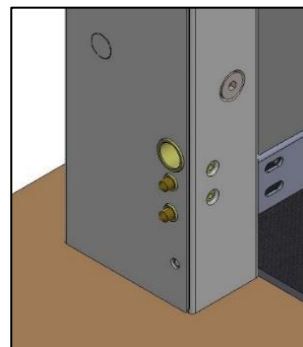
Before fixing the door to the door brackets, the brackets must be attached to the floor.  
 (The example below is with a door mounted on the left-hand side of the lift).



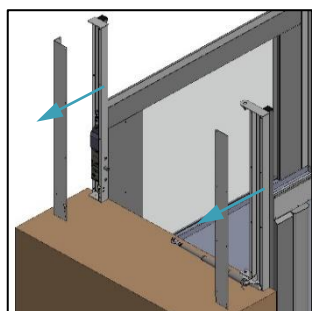
1. When both wall profiles are attached they should have a clearance of 10 mm between floor and profile. (If not, you need to cut the wall profile to size).



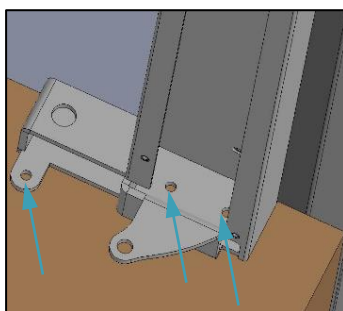
2. The bracket for door actuator is attached on the left-hand side of the lift.



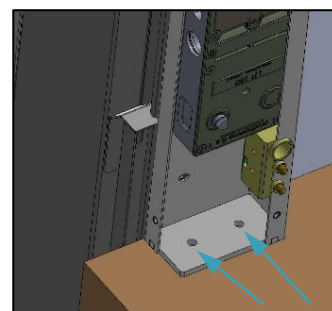
3. The door contact is attached on the right-hand side of the lift.



4. Dismount covers from door posts.

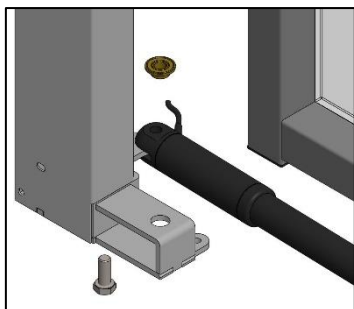


5. Bolt the door posts to the floor: Use the appropriate fixing screw, adapted to the floor material

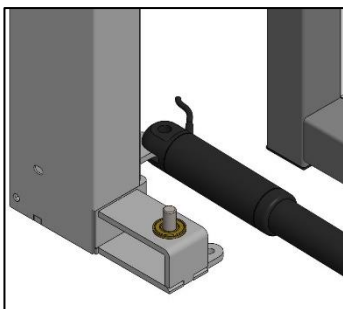


6. Remount covers on door posts.

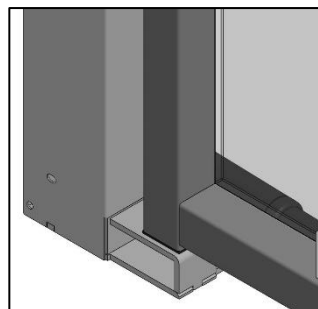
The door can now be fixed as shown next.



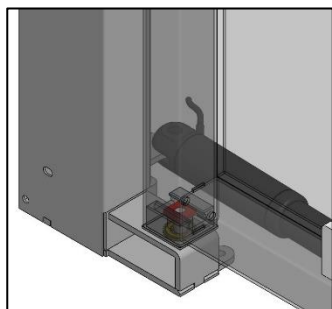
1. Insert hex bolt in hole on door bracket.



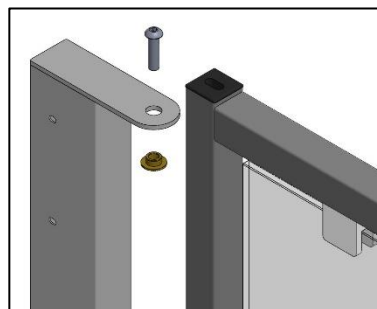
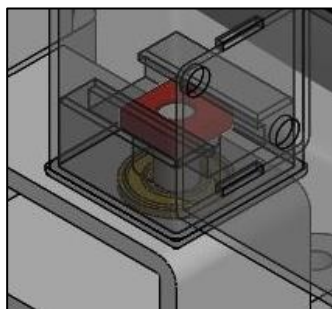
2. Insert brass spacer on hex bolt.



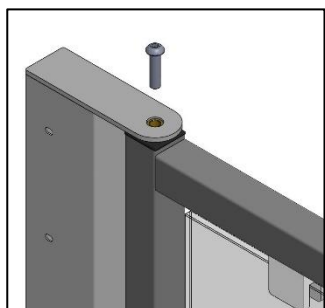
3. Place door on bracket.



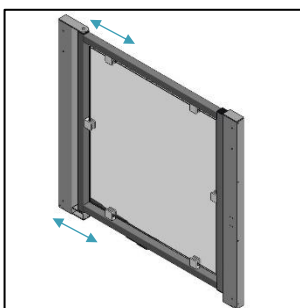
4. Make sure the square washer (red marked) inside door frame is placed directly over the hex bolt. Adjust washer with e.g. screw driver before placing door on bracket. Tighten screw gently.



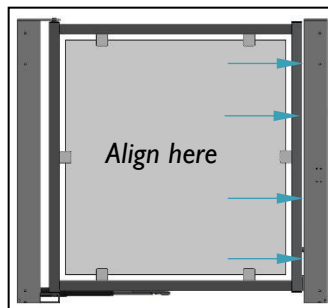
5. Insert brass spacer in hole on door bracket and place door under it on bracket.



6. Insert Allen screw in hole on door bracket and tighten gently.



7. Level door and align with door post before tightening hex bolt and Allen screw.



8. Connect the door to the actuator by using the supplied metal clip fitting.

The door can be adjusted in the closing direction by loosening the nut. Then turn the head of the actuator to the desired position and tighten the nut.

It is of utmost importance that the door is adjusted carefully so that it will activate the two electronic contact pins correctly.





### 3. Control unit

The control unit consists of the power supply unit (103080), the PCB for connection box (102726), both factory mounted on the bottom rail under the lift and two control boards (103482) mounted inside the two control boxes, placed on each side of the lift.

During installation is not necessary to have the power supply unit (PSU) connected to mains; the lift is able to run on the battery pack alone. It will give alarm until the PSU-charger is reconnected.

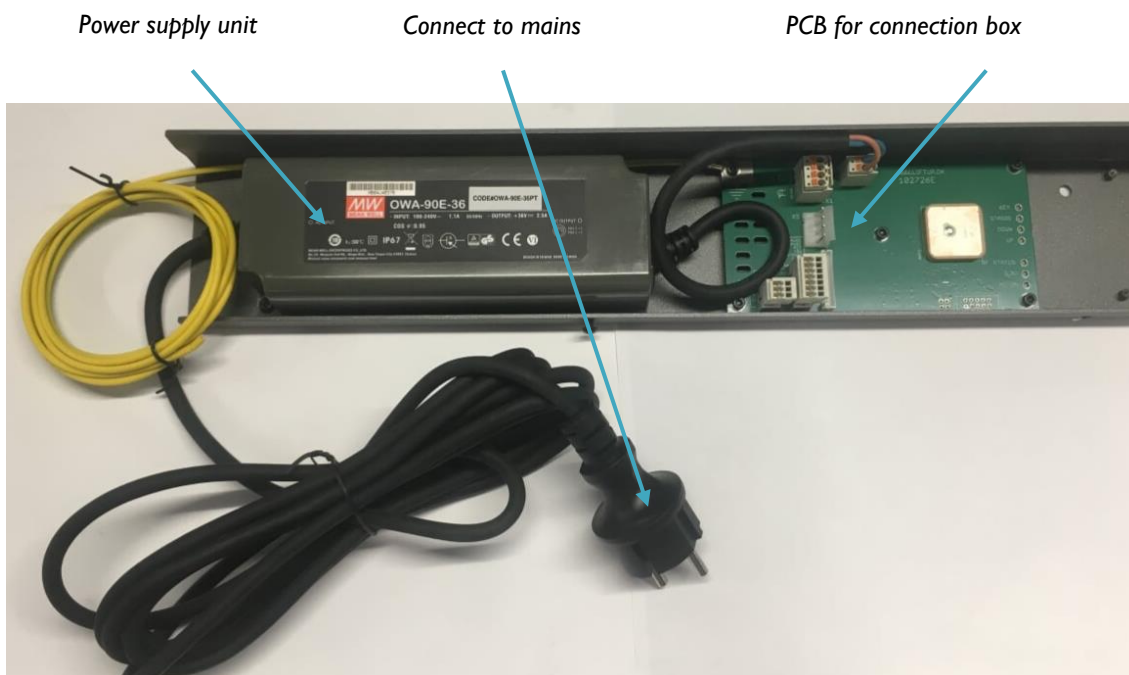
Make sure to place any jumpers to make it run – see section 5.3.

- Release the emergency stop button.
- Using the  button on the lift, now push “lift down”, and calibrate the system.
- Now push the  button to move the lift to the upper level.



**ATTENTION!** Remember to push the emergency stop button, before you start working underneath the lift.

#### 3.1 Bottom rail

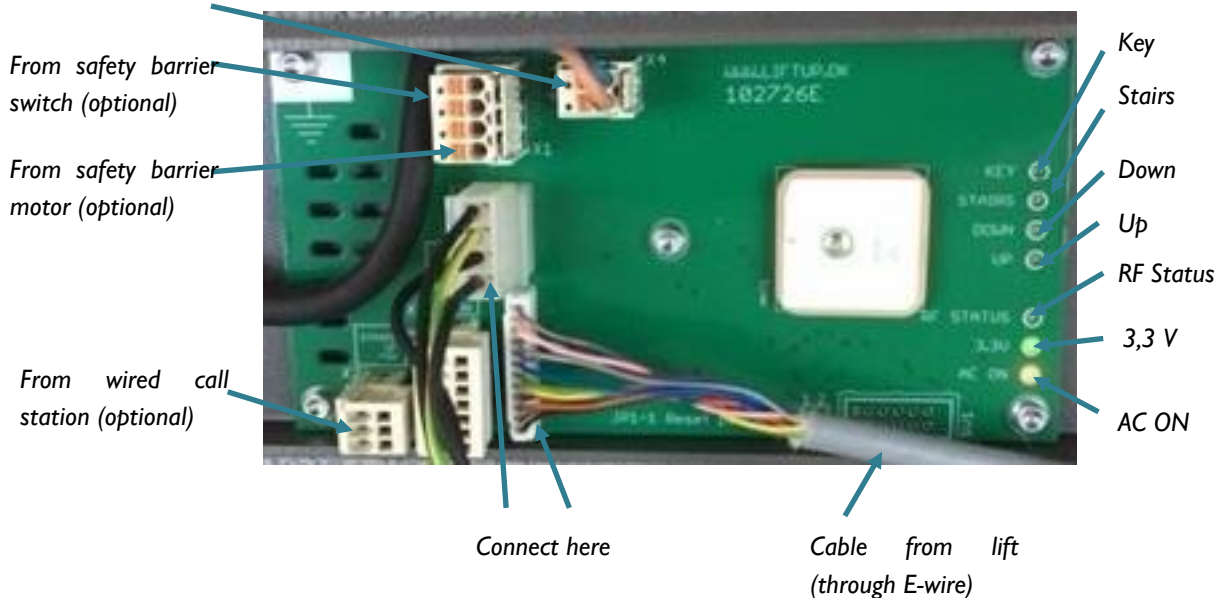


Description	LED Colour	Action if LED is ON
<b>Key</b>	Orange	Key locked
<b>Stairs</b>	/	Not used on EasyLift
<b>Down</b>	Yellow	Button activated
<b>Up</b>	Yellow	Button activated
<b>RF Status</b>	Orange	Remote control activated
<b>3.3 V</b>	Green	DC supply for remote control OK
<b>AC ON</b>	Orange	Power supply connected (mains)

Partnumber	connection board X5	connection board X6	
103273			
<b>New version</b>			<b>ON/OFF contact</b>
104017 104018	 (1) (2) (green/yellow) (3)		

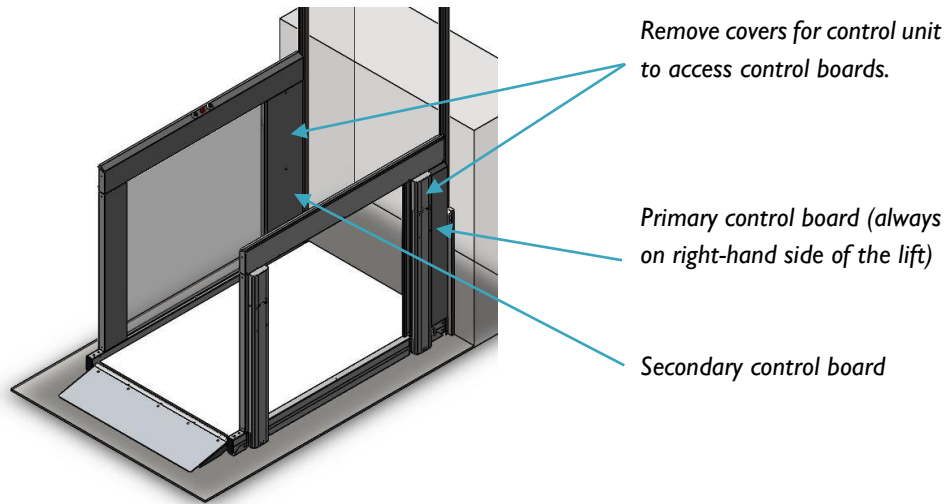
**Power supply / PSU**

(Wire colours: red or brown / black or blue)



### 3.2 Control boards

The control boards (103482) for the lift are mounted inside the two control units, placed on each side of the lift.



SECONDARY Control board (103482) LH side

PRIMARY Control board (103482) RH side



Power connection

All sensors cable

Actuator cables

PCB for Connection box cables

Battery CR1408

Operating panel

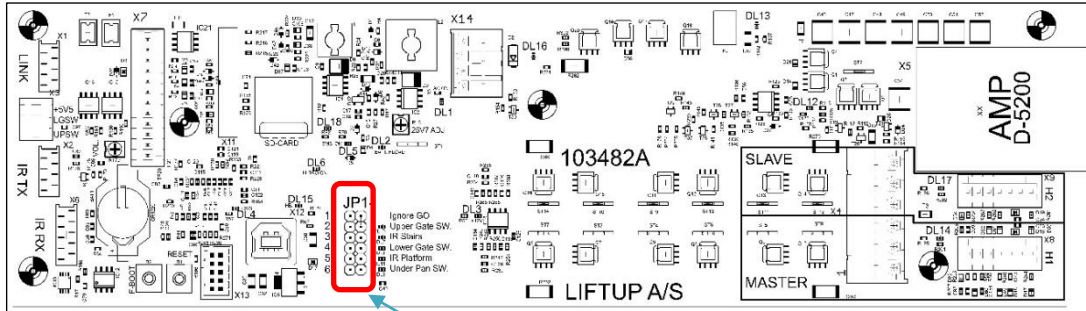
To secondary Control board LH side

To primary control board RH side

### 3.3 Control board jumpers JP1

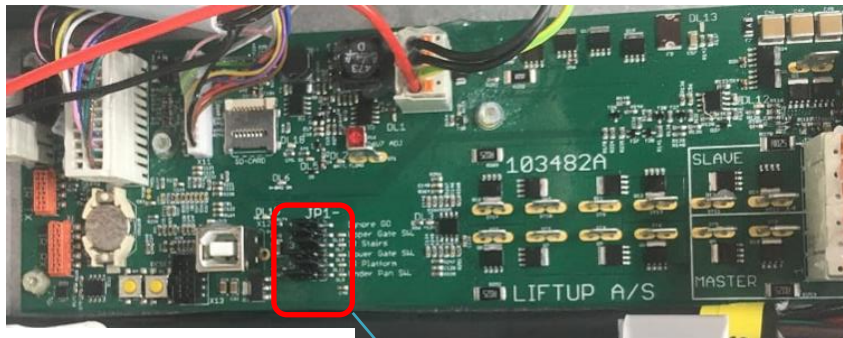


**IMPORTANT!** Remove all jumpers to reactivate all safety functions. (Except “Ignore GO”). Jumpers and LED are only valid on PRIMARY control board – Right-hand side.



PRIMARY Control board (103482) RH side mounted

Jumpers



PRIMARY Control board (103482) RH side mounted



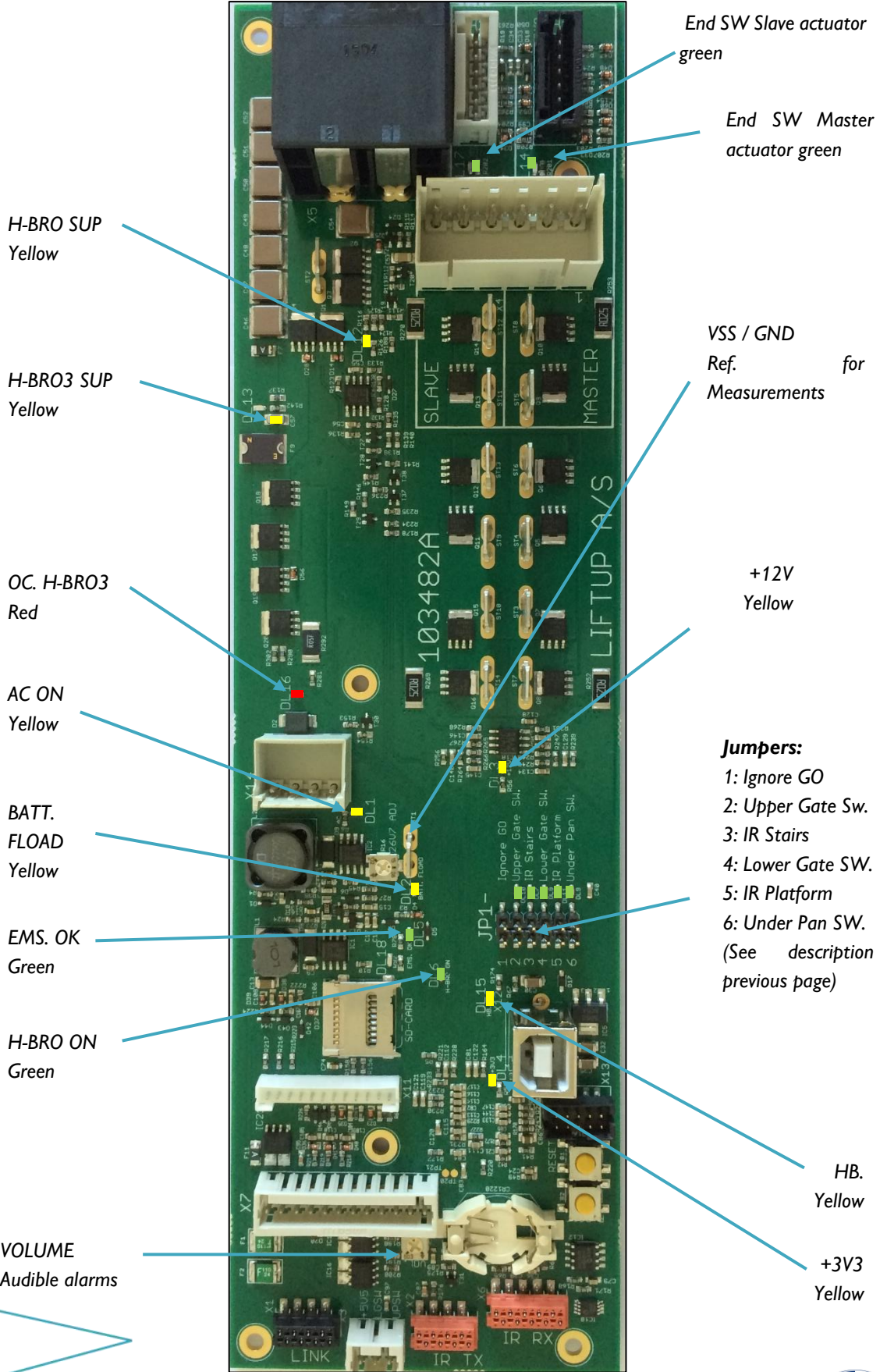
Jumper 3 and 5 are always ON for Easylift.

Nb	Description	Action if jumper is ON. (PRIMARY Control Board only)	Normal position of Jumper
1	Ignore GO	Allows auto return and soft stop	ON
2	Upper Gate Switch	Ignore upper gate switch	NOT ON
3	IR Stairs	Ignore IR error on Steps / not used on Easylift	ON
4	Lower Gate Switch	Ignore lower gate switch	NOT ON
5	IR Platform	Ignore IR error Platform / not used on Easylift	ON
6	Under Pan Switch	Ignore Under Pan safety switches	NOT ON



### 3.4 Control board LED signals

Control board (103482):



- Jumpers:**
- 1: Ignore GO
  - 2: Upper Gate Sw.
  - 3: IR Stairs
  - 4: Lower Gate SW.
  - 5: IR Platform
  - 6: Under Pan SW.
- (See description previous page)

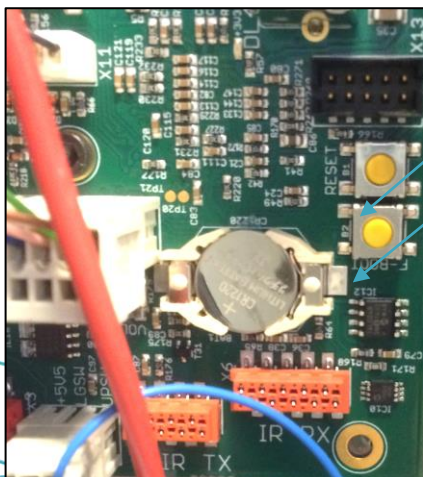


Control board LED signal descriptions:

Description	LED Colour	Action	Primary / Secondary
H-BRO SUP.	Yellow	Supply for actuator ready	P + S
H-BRO3 SUP.	Yellow	Supply for ramp (Secondary) / safety barrier ready (Primary)	(P)+(S)
OC. H-BRO3	Red	Over current ramp (Secondary) / safety barrier (Primary)	(P)+(S)
AC ON	Yellow	AC mains on (Supply)	P + S
BATT. FLOAT	Yellow	Battery charged = Maintenance voltage 26,22 V	P + S
EMS. OK	Green	Emergency switch released OK	P
H-BRO ON	Green	Go for actuator supply	P + S
VOLUME	NA	Volume for audible alarms	P
End SW	Green	Slave actuator end SW, green=down	P + S
End SW	Green	Master actuator end SW, green=down	P + S
VSS / GND	NA	Ref. for Measurements	P + S
+12V	Yellow	12 V DC supply OK (Supply or batteries connected)	P + S
Under Pan SW.	Green	Safety switches Under pan OK or bypassed by jumper	P
IR Platform	Green	IR upper step OK or bypassed by jumper	P
Lower Gate SW.	Green	Ramp switch OK or bypassed by jumper	P
IR Stairs	Green	IR stairs and girder squeeze protection OK or bypassed by jumper	P
Upper Gate SW.	Green	Safety barrier switch OK or bypassed by jumper	P
Ignore GO	NA	Allows auto return and soft stop	P
+3V3	Yellow	Supply OK	P + S
HB.	Yellow	CPU OK when flashing	P + S

### 3.5 Control board dipswitches

Dipswitches for resetting and forcing the board into boot mode, is located at the bottom of the boards.



Reset	Push to reset the system. The processor will restart and reload the current firmware.
F-Boot	To force the board into boot mode. Only for firmware update. Push both F-BOOT and RESET, and release RESET before F-BOOT => The system is now in boot mode. (The HB LED will stop flashing). See 3.4.

### 3.6 Control board wiring

#### 103482 / PRIMARY SIDE (right) EASYLIFT V3

X4 Actuators motor power				
6	Black	Slave W		
5	Brown	Slave U		
4	Red	Slave V		
3	Black	Master W		
2	Brown	Master U		
1	Red	Master V		
X8 Actuator feedback Master				
1	Black	Hall sensor U		
2	Brown	+5V		
3	Red	VSS (Gnd)		
4	Orange	Hall sensor V		
5	Yellow	Hall sensor W		
6	Green	Not used		
7	Blue	Stop Sw		
X9 Actuator feedback Slave				
1	Black	Hall sensor U		
2	Brown	+5V		
3	Red	VSS (Gnd)		
4	Orange	Hall sensor V		
5	Yellow	Hall sensor W		
6	Green	Not used		
7	Blue	Stop Sw		
X14 Power connections				
1	Brown or Black 1	Upper Gate Motor (-)	<b>103273</b> <b>104017</b>	
2	Orange or Black 2	Upper Gate Motor (+)		
3	Black or Yellow/Green	VSS ( - Supply / GND)		
4	Red	Min. 29V (from PSU X4)		
X7 connections operating panel				
12	Red	Light +24V		
11	Pink/Grey	AUX 2		
10	Red/Blue	AUX 1		
9	Black	Light neg.		
8	Purple	Alarm button		
7	Yellow	Down button		
6	Grey	Up button		
5	White	Emergency Sw +		
4	Blue	VSS (Gnd)		X1 Ribbon cable for LINK
3	Pink	Emergency Sw -		X3 (Black or Yellow) LGSW+5V5
2	Green	Speaker +		X3 (Black or Brown) LGSW return
1	Brown	Speaker -		X3 Blue UPSW return

Control Board Jumpers JP1		
Jumper 3 and 5 always ON for EASYLIFT		
No	Description	Action
1	Ignore GO	Allow auto return and soft stop
2	Upper gate SW	Ignore upper gate switch
3	IR Stairs	Ignore IR errors and guider squeeze protection
4	Lower Gate SW	Ignore lower gate switch
5	IR Platform	Ignore upper IR
6	Under Pan SW	Ignore Safety switches

### 102726 CONNECTION BOARD

X6		
1	Black	UGSW Upper gate Sw
2	Brown	UKEY
3	Red	5V5 Fused max 100mA
4	Orange or Red/ Blue	CAN L1
5	Yellow	CAN H1
6	Green	AUX1
7	Blue	AUX2
8	Purple	+29V Fused max 100mA
9	Grey	VSS (- Supply / GND)
10	White	Call station/ remote UP
11	Pink	Call station/ remote DOWN
12	Black/White or Grey/Pink	Call station/ remote STAIRS

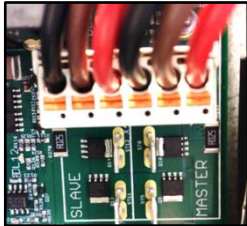



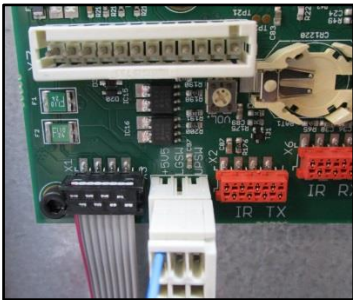
X5		
1	1. Brown or 2. Black 1	Upper Gate Motor -
2	Orange or Black 2	Upper Gate Motor +
3	Black or Yellow/Green	VSS (- Supply / GND)
4	Red or Black 3	Min. 29V (from PSU X4)


X4 power from PSU		
1	Red or Brown	Min. 29V
2	Black or Blue	VSS (Gnd)



**103482 / SECONDARY SIDE (left) EASYLIFT V3**

X4 Actuators motor power			
6	Black	Slave W	
5	Brown	Slave U	
4	Red	Slave V	
3	Black	Master W	
2	Brown	Master U	
1	Red	Master V	
X8 Actuator feedback Master			
1	Black	Hall sensor U	
2	Brown	+5V	
3	Red	VSS (Gnd)	
4	Orange	Hall sensor V	
5	Yellow	Hall sensor W	
6	Green	Not used	
7	Blue	Stop Sw	
X9 Actuator feedback Slave			
1	Black	Hall sensor U	
2	Brown	+5V	
3	Red	VSS (Gnd)	
4	Orange	Hall sensor V	
5	Yellow	Hall sensor W	
6	Green	Not used	
7	Blue	Stop Sw	
X14 Power connections			
1	Red or Brown	Lower Gate Motor	
2	Black	Lower Gate Motor	
X1 - X3			
X1	Ribbon cable for LINK		
X3	Blue Under pan switch +5V5		

Control Board Jumpers JP1		
Jumpers are not in use on Secondary side		
No	Description	Action
1	Ignore GO	Not used
2	Upper gate SW	Not used
3	IR Stairs	Not used
4	Lower Gate SW	Not used
5	IR Platform	Not used
6	Under Pan SW	Not used



### 3.7 Control Board Wiring for lift with lock on door

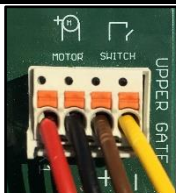
If the lift is supplied with doors, these doors can be supplied with locks\*. Locks are only available for EasyLift 1100 indoor version.



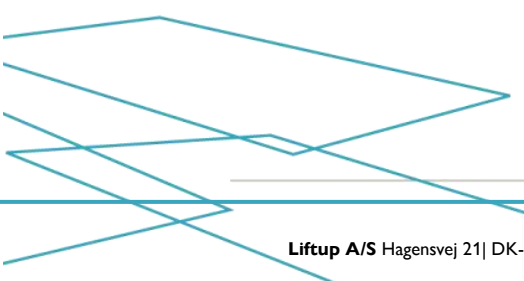
**NOTE:** The connections illustrated in this chapter are only valid for EasyLift 1100 supplied with lock on the doors. For all other connections, please see section 3.6.

#### 102726 CONNECTION BOARD - EASYLIFT 1100 with lock on door

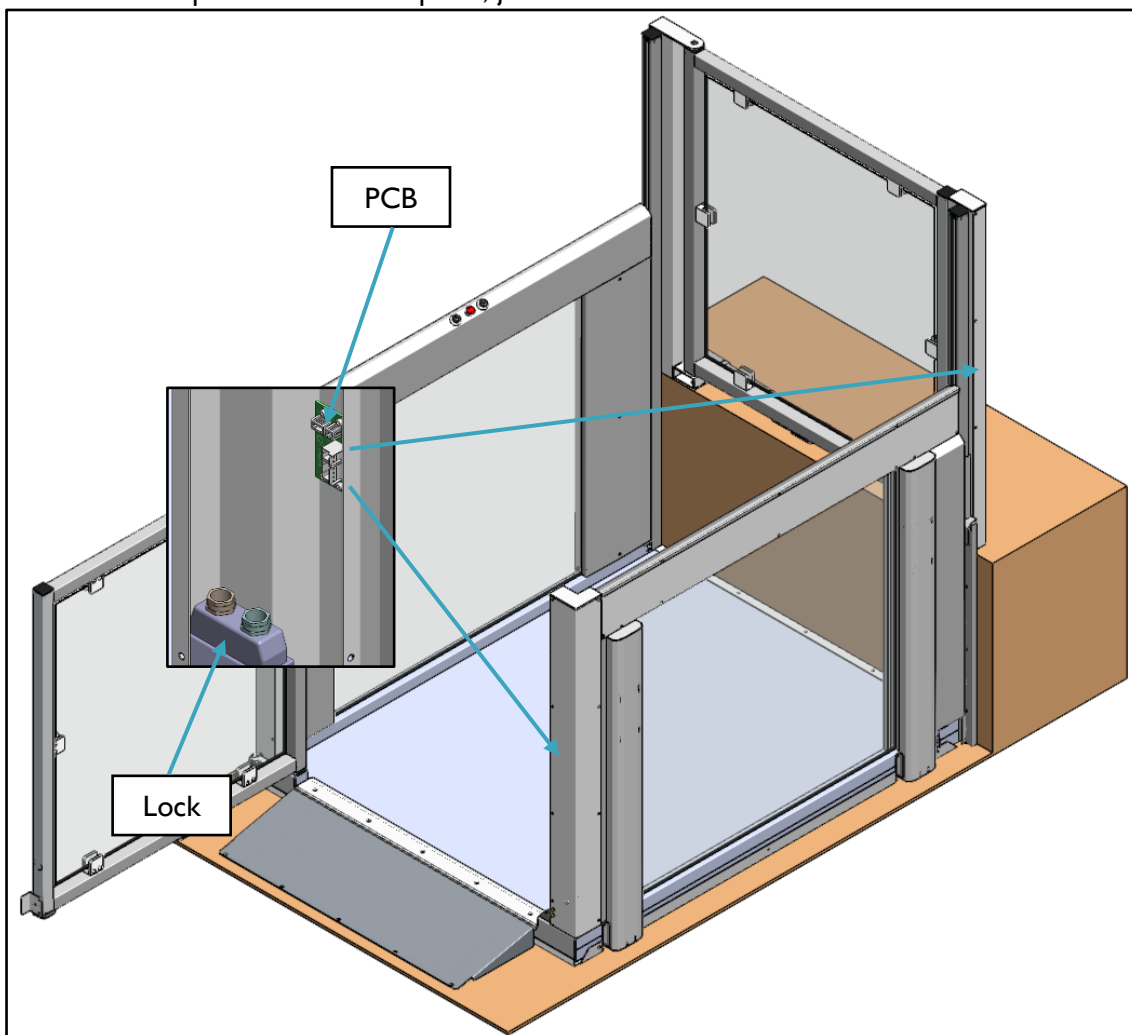
X1 Power connections to PCB lock		
1	Red	Motor (+)
2	Black	Motor (-)
3	Brown	UGSWR
4	Yellow	+5V5



\* Supplementary equipment



PCB for lock is placed inside door posts, just above the lock.



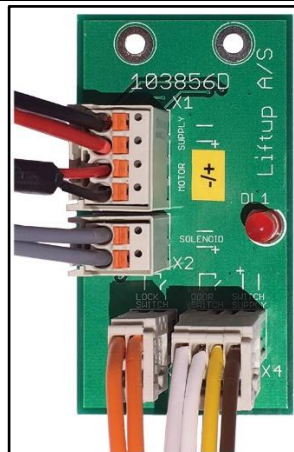
**103689 Lock for door, RH & 103690 Lock for door, LH**

Connections lock to PCB		
Orange	Orange	Lock SW
Orange	Orange	Lock SW
Blue	Grey	Solenoid (+)
Brown	Grey	Solenoid (-)



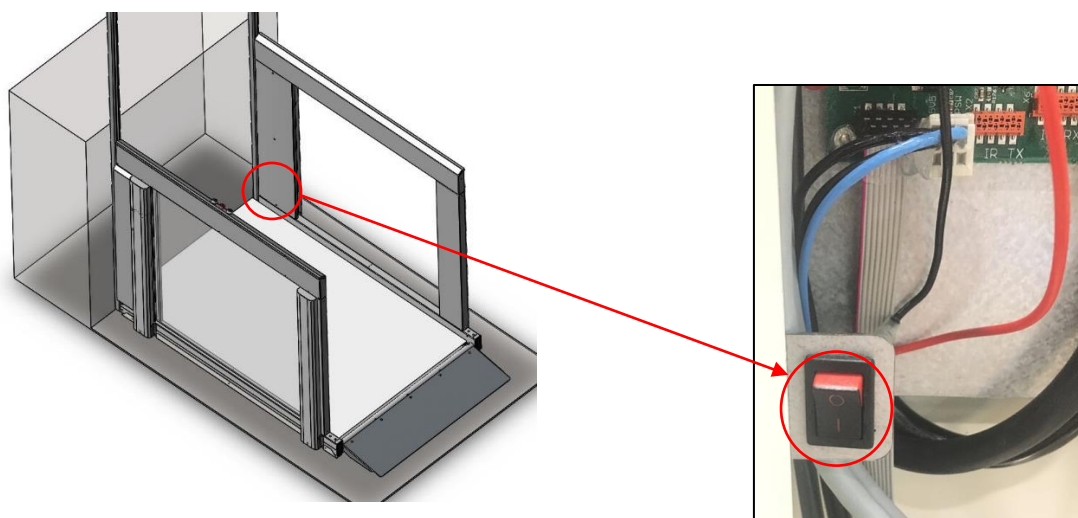
**103856 / PCB for lock - EASYLIFT 1100 with lock on door**

Connections PCB for lock (103856)		
1	Black	X1 Supply -
2	Red	X1 Supply +
3	Red	X1 Motor +
4	Black	X1 Motor -
5	Grey	X2 Solenoid
6	Grey	X2 Solenoid
7	Orange	X3 Lock switch
8	Orange	X3 Lock switch
9	White	X4 Door switch
10	White	X4 Door switch
11	Yellow	X4 Switch supply +
12	Brown	X4 Switch supply -



**3.8 ON/OFF switch**

The lift comes fitted with an ON/OFF switch. It is sited below the main board on the right-hand side of the lift. You need to remove the cover to access the switch. This button is used to disconnect the power supply to the lift. If the user switches this off at the same time as activating the emergency stop, the lift will be completely powered off.



The ON/OFF switch is used in the pairing of wireless call stations (please see chapter 4). Power to the lift is switched on/off by activating the ON/OFF switch and the emergency stop (please see chapter 5). When power is again returned to the lift (and emergency stop is released), the control system restarts (please see chapter 5).

\*Supplementary equipment

### 3.9 Auto Return Function

Go to section 5.2 about the Liftup Service Tool to learn about the Auto return function.

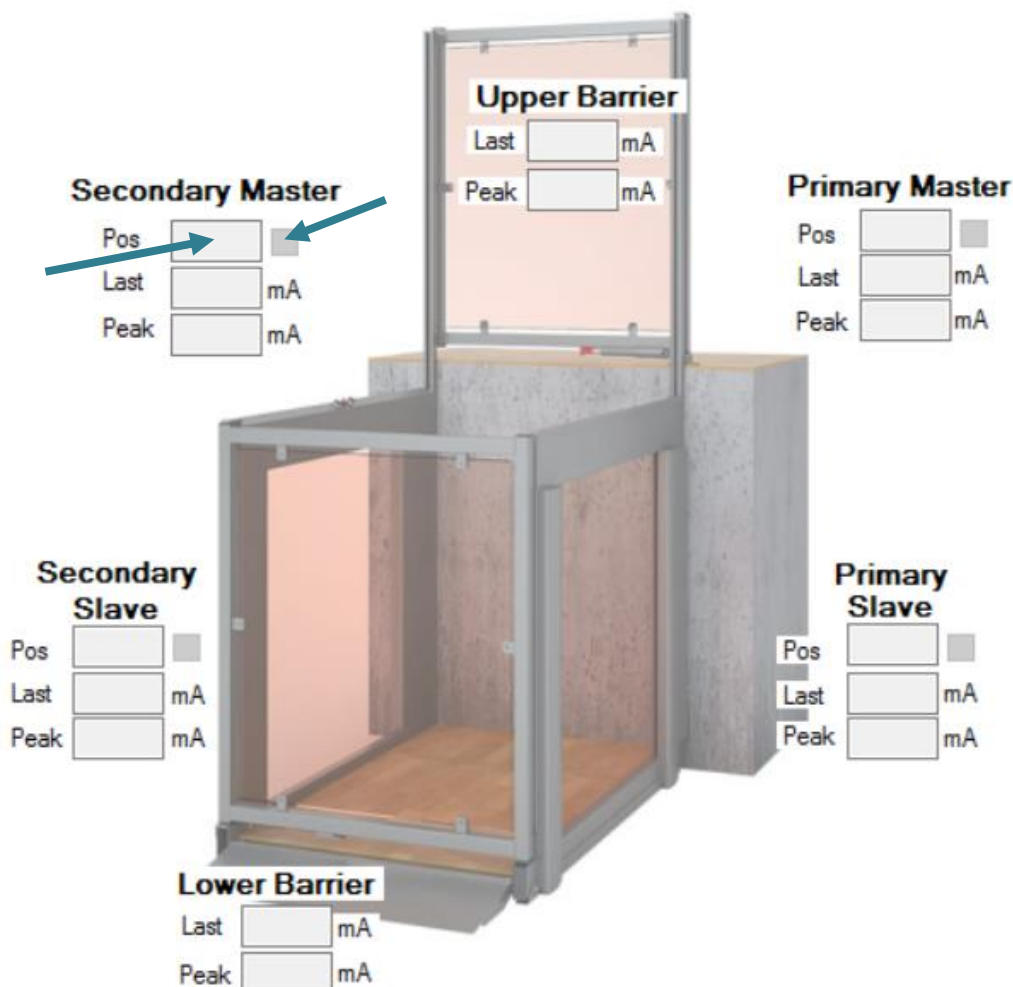
### 3.10 Calibration

In the case of:

- Exit Service Mode
- Release of emergency button when mains is OFF
- Reset of Control Board
- Programming of Lift with Liftup Service Tool

the lift will lose its position, it will then need calibration before it can move normally again. Any activation of call station/onboard buttons will make the lift go down to lower position. During this movement some actuators can be faster than others to arrive at lower position - this is normal.

Once all four actuators are “at zero” (see picture below taken from Liftup Service Tool) all four actuators will show a green light and a “0” at Position. Once this is done, the lift can move normally again.



## 4. Call stations

The lift can be delivered with different types of call stations to be mounted on upper level and lower level (recommended). Find different solutions on [www.liftup.dk](http://www.liftup.dk).  
How to connect a standard Liftup call station is described below.

### 4.1 Standard call station wired

Two ways connections



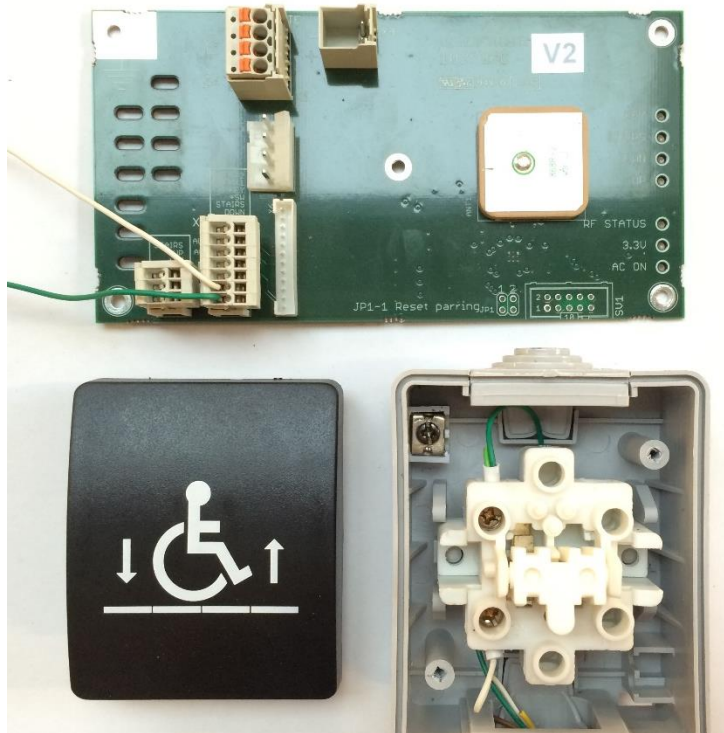
#### Lower Call station:

Green / Common  
Brown / Up  
White / Down

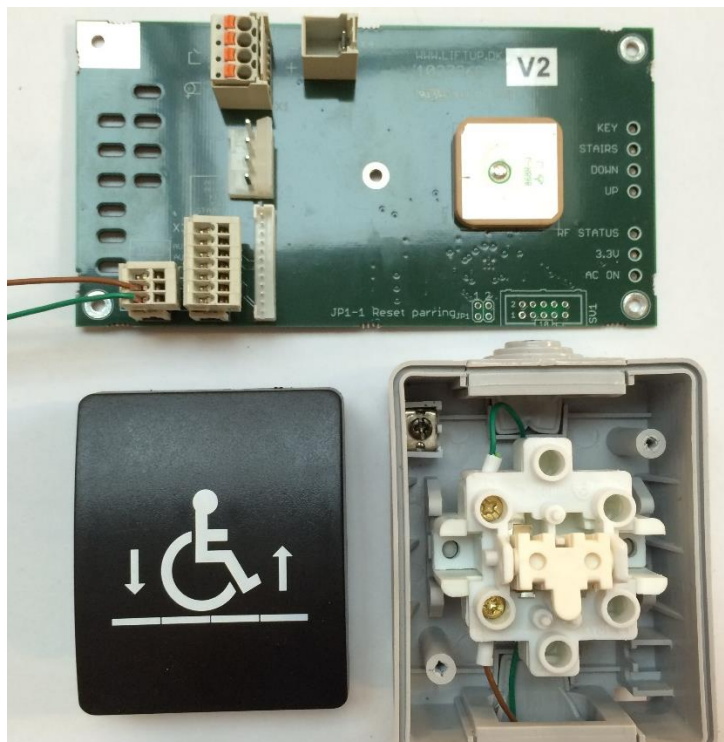
#### Upper Call station:

Green / Common  
White / Down  
Brown / Up

One way connections



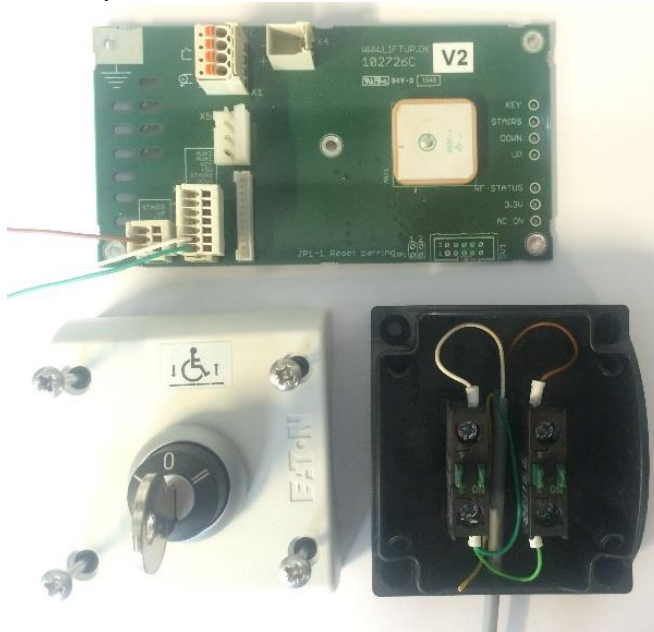
**Lower call station:**  
Green / Common  
White / Down



**Upper call station:**  
Green / Common  
Brown / Up

## 4.2 Key operated call stations

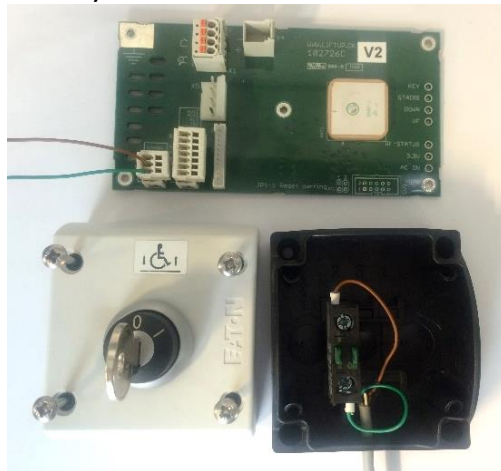
Two ways connections



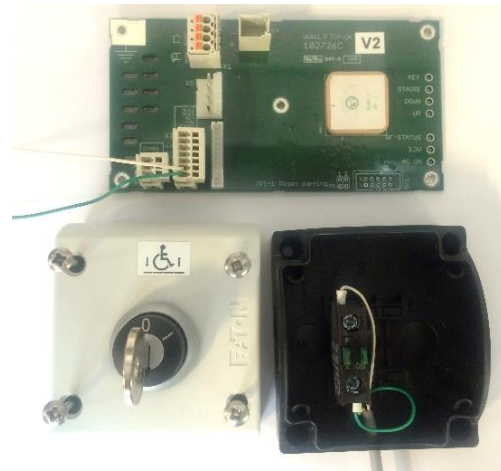
**Upper call station:**  
 Green / Common  
 Brown / Up  
 White / Down

**Upper call station:**  
 Green / Common  
 Brown / Up  
 White / Down

One way connections



Upper call station



Lower call station



### 4.3 Wireless call stations (wall mounted)

Two ways connections



One way connections



Upper Call station



Lower Call station

## 4.4 How to pair transmitter and receiver

### 4.4.1 Wireless call station and receiver of the lift

The wireless call station and receiver must always be paired in order to work.

The receiver will not react to a wireless call station which is not paired with it.

A receiver can be paired with up to 20 wireless call stations.

A wireless call station can be paired with several receivers if required.

When a receiver is powered on (please see section 10.6) the RF-Status in the connection box will flash for 2 minutes. Or until it is paired with a wireless call station.

1. Ensure that there is power to the system. Press the emergency stop and switch off the on/off switch on the side of the lift (please see item 10.6).
2. Wall-mounted remote-controlled call station: Set dip switch S4 #2 to ON and press on the contact or short-circuit (↑) or (↓) using a metal object. The control LED on the call station will start to flash slowly. The call station is now in installation mode for 2 minutes. Return S4 #2 to its starting position (off).
3. Within these 2 minutes, release the red emergency stop on the lift by turning it clockwise.
4. The control LED on the call station is paired with the lift when it stops flashing.
5. Test the system so as to ensure the pairing has been performed correctly. If not, repeat 1-5 above. If you need to pair several call stations to the receiver, repeat items 2-6 above.
6. Switch on the on/off switch on the side of the lift.



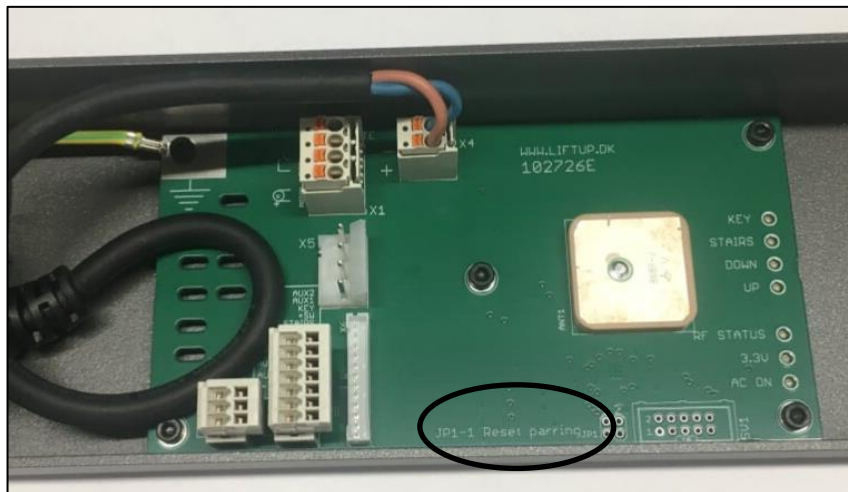
### How to reset wireless call station and receiver of the lift

To reset a wireless call station so it is no longer paired with a particular lift, do as follows:

- Set dip switch S4 #1 to ON and press on the contact or connect (↑) or (↓) using a metal object. The control LED on the call station will flash rapidly.
- The pairing with the receiver has now been erased.
- Return dip switch S4 #1 to off.

### How to reset the receiver of the lift

- Switch the power to the lift on.
- Short-circuit JP1-1 on the connection box board.
- When the control LED begins to flash rapidly, the receiver has been reset.
- Should the control LED not flash rapidly, this means that no receiver has been paired.



#### 4.4.2 Remote control and receiver of the lift

The remote control and receiver of the lift must always be paired in order to work.

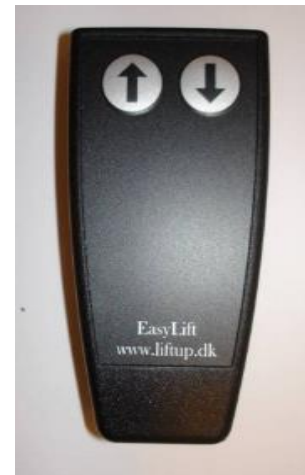
The receiver will not react to a remote control which is not paired with it.

A receiver can be paired with up to 20 remote controls.

A remote control can be paired with several receivers if required. When a receiver is powered on (please see section 10.6) the RF-Status in the connection box will flash for 2 minutes. Or until it is paired with a remote control.



1. Ensure that there is power to the system. Press the emergency stop and switch off the on/off switch on the side of the lift (see section 3.7).
2. Press the UP (↑) and DOWN (↓) buttons on the remote control at the same time and hold them down for approx. 5 seconds until the control LED on the remote control begins to flash slowly. The remote control is now in installation mode for 2 minutes.
3. Within these 2 minutes, release the red emergency stop on the lift by turning it clockwise.
4. When the control LED on the remote control stops flashing it is paired with the lift.
5. Test the system so as to ensure the pairing has been performed correctly; if not, repeat 1-5 above. If you need to pair several remote controls to the receiver, repeat item 2 above.
6. Switch on the on/off switch on the side of the lift.



Handheld remote control (transmitter)

#### How to reset remote control and receiver of the lift

To reset a handset so it is no longer associated with a particular lift, do as follows:

1. Press the UP (↑) and DOWN (↓) buttons on the handset at the same time and hold them down for approx. 5 seconds. Until the control diode on the handset begins to flash slowly. The handset is now in installation mode for 2 minutes.
2. Perform the following within the 2 minutes:

Press: UP (↑), UP (↑), DOWN (↓), DOWN (↓), UP (↑), DOWN (↓), UP (↑), DOWN (↓)

3. When the control diode starts to flash quickly, the handset is no longer associated with a particular lift.



**IMPORTANT!** Make sure no other receiver is in pairing mode (Push eventually pairing mode).

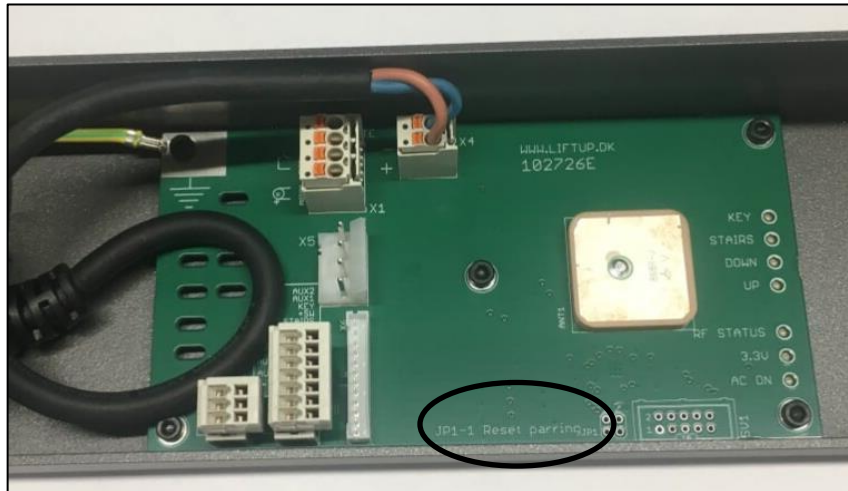
### How to reset the receiver of the lift

Switch the power to the lift on.

Short-circuit JP1-1 on the connection box board.

When the control LED begins to flash rapidly, the receiver has been reset.

Should the control LED not flash rapidly, this means that no receiver has been paired.

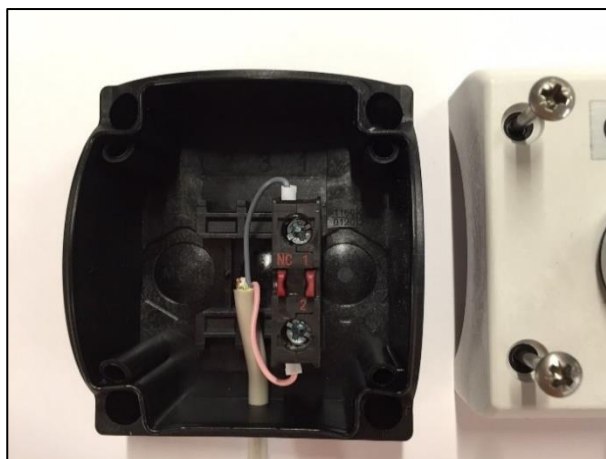


#### 4.5 ON/OFF Key switch (Optional)

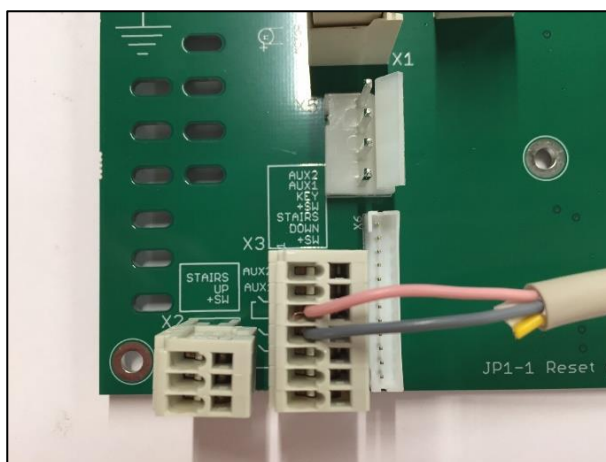
The EasyLift V3 can be delivered with a key switch to switch off the unit (art.no. 103480). How to connect a standard Liftup key switch is described below.



*Standard key switch*



*Wires mounted to contact in key switch box*



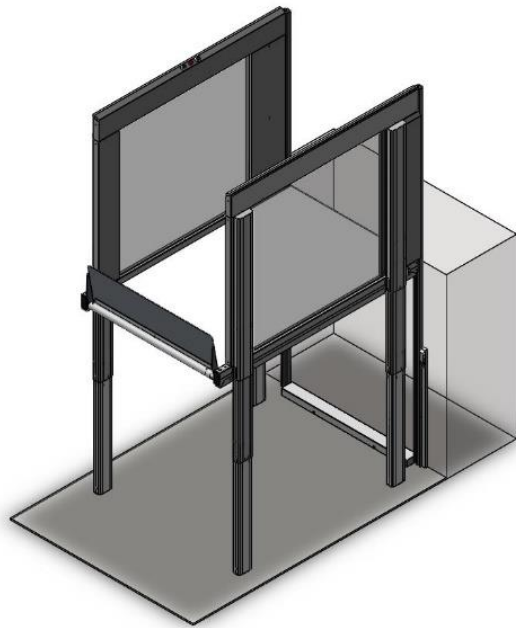
*Wires from key switch mounted on print for connection box. Placed on bottom rail.*

## 5. Setting of lifting height

### 5.1 Definition

All lifts are delivered with two programmable lifting height settings. According to your order confirmation the lift is tested and set to your specified heights but can be modified, if adjustment is needed.

1<sup>st</sup> programmable height setting (Platform Lifting Height) is the position where the platform will stop when it reaches the top landing.



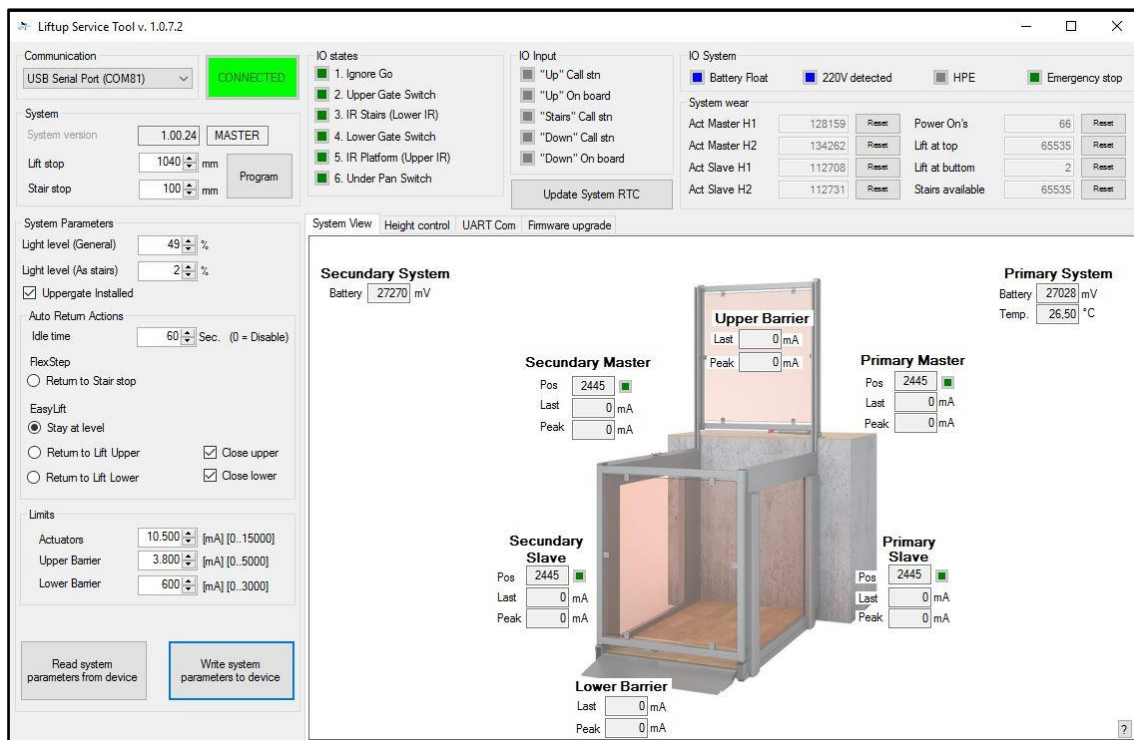
Stop at top landing

### 5.2 Setting of stops using Liftup Service Tool

The Liftup Service Tool must be installed on a PC\* (Laptop) with a USB output.

1. Place the USB cable into the PC and into the USB plug of the Master control board (103482) on the lift (RH side of the lift).
2. Start the Liftup Service Tool on PC (make sure you know the name of the COM port, see Annex to see how). You should see the “Connected” box with green background (see below, USB detected on COM 81)

\* PC must be Windows 7 or newer. Windows XP is usable but requires special drivers.



3. In the Stroke area, set the value of actuators:
  - Platform Lifting height, in mm (see NOTE)

4. Push the “Write system parameters to device”.

Now the system is ready to run, please remember to check that all settings are as expected.

NOTE: Remember to deduct approx. 70 mm to your settings as the platform is approx. 70 mm thick.



**IMPORTANT!** After programming the system must be calibrated by pushing the “lift down” button until the platform is positioned at lower landing.





### 5.3 Setting lifting height (virtual top stop) by service mode

When the system is in service mode, it is possible to set the lifting height of the lift.

- A. Set the system into service mode (see chapter 6).
- B. Move the lift to the lower level (at this moment the lift is not calibrated, it will therefore move with low speed). If the lift is already down, you will need to move it up about 10 cm and then down again.
- C. Push the “**up**” button (on call stations or on the lift), until the desired level is reached (the travel speed is now quicker, the lift is calibrated).
- D. To record the new lifting height, push the emergency button (you will still stay in service mode), and push the “up” button on the platform for one second, you will hear “a validation sound”.
- E. Come out of the service mode (see chapter 6).



**IMPORTANT!** After programming the system must be calibrated by pushing the “lift down” button. Run the lift all the way down.

## 6. Service mode

### 6.1 How to set the system into service mode

To set the system into service mode, do as following:

1. Push emergency stop button.
2. Push and hold the UP and DOWN buttons (↑/↓), release the emergency stop button, keep holding the two buttons (↑/↓) for 10 sec.
3. Stop pushing the buttons, once you hear the service mode sound (two tones every 5 sec.)



To come out of service mode, make the same procedure as when you go into service mode (1, 2, 3).

In service mode the system needs to have the ramp lock/door switch activated and the vertical Safety Barrier/door Switch activated. In this mode the auto return function is disabled, so is the top stop.

### 6.2 Features in service mode NOT CALIBRATED

**NOTE 1:** Be careful not to travel with the platform higher than 1250 mm. This can happen in service mode if not calibrated.

To change an actuator:

Disconnect one of the Actuators on the control Unit. Now the lift is travelling on 3 Actuators.

**NOTE 2:** As the EasyLift is not calibrated, the actuators are not synchronized between each other (the platform will therefore not stay parallel to the floor).

**NOTE 3:** Be careful not to brake the E-chain, disconnect it from the RH Side wall profile if necessary

### 6.3 Features in service mode CALIBRATED

When the system is in service mode, different kinds of features are available, see following:

1. It is possible to set virtual top stop.
2. All four actuators can be moved by pushing the “lift down” or “lift up” (↑/↓).

## 7. Safety features

### 7.1 Safety pressure plate

Below the lift is a pressure plate connected to safety micro switches (see fig. 7.2) This eliminates the risk of getting squeezed underneath the platform.

The pressure plate micro switches are connected and work in a normally closed circuit and if activated during downwards motion, the lift will stop and move approx. 2-3 cm upwards. In service mode the lift stops completely – it does not move 2-3 cm upwards.

### 7.2 Adjustment of micro switches for pressure plates

To adjust the micro switches, loosen the two screws underneath the frame of the lift.

Move the micro switch gently forwards or backwards to the correct position.

Tighten the two screws.

Test that the switch is correctly adjusted by activating the pressure plate while maneuvering the lift down.

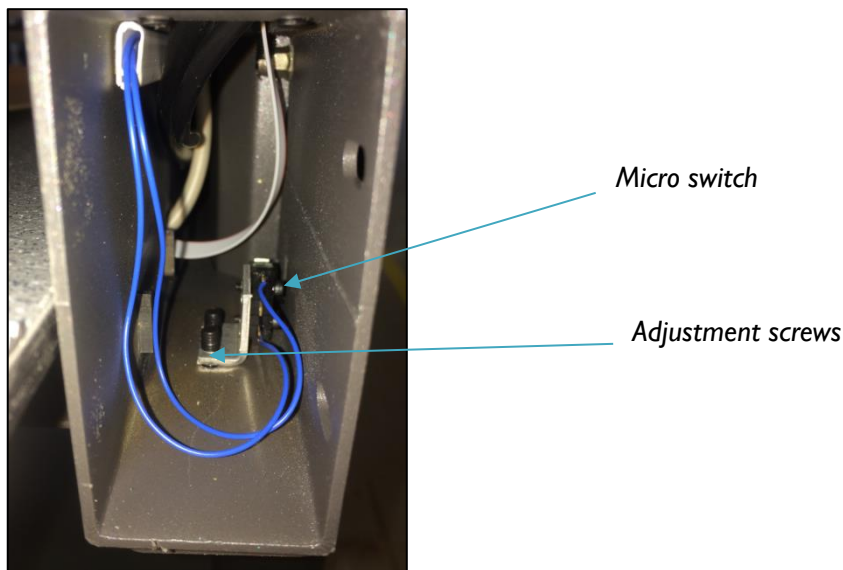


Fig. 7.2: Side frame of the EasyLift

### 7.3 Audible alarms

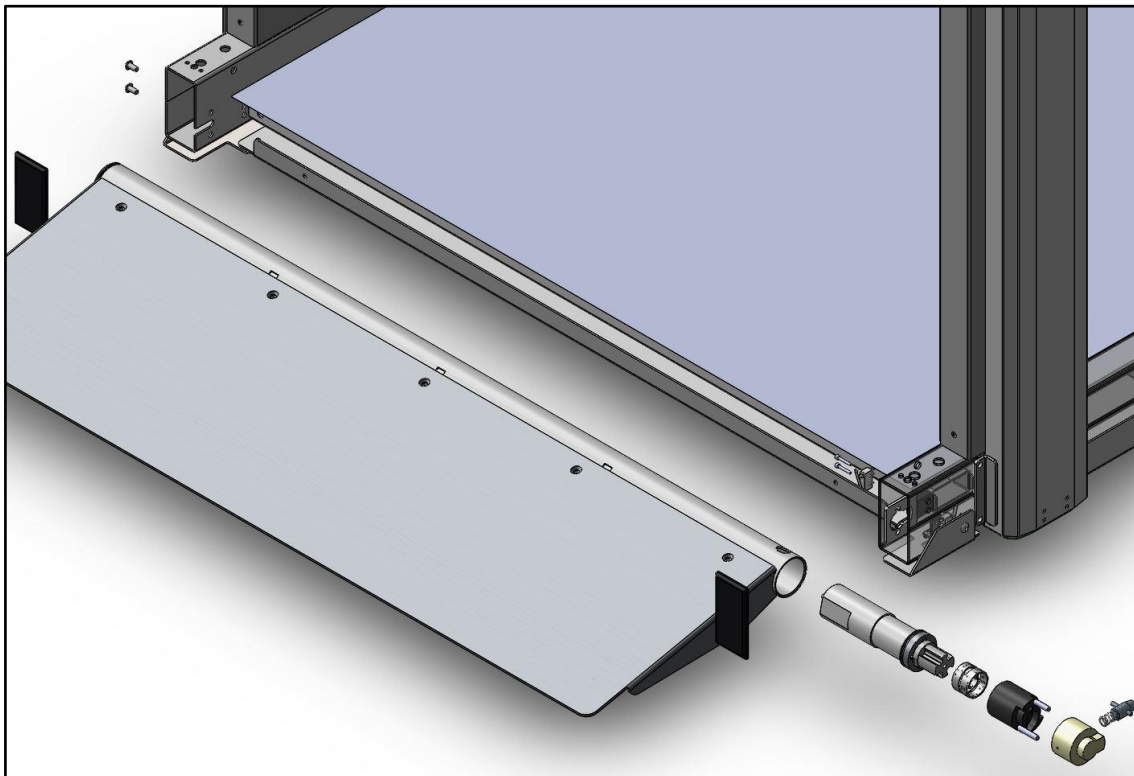
If “speak” is installed on the lift this will be activated in case of an alarm. Otherwise an alarm tone will sound.

Speak	Activity/warning	
Opening	The vertical safety barrier is opening	■ — ■ —
Closing	The vertical safety barrier is closing	— ■ — ■
Alarm: Overload alarm	The platform is overloaded	■ — — ■ — —
Alarm: Battery fault – the lift cannot be used	The battery has a fault. Inadequate power supply (please see section 5 Technical Specifications)	■ — — ■ — —
Alarm: Under pan switch activated	Remove the object under the lift which is preventing downward movement	— — ■ — — ■
Ding Ding Ding	Arriving at top/bottom level	
Warning – automatic operation	A warning before the lift will run auto return	
BEEP-BEEP-BEEP...	The lift is in the process of running auto return	■ — ■ — ■ — ...
Emergency stop pressed	The red emergency stop button has been pressed in. This must be released in order that the lift can function again	■ — ■ — ■
The lift is locked	The lift is locked with a key switch	■ — ■ — ■
Battery warning	Low battery level	■ — ■ — ■
Power supply is interrupted – connect or press emergency stop	Connect to a power supply or activate emergency stop in order to power off the lift	■ — ■ — ■

- — ■ High tone followed a deeper tone
- — ■ Low tone followed by higher tone
- ||| Identical tones (3 off)

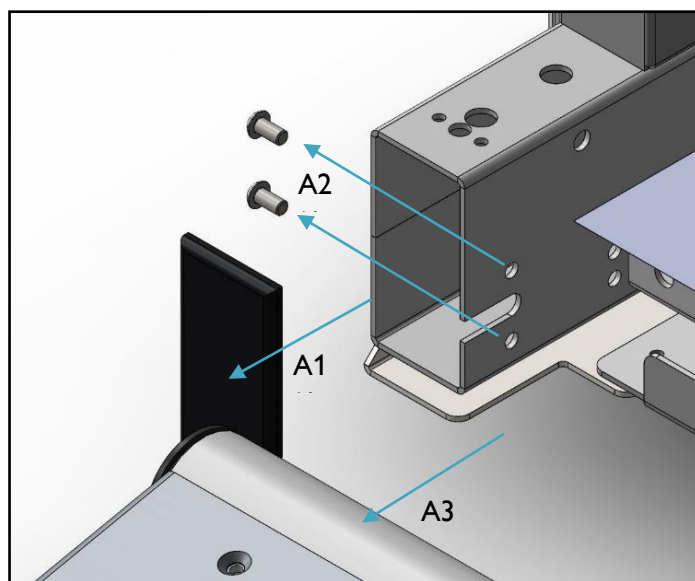
### 7.4 Automatic ramp/roll-off protection (only on EasyLift 800/900)

The automatic ramp/roll-off protection is driven by an electric motor inside the steel tube. The motor also drives the mechanical lock inside the pipe. The lock ensures that no one or nothing rolls off the lifting platform during motion.

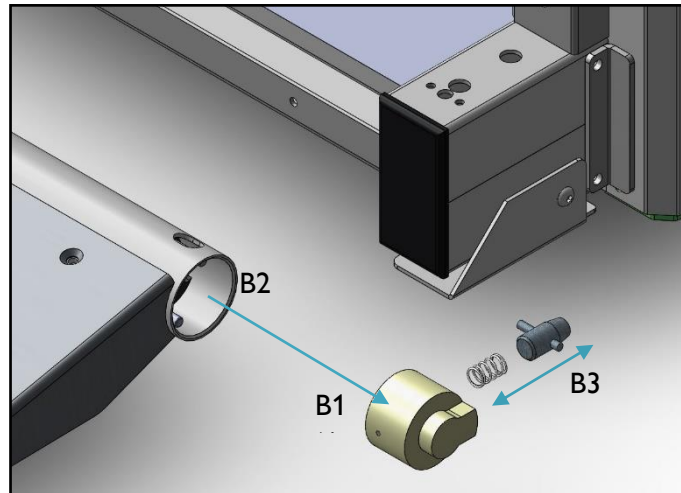


#### Maintenance/Repair/Replacement:

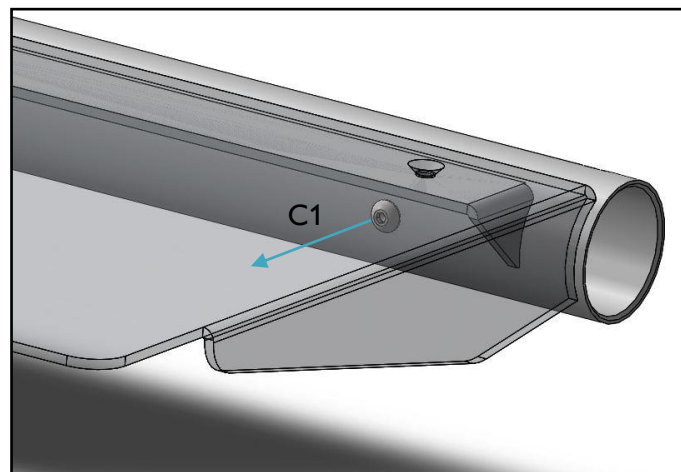
- A. Remove black plastic cover (A1). Unscrew the two screws (A2) holding the ramp tube. Remove ramp tube (A3) gently. Beware of the wires connecting to the motor!



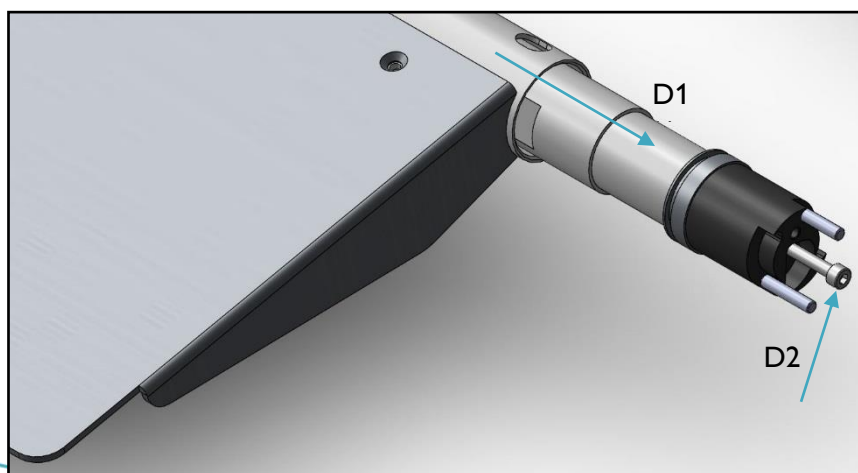
- B. Gently pull out the brass bracket (B1) from the ramp tube (B2). If the lock pawl (B3) is out, push it in with a finger. The lock pawl is spring loaded - be careful!



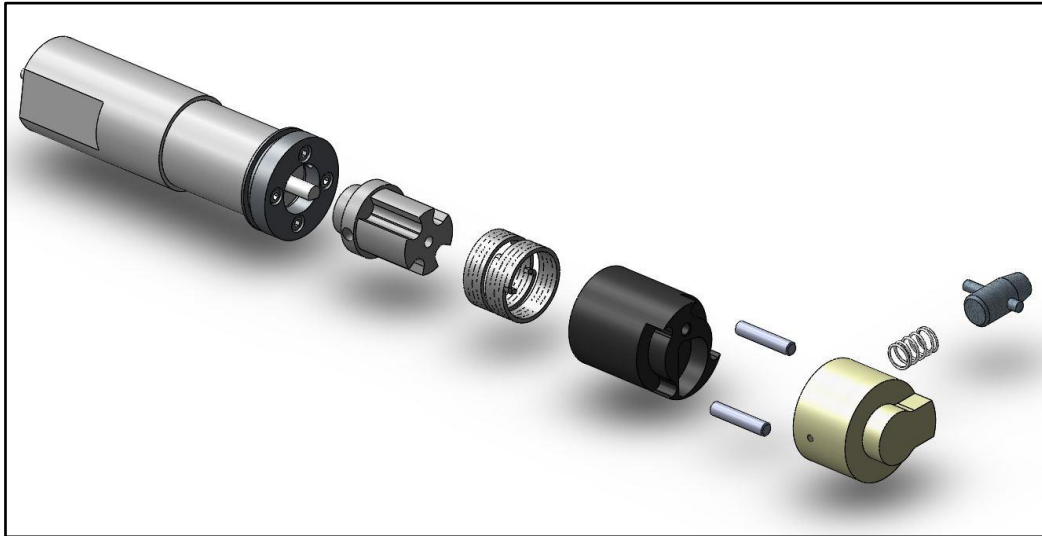
- C. Unscrew the screw (C1) holding the motor- and lock assembly.



- D. Gently pull out the motor- and lock assembly (D1) from the ramp tube. If the assembly is tight, use a M5 screw (D2) to retract it from the tube.



### When assembling the lock unit:



- E. Push the motor in by using the long M5 screw. Be careful that the cable will not be squeezed between motor and ramp pipe. Remove the M5 screw.
- F. Assemble the lock assembly, holding in the lock pawl at the same time. Turn the lock assembly inside the tube until it fits.
- G. Fasten the lock assembly to the side frame (A). The lock pawl should point towards the micro switch.

Adjust the micro switch to be activated when the lock pawl is out, and do NOT activate the switch, when the lock pawl is in the pipe.

## 8. Unlocking door in case of an emergency

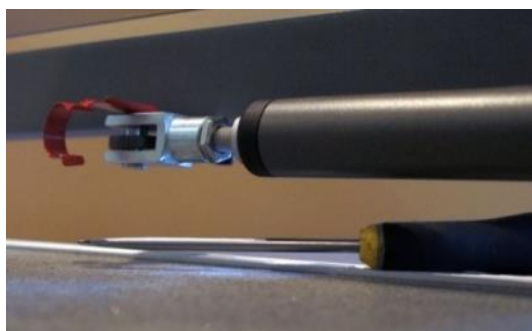
In case of emergency/malfunction: Release the folding spring bolt.



1. Pull the spring out from the shaft of the clevis, using a suitable tool, screwdriver, ruler, bottle-opener, etc.



2. From outside, you can attack the lower side.

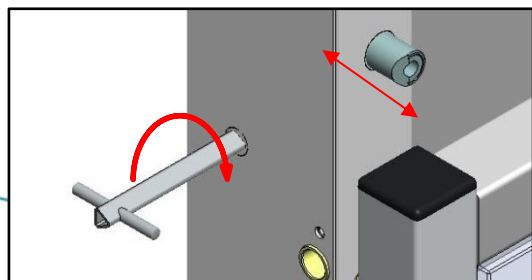


3. Spring is released.



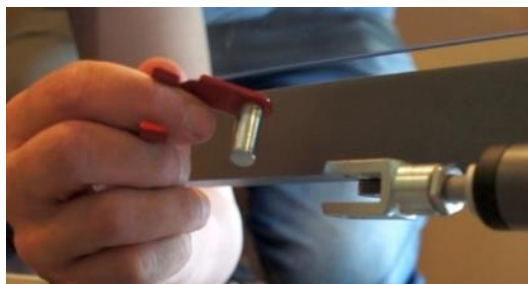
4. When the spring is released pull out the bolt.

**Please note!** The bolt may be difficult to pull out, because of pressure on the door actuator.



5. If the door is equipped with an automatic door lock; unlock it with a triangular key (automatic door lock only available on EasyLift 1100 doors).





6. Now the door can be moved freely.

When the fault has been corrected, the door can be connected again following this instruction in reverse order.

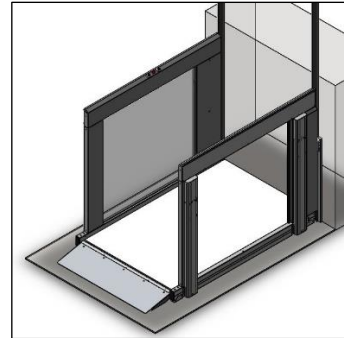
## 9. Actuator replacement

### 9.1 Dismounting actuator



**ATTENTION!** When the actuators are dismantled, the side covers are not supported.

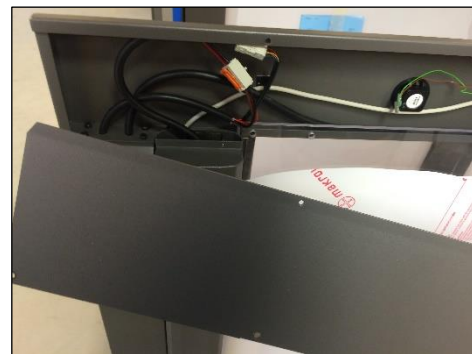
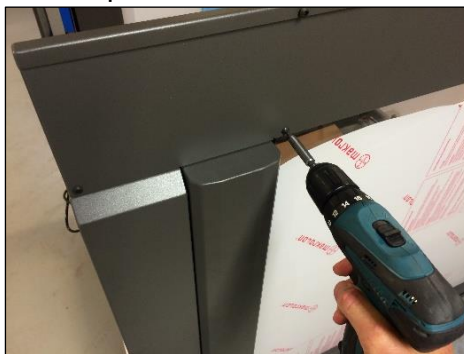
1. Push “lift down” button until the platform is positioned at lower landing.



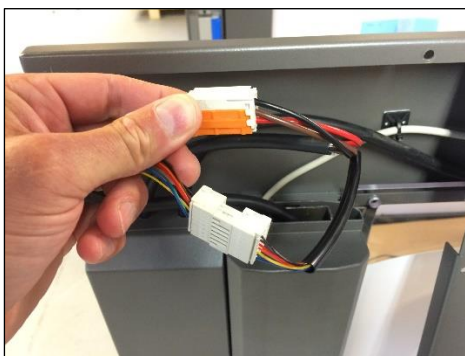
2. Push the emergency stop button.



3. Remove top cover from the frame.



4. Disconnect the cable for the actuator.



5. Unscrew the four screws holding the actuator on the frame and remove actuator.



6. Mount actuator using this guide in reverse order.

### 9.1 Replacing spindle unit

1. Unscrew the four screws and remove the foot plate under the actuator.



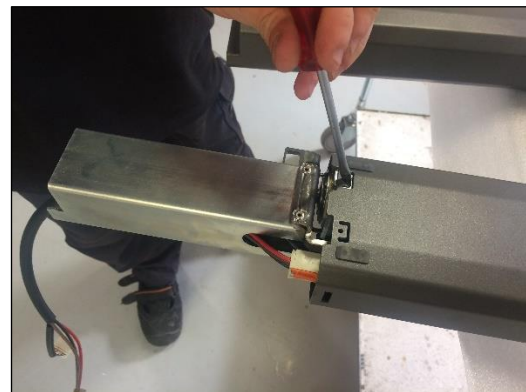
2. Unscrew the three screws holding the spindle unit.



3. Release the outer actuator tube from the extension pipe. Use a flat pliers to bend the sheet metal lock on the extension tube. Pull the rest of the assembled spindle unit out from the outer actuator tube.



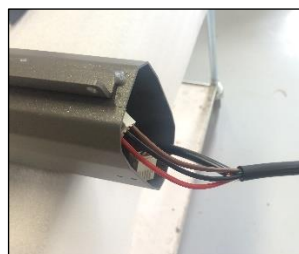
4. Release the middle actuator tube from the top bracket on the spindle unit. Use a small screw driver or similar to bend the sheet metal locks.



5. Pull the spindle unit out from the outer actuator tube.



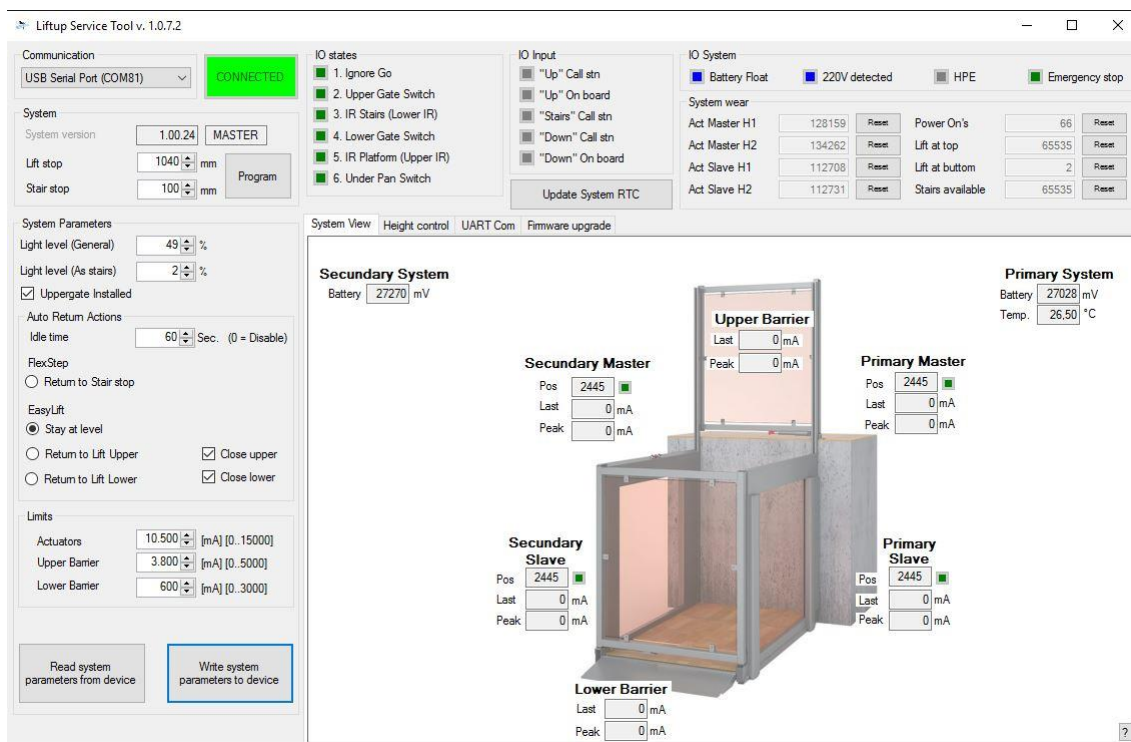
6. Insert new spindle unit and mount actuator using this guide in reverse order. Please be careful not to damage wires when sliding the actuator tubes together.



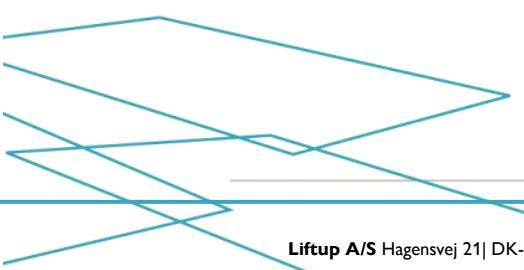


# 10. Enclosures

## 10.1 Liftup Control Software

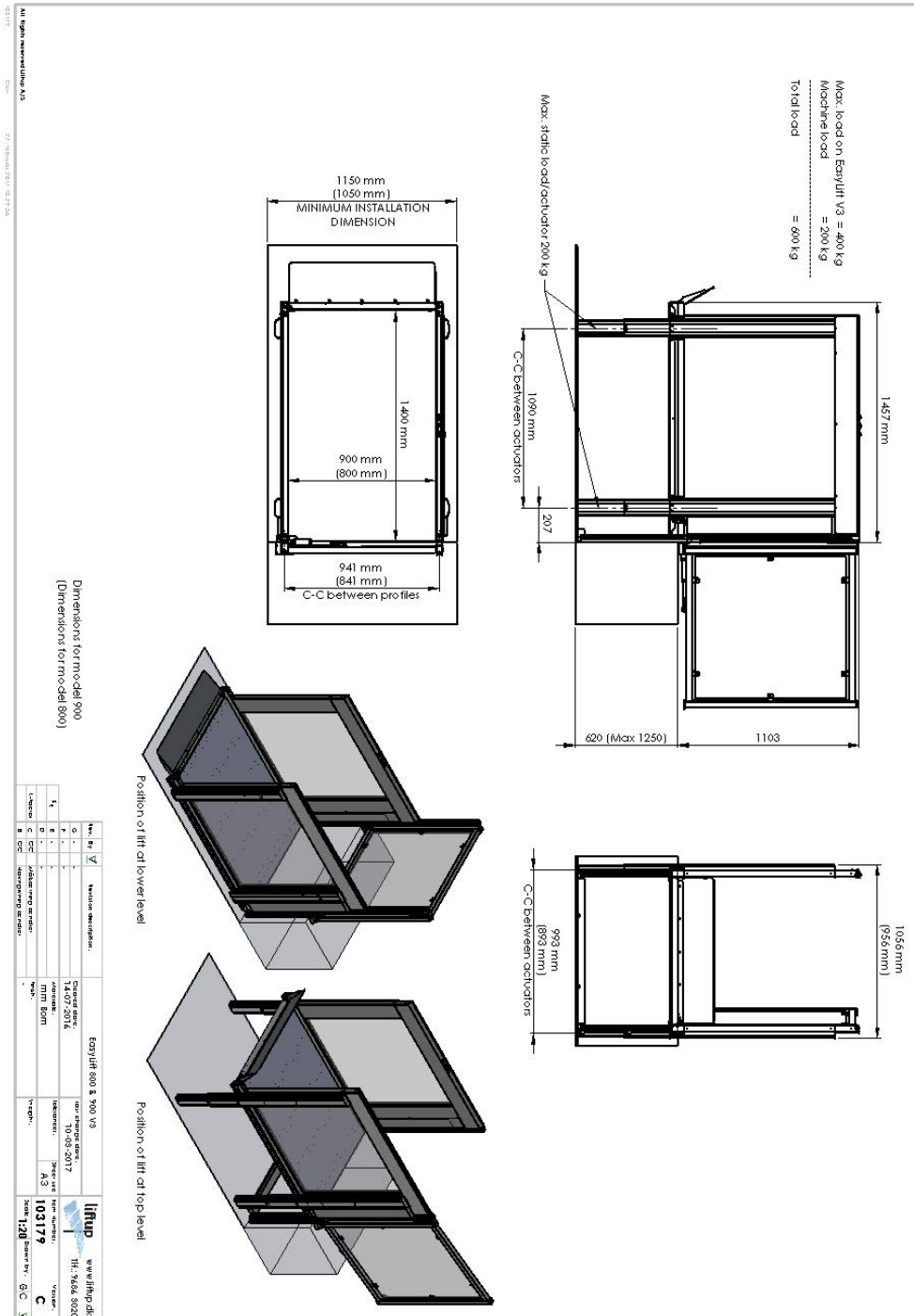


In the EasyLift Programming Software the virtual Top Stop can be adjusted.

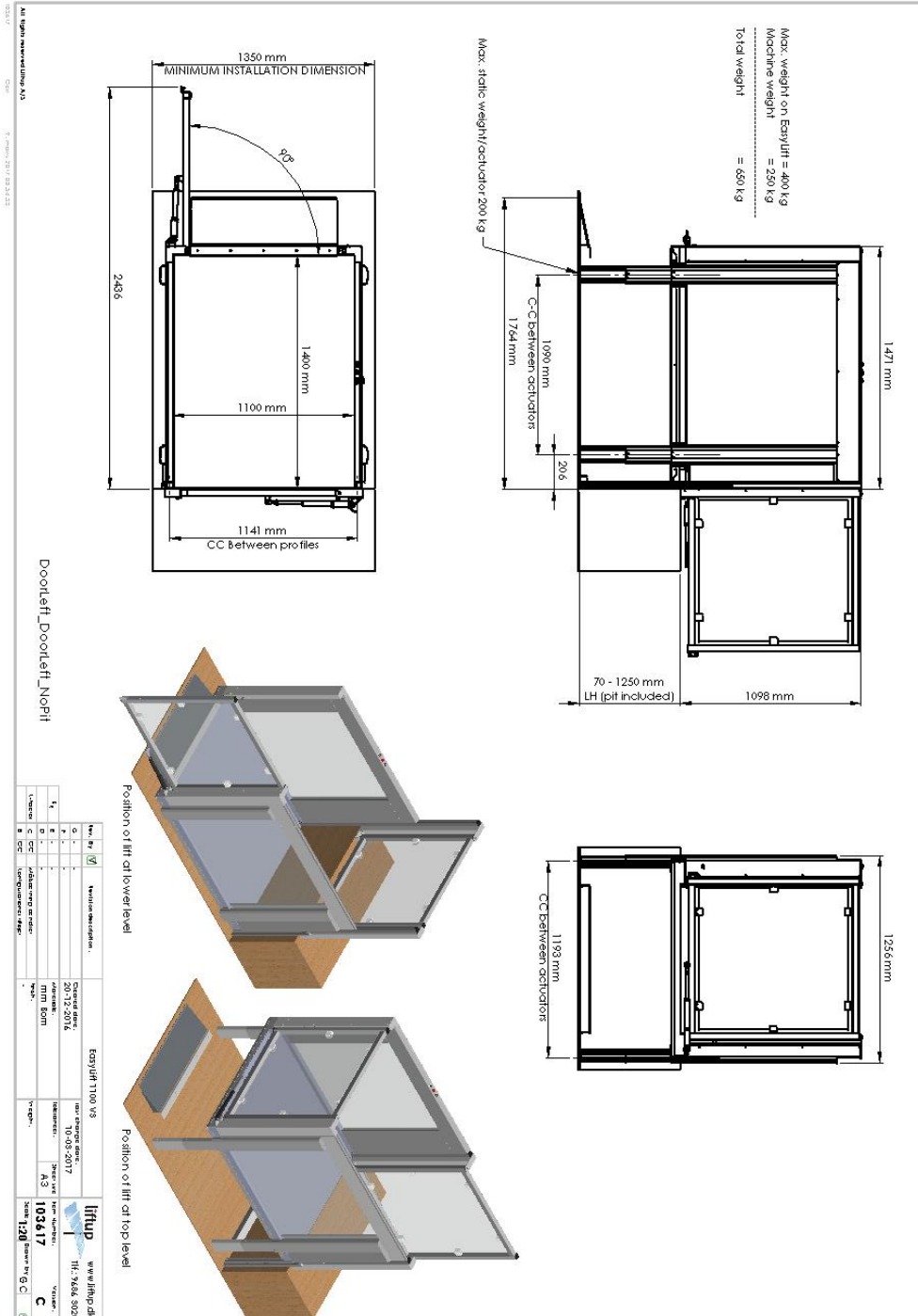




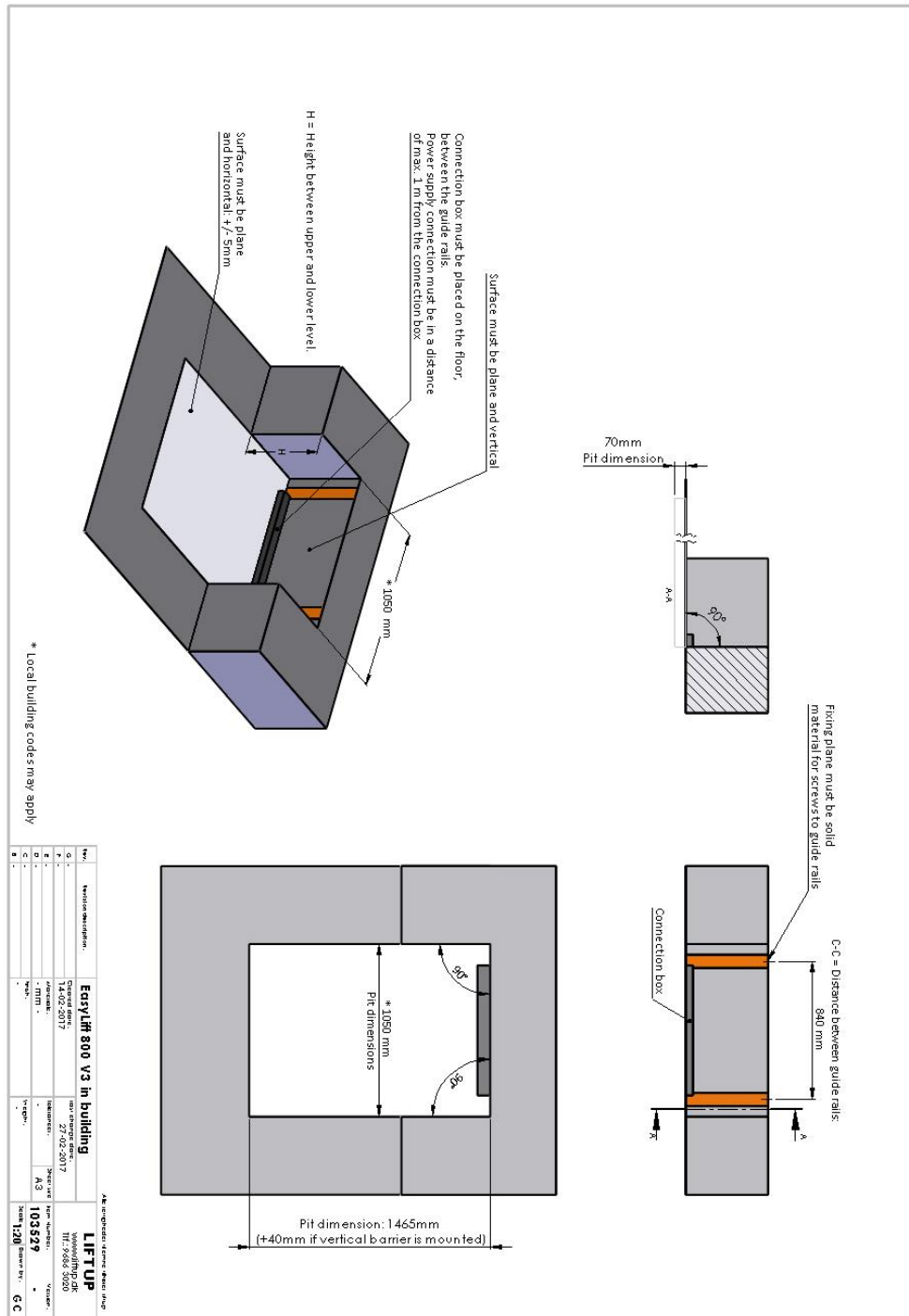
## 10.2 Drawing EasyLift 800 / 900



### 10.3 Drawing EasyLift 1100

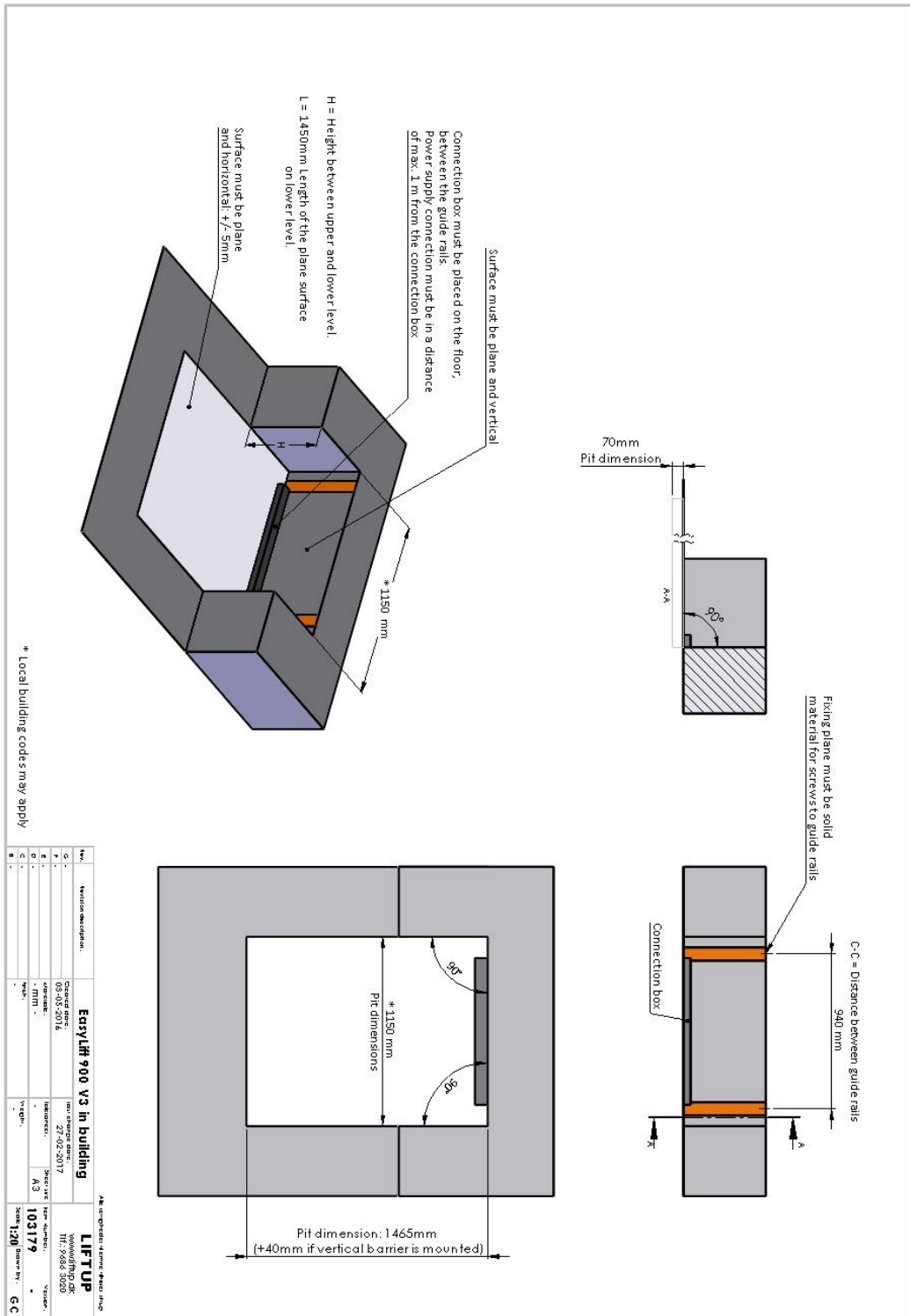


### 10.4 Installation specifications EasyLift 800

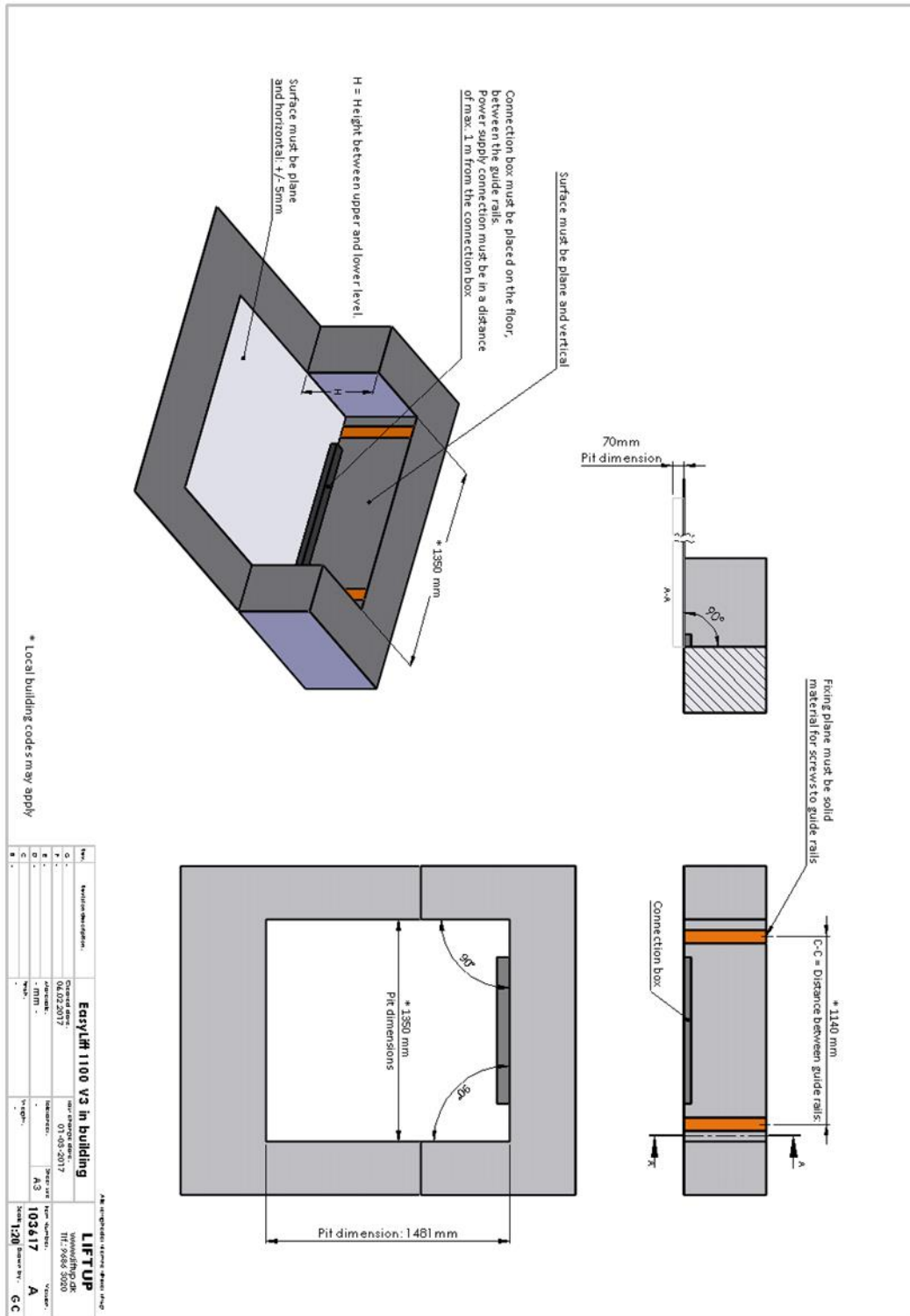




### 10.5 Installation specifications EasyLift 900

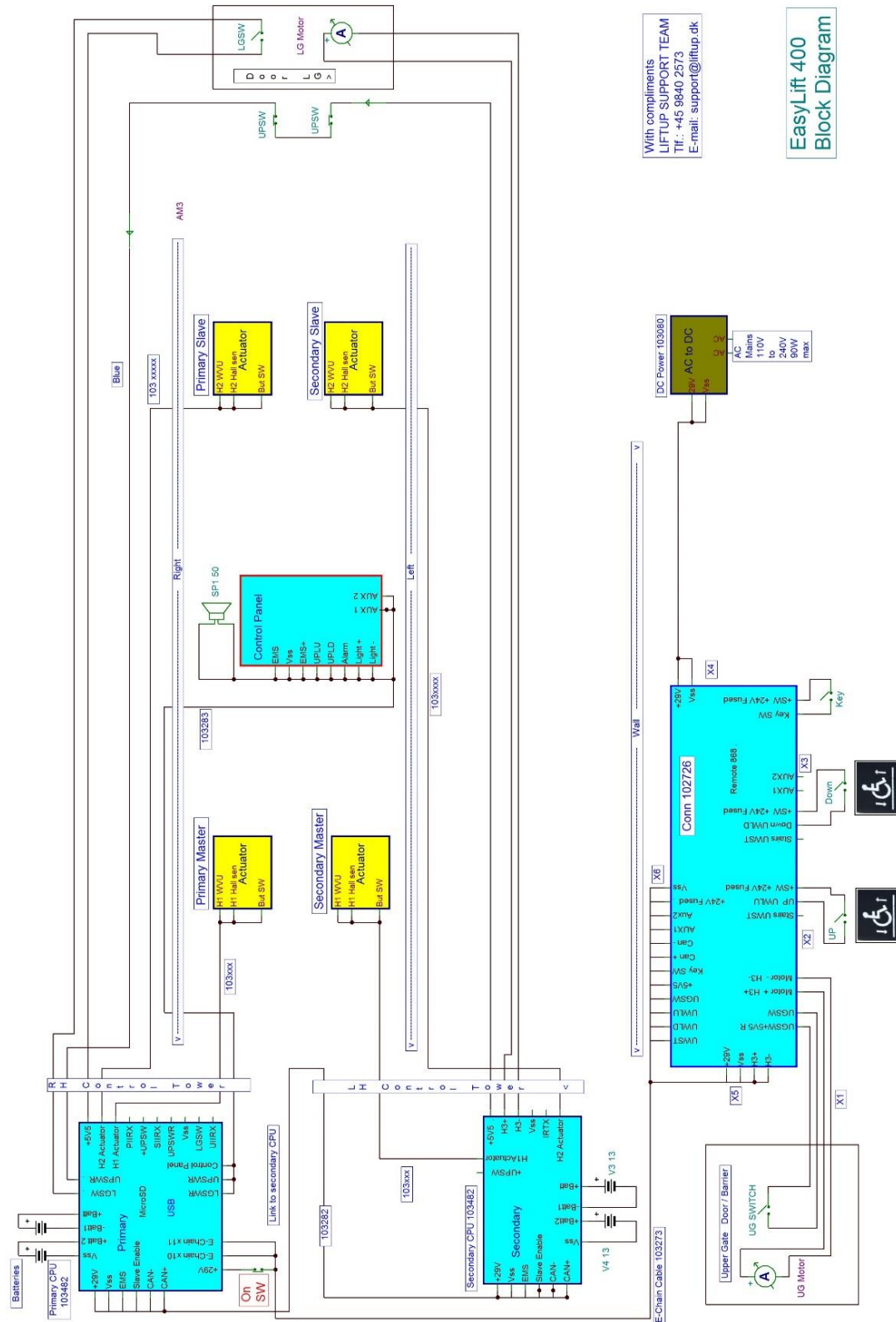


### 10.6 Installation specifications EasyLift 1100





10.7 Simplified electrical diagram (WITHOUT lock on door)



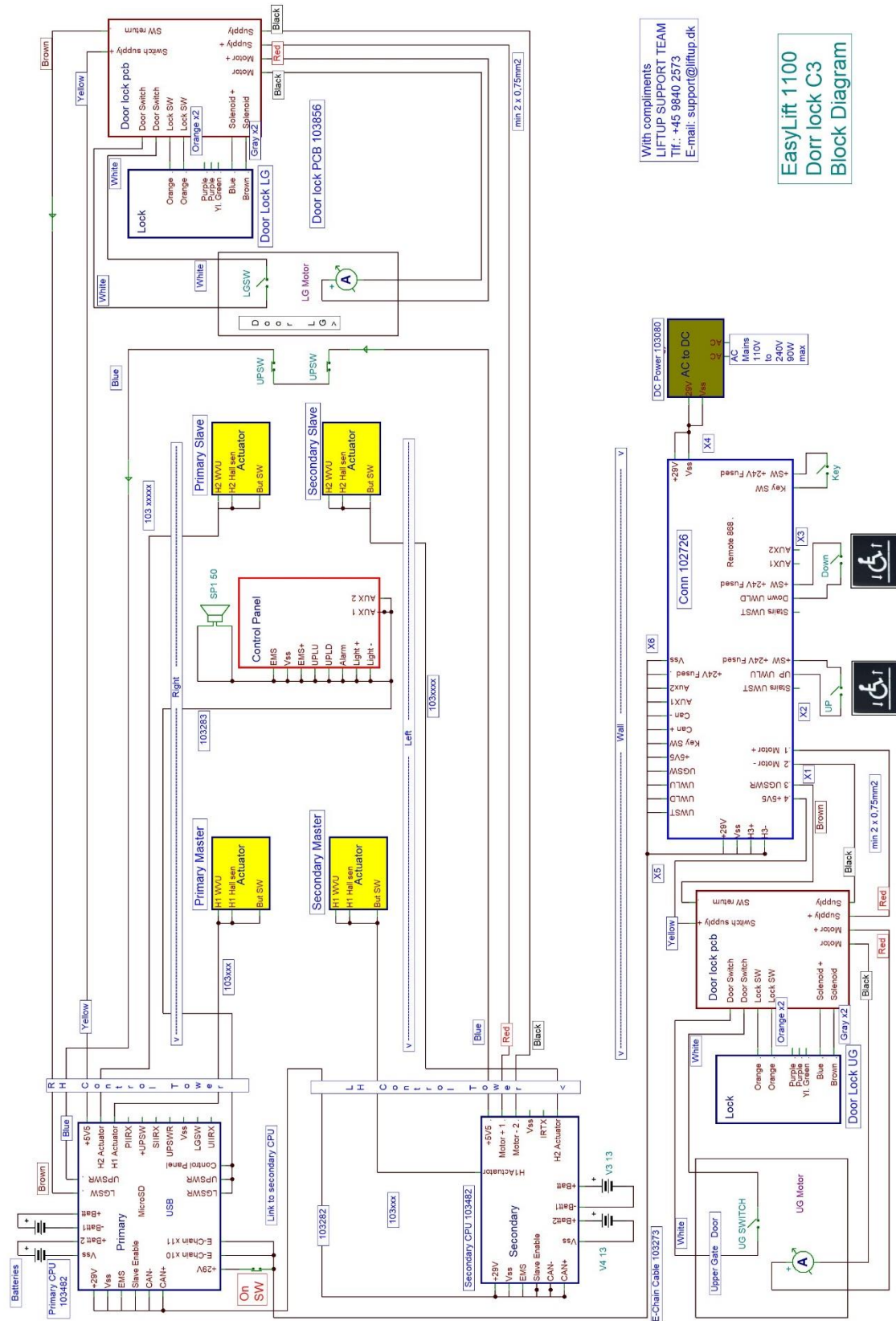
With compliments  
LIFTUP SUPPORT TEAM  
Tel. : +45 9640 2373  
E-mail: support@liftup.dk

EasyLift 400  
Block Diagram





### 10.8 Simplified electrical diagram (WITH lock on door)



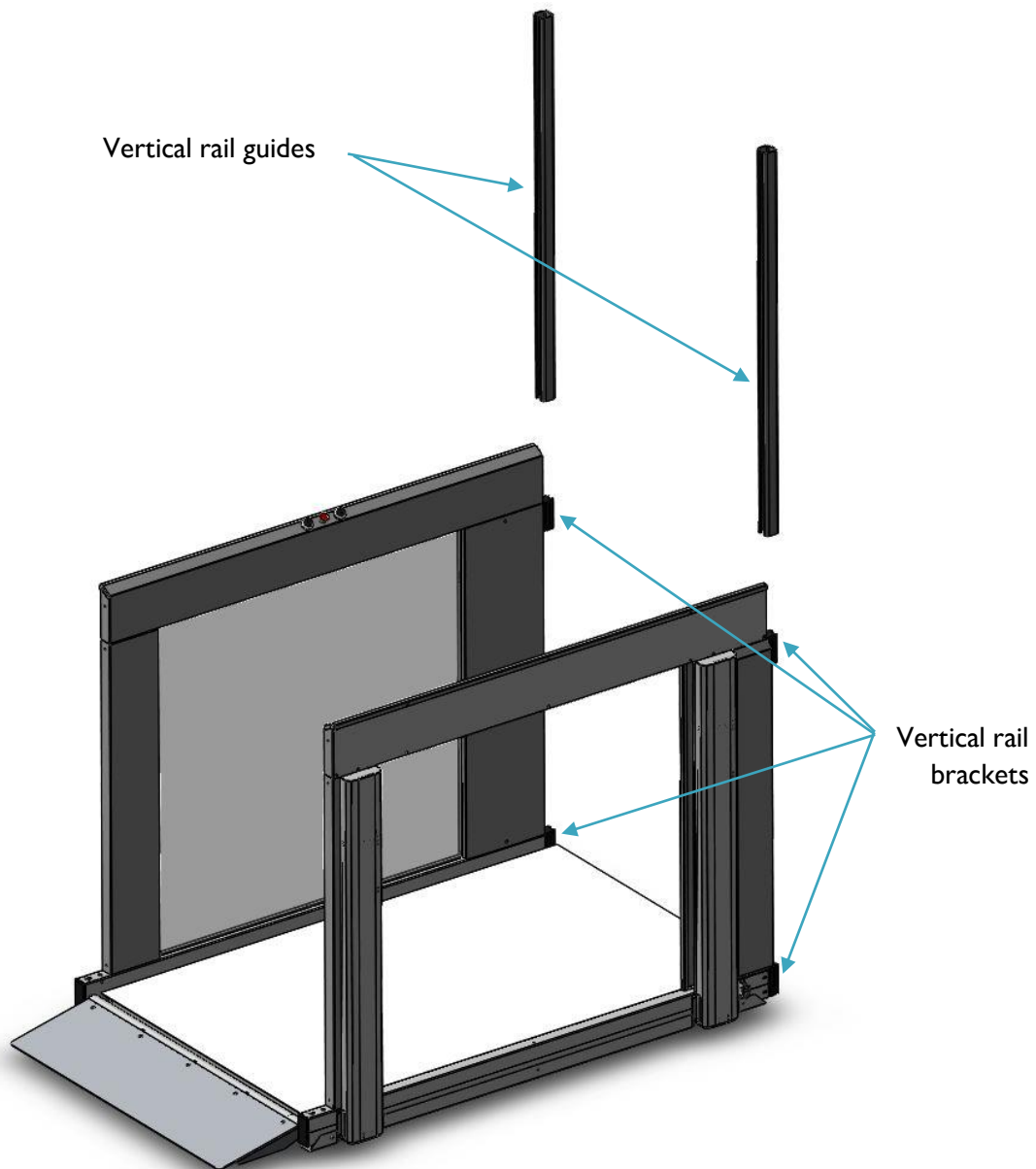
With compliments  
LIFTUP SUPPORT TEAM  
Tlf: +45 9840 2573  
E-mail: support@liftup.dk

EasyLift 1100  
Dorr lock C3  
Block Diagram



### 10.9 Pull force of mounting screws

Recommended strength of screw, attachment when installing Vertical Rail Guides



Screws, attachment to the building must withstand a Pull Force not less than 0.5 kN each.

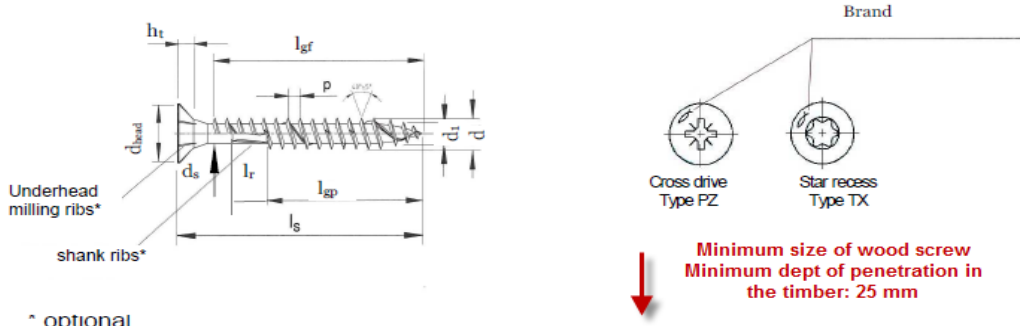
(See next page examples of screw attachments)



!!! Minimum 3 screws in each Vertical Rail Guide !!!



**NOTE:** If the strength of screw, attachment is validated by test, minimum withdrawal strength is 1.5 kN. Factor of Safety > 3



\* optional

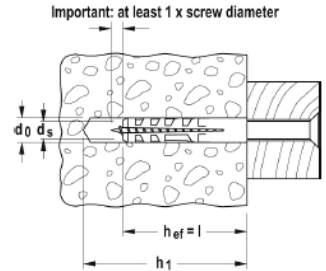
Power-Fast self-drilling screw (countersunk head) with full thread or with partial thread

Thread Ø		3,0	3,5	4,0	4,5	5,0	6,0			
d	Nominal thread diameter	3,15	3,65	4,15	4,65	5,15	6,15			
	Allow. deviation					-0,40				
d1	Core diameter	2,00	2,20	2,50	2,70	3,10	3,80			
	Allow. deviation					-0,30 / +0,10				
d <sub>head</sub>	Head diameter	6,00	7,00	8,00	8,80	9,70	11,90			
	Allow. deviation					-0,50 / +0,10				
d <sub>s</sub>	Shank diameter	2,25	2,55	2,90	3,25	3,55	4,20			
	Allow. deviation					-0,30 / +0,10				
h <sub>t</sub>	Length of head	1,90	2,10	2,50	2,70	3,00	3,40			
	Thread pitch	1,50	1,80	2,00	2,20	2,50	3,00-4,50			
p	Allow. deviation					±10%				
	Length of shank ribs	3,75	4,25	4,75	5,5	6,0	7,0			
l <sub>r</sub> *	Allow. deviation		±0,75			±1,0				
	Star recess Type TX	10		20			30			
	Cross drive type PZ	1		2			3			

**TECHNICAL DATA**



Expansion plug S



Minium size of expansions plug

Article name	Art.-No.	Drill hole diameter d <sub>0</sub> [mm]	Anchor length l [mm]	Wood and chipboard screws d <sub>s</sub> /d <sub>s</sub> x l <sub>s</sub> [mm]	Wood and chipboard screws d <sub>s</sub> [mm]
S 4	060104	4	20		2-3
S 5	060106	5	25		3-4
S 6	060106	6	30		4-5
S 8	060108	8	40		4,5-6,0
S 10	060110	10	50		6-8
S 12	060112	12	60		8-10
S 14	060114	14	75		10-12
S 16	060116	16	80		12 (1/2")
S 20	060120	20	90		16

**LOADS**

**S-Plug**

Highest recommended loads<sup>1)</sup> for a single anchor. The given loads are valid for wood screws with the specified diameter.

Allowed Base Material

Type		S4	S5	S6	S8	S10	S12	S14	S16	S20
Screw diameter	Ø [mm]	3	4	5	6	8	10	12	12	16
Min. edge distance in concrete	c <sub>min</sub> [mm]	20	25	30	40	50	60	70	80	100
Recommended loads in the respective base material F <sub>ReC</sub> <sup>2)</sup>										
Concrete	≥ C20/25 [kN]	0,16	0,28	0,40	0,60	1,10	1,50	1,85	2,26	3,88
Solid brick	≥ Mz 12 [kN]	0,14	0,24	0,28	0,50	- <sup>3)</sup>	- <sup>3)</sup>	- <sup>3)</sup>	- <sup>3)</sup>	- <sup>3)</sup>
Solid sand-lime brick	≥ KS 12 [kN]	0,14	0,24	0,28	0,55	- <sup>3)</sup>	- <sup>3)</sup>	- <sup>3)</sup>	- <sup>3)</sup>	- <sup>3)</sup>
Aerated concrete	≥ PB4, PP4 (G4) [kN]	-	-	0,05	0,07	0,16	0,28	0,40	- <sup>3)</sup>	- <sup>3)</sup>
Plaster wall	[kN]	-	-	-	0,15	0,23	0,37	0,60	- <sup>3)</sup>	- <sup>3)</sup>

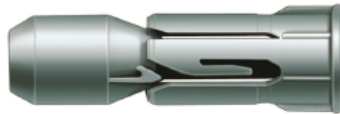
<sup>1)</sup> Includes the safety factor 7.

<sup>2)</sup> Valid for tensile load, shear load and oblique load under any angle.

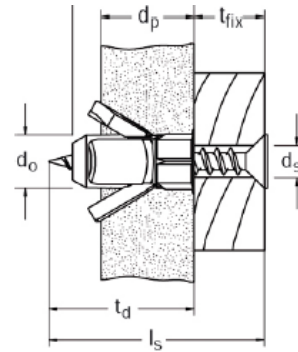
<sup>3)</sup> Due to that the failure of the substrate varies too much no reproducible values can be given.

**APPROVED**





Board fixing PD



Article name	Art.-No.	Drill hole diameter $d_o$ [mm]	Chipboard screw $d_s / d_s \times l_s$ [mm]	Max. fixture thickness $t_{fix}$ [mm]
PD 8	024771	8	4	
PD 10	015935	10	5	
PD 12	015937	12	6	
PD 8 S	024772	8	4 x 40	11
PD 10 S	015936	10	5 x 40	12
PD 12 S	015938	12	6 x 50	22

**LOADS**

**Board fixing PD**

Highest recommended loads<sup>1)</sup> for a single anchor.

The given loads are valid for chipboard screws with the specified diameter.

Not Allowed  
Base Material

Type			PD 8	PD 10	PD 12
Chipboard screw	$\emptyset$ [mm]		4	5	6
<b>Recommended loads in the respective base material <math>F_{rec}</math><sup>2)</sup></b>					
Gypsum plasterboard	9,5 mm	[kN]	0,10	0,10	0,10
Gypsum plasterboard	12,5 mm	[kN]	0,10	0,10	0,15
Gypsum plasterboard	2 x 12,5 mm	[kN]	0,15	0,15	0,15
Gypsum fibreboard	12,5 mm	[kN]	0,20	0,25	0,30
Plywood		[kN]	0,15	0,40	0,80
Chipboard	16 mm	[kN]	0,25	0,25	0,25

<sup>1)</sup> Required safety factors are considered.

<sup>2)</sup> Valid for tensile load, shear load and oblique load under any angle.

**NOT APPROVED**

# equal opportunities

"Aesthetics, design and safety is essential in everything we do. We are developing dignified aids, not machines."

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