LIFTINGITALIA S.r.l.
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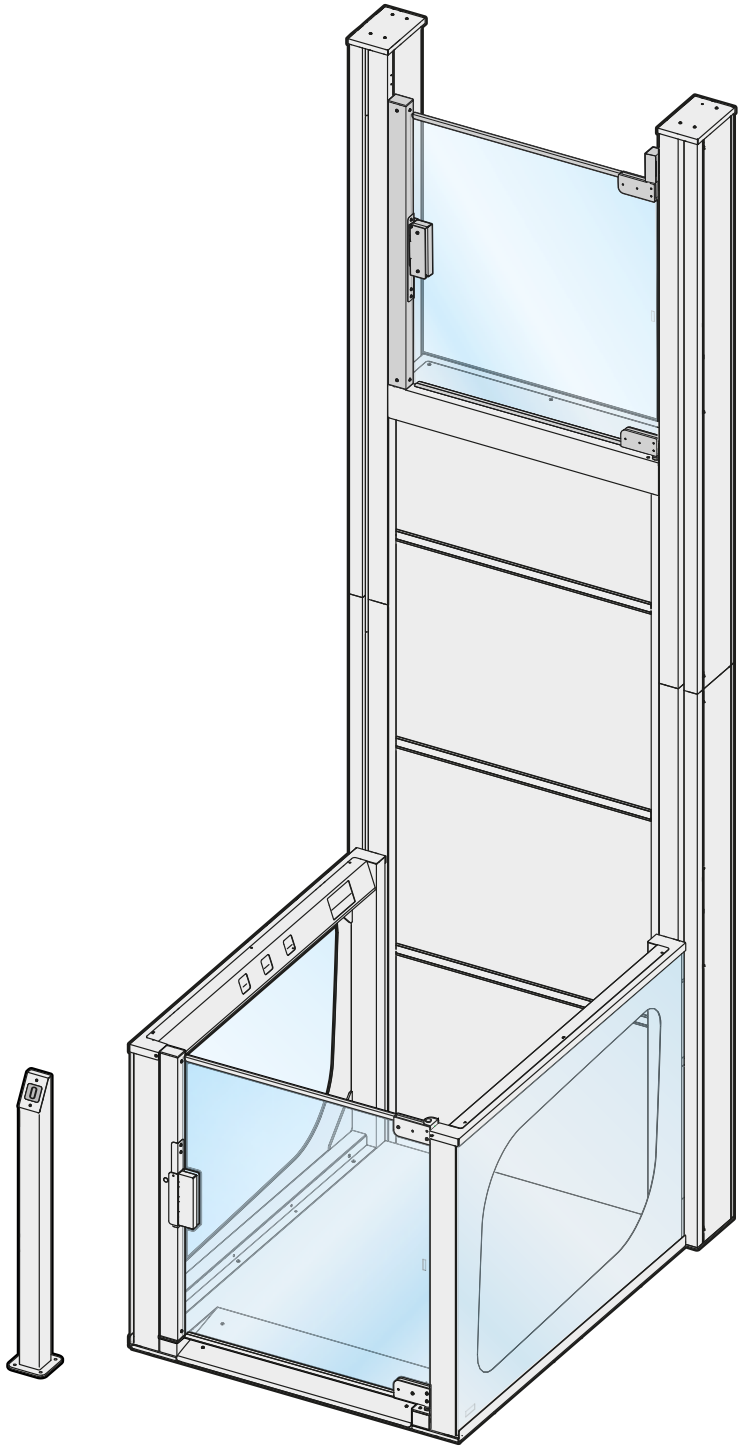
AREALIFT LIFTINGITALIA

EasyPlat

Electric belt driven low rise platform lift



sample images

INSTALLATION AND COMMISSIONING INSTRUCTIONS

1.6	Extra threshold adjustment insertion.	19.05.2021
1.5	Update page 40.	18.05.2021
1.4	Update § 3.2 sill adjustment.	12.05.2021
1.3	Threshold update.	26.04.2021
1.2	Chapters: 9, 11, 18 update	15.03.2021
1.1	Chapters: 9, 11, 18 insertion	08.03.2021
1	General update	08.10.2020
0	New edition	20.07.2020
Rev.	*Description*	*Date*

TABLE OF CONTENTS

PURPOSE OF THE MANUAL

The purpose of this manual is to provide correct information on the installation and correct use of the product, in order to contribute to personal safety and to the proper functioning of the system. Keep the manual for the entire life of the product. In the event of a change of ownership, the manual must be provided to the new user as an integral part of the product.

NOTICE	
	**READ THIS MANUAL CAREFULLY** before installing and using the product. This product must be installed and put into operation according to the provisions and regulations in force. Improper installation or improper use of the product can cause damage to people and property, as well as cause the warranty to lapse.
	FOLLOW THE SUGGESTIONS AND RECOMMENDATIONS TO OPERATE IN SAFETY. Any unauthorised modification can compromise the safety of the system, as well as the correct operation and the life of the machine. If you have any doubts regarding the correct understanding of the information and contents contained in this manual, contact LIFTING ITALIA S.r.l. immediately.
	QUALIFIED PERSONNEL: The product covered by this documentation can only be installed by qualified personnel, in compliance with the attached technical documentation, above all in compliance with the safety warnings and the precautions contained therein.
	Keep the technical and safety documentation near the lift system.

PERSONAL SECURITY AND RISK RECOGNITION

This manual contains safety rules that must be observed to safeguard personal safety and to prevent damage to the property. The indications to be followed to guarantee personal safety are highlighted by a triangle symbol while those to avoid material damage are not preceded by the triangle. The hazard warnings are shown as follows and indicate the different levels of risk in descending order.

RISK SYMBOLOGY AND PHRASES

RISK CLASSIFICATION AND RELATIVE GRAVITY OF DAMAGE		
DANGER	The symbol indicates that the failure to comply with appropriate safety measures **causes** death or serious physical injury.	RISK LEVEL
WARNING	The symbol indicates that the failure to observe the corresponding safety measures **can cause** death or serious personal injury.	
CAUTION	The symbol indicates that failure to observe the relevant safety measures **can cause** minor or moderate personal injury or damage to the device.	
NOTICE	It is not a symbol of security. It indicates that the failure to comply with relevant safety measures **can result** in property damage.	
INFORMATION	It is not a symbol of security. It indicates important information.	

If there are multiple levels of risk, the danger warning always indicates the highest one. If a warning is drawn with a triangle to warn to the risk of injury to persons, the risk of possible property damage may also be caused at the same time.

NOTE: During installation / maintenance of the platform, the safety functions are temporarily suspended. Therefore, all necessary precautions must be taken to avoid personal injury and / or damage to the product.

MANUAL READING GUIDE

WARNING SIGN					
	GENERAL DANGER		ELECTRICITY DANGER		DANGER FLAMMABLE MATERIAL
	DANGER OF FALL BY A LEVEL		DANGER SUSPENDED LOADS		DANGER OF CRUSHING

PROHIBITION SIGN					
	GENERIC PROHIBITION		FORBIDDEN TO STEP ON		PROHIBITED TO WALK ON OR STOP IN THIS AREA

MANDATORY SIGN					
	OBLIGATIORY TO WEAR THE PROTECTION HELMET		OBLIGATORY TO WEAR SAFETY SHOES		OBLIGATORY WEAR THE PROTECTIVE GLOVES
	OBLIGATORY TO WEAR EYE PROTECTION		OBLIGATION TO WEAR THE AUDIO PROTECTION		OBLIGATORY TO WEAR THE MASK
	OBLIGATORY TO WEAR PROTECTIVE CLOTHES		OBLIGATORY TO KEEP CLOSED		OBLIGATORY TO CHECK THE PROTECTIONS

EMERGENCY AND FIRST AID SIGNS		INDICATION SYMBOLS					
	FIRST AID		NOTE WELL		KEEP DRY		OBLIGATORY TO CHECK THE PROTECTIONS

LIABILITY AND WARRANTY CONDITIONS:

RESPONSIBILITY OF THE INSTALLER

The elevator / platform is produced and intended to be installed as described in the attached project drawing and in this manual; any divergence from the prescribed procedure may affect the operation and safety of the system and cause the immediate cancellation of the warranty.

Any modification or variation made to the project and the to the assembly Instructions must be documented in detail and referred to LIFTING ITALIA S.r.l., in order to allow the company an adequate assessment. Under no circumstances can a modified system be activated without the express authorization of LIFTING ITALIA S.r.l.

Installers are responsible for ensuring compliance with safety procedures at work and any health and safety regulations in force in the country and on the site where the assembly is carried out.

The elevator / platform must only be used in the way envisaged by the system and illustrated in the relative manuals (transportation of people and / or things, maximum loads, cycles of use, etc.). LIFTING ITALIA S.r.l. assumes no responsibility for damage to persons and property caused by improper use of the system.

NOTE: Pictures and images on this manual are for illustration purposes only.

1. GENERAL REQUIREMENTS AND INSTALLATION SITE MANAGEMENT

1.1. GENERAL REQUIREMENTS

IMPORTANT!

For more information on safety, liability and warranty conditions, receipt and storage of material on site, packaging, waste disposal, cleaning and storage of the product; refer to the "**SAFETY INSTRUCTIONS AND SITE MANAGEMENT**" manual.

NOTICE

PRELIMINARY CHECKS: Once the packaging has been opened, check that the product is intact and has not been damaged during transport. Should any anomalies or damage be found, please dispatch them in writing on the transport document to the transport company, giving written notice to LIFTINGITALIA S.r.l.

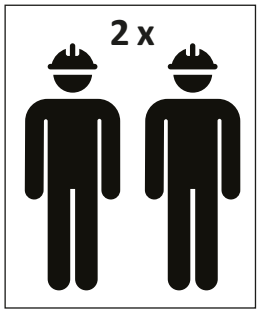
NOTE: In this manual, we will talk about "SHAFT" meaning for it the base slab, the slab of landing and the vertical wall that connects its slabs.

⚠ CAUTION

SAFETY AND SITE MANAGEMENT - OVERALL DISPOSITIONS:

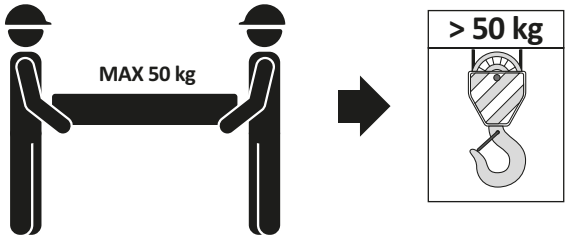
1. Always secure tools and any objects against falling;
2. Pay the utmost attention to all the steps described in this;
3. While assembling the parts making up the system or after installation, be careful of any sharp burrs (machining residues);

- Before proceeding with the installation, it is necessary to remove any rubble and material deposited during the construction of the shaft.
- Only nuts and bolts included in the supply must be used.
- The bags containing the screws must be opened in correspondence with the respective operating phases indicated in this manual.
- The instructions described in this manual refer to a reinforced shaft, to a fastening with mechanical expansion plugs of the stud type. For the use of plugs in masonry other than the reinforced concrete see the attachment to this manual. For the shafts with metal framework, we proceed by replacing the plugs with normal screws.
- In these instructions and on the wiring diagram, the stops are indicated with 0, 1, (2, 3 etc.), meaning "0" the lowest stop: the numbers on the push-button panels may be different according to the user's needs (for example- 1, 0, etc.).



The assembly must be performed by a MINIMUM 2 people;

If the load is greater than 50kg, use the hoist for handling.



2. PRODUCT DESCRIPTION

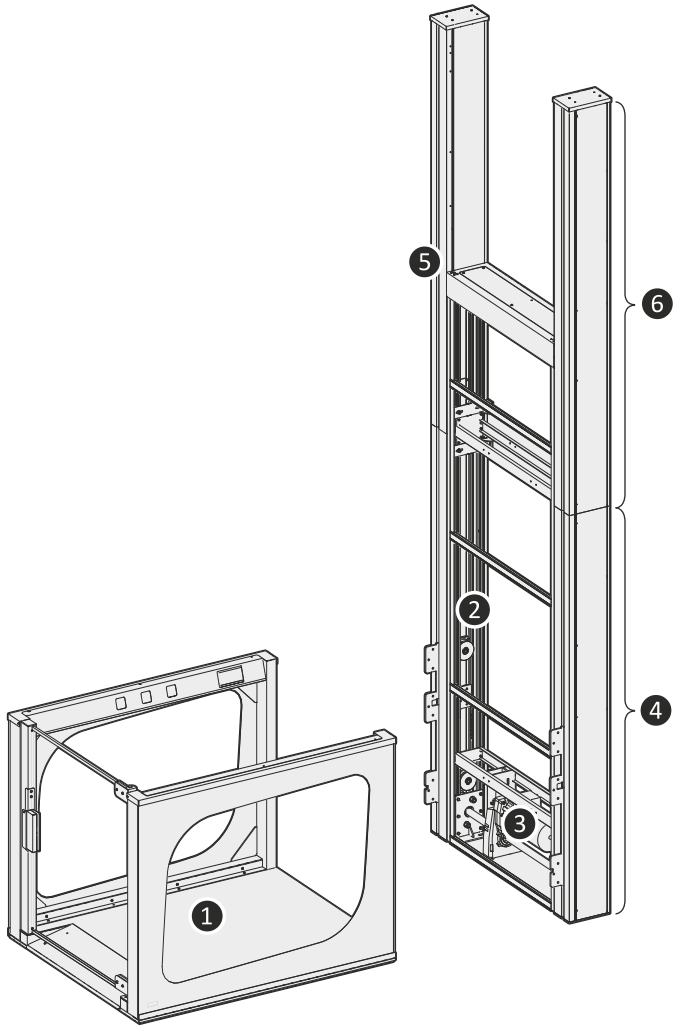
2.1. GENERAL DESCRIPTION AND TERMINOLOGY

EasyPlat is a belt driven low rise platform lift, designed for accessibility, with a maximum travel of 3 m.
Platform ❶ motion is realised by means of a system of belts ❷, connected to a motor ❸ positioned inside the machine body ❹, which also integrates the guides ❺.
When provided by the design, an extension ❻ is attached to the machine body ❹ by means of a specific coupling system ❼.
The motor, the controls and the manoeuvres are controlled by the electric board ❽ integrated on the platform, which receives the commands from the control station and from the Electromotive Force panel.

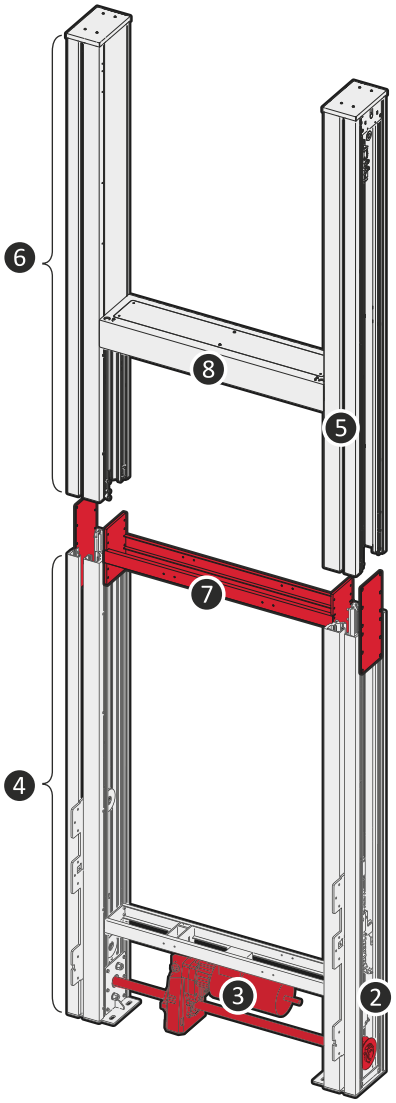
Landings (P1 e P2) are closed by gates integrated respectively in the platform and in the sling/motor unit.
The platform lift EasyPlat is very easy to install, thanks to its pre-assembled units, and is suitable for installation both inside and outside buildings.

(IT) Regulations: 2006/42/EC Machinery Directive;

sample images



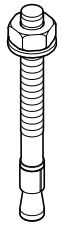
MECHANIC ASSEMBLY



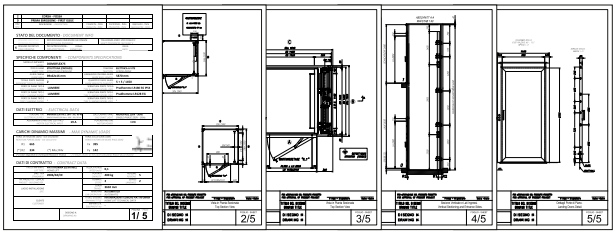
LIFTING ITALIA S.r.l. goal is to promote the continuous improvement of its products and consequently their technical specifications may be subject to change without notice or commitment.

INFORMATION 3. BOX CONTENT - SCREWS KIT

NOTE: Each "KIT" box with its identification code represents the packaging unit, i.e. how many pieces per type are contained in each package.

S000.23.0012	F500.23.0002	F500.23.0001
STRUCTURE SIDE ANCHORING KIT	COLUMN FASTENING KIT	CARRIER FASTENING KIT
 N° 4 KIT FORNITI 2 x M12x200	 4 x M8x90	 18x TCEI M8 x 35

LAYOUTS



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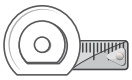
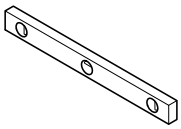
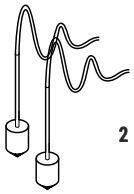
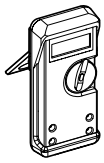
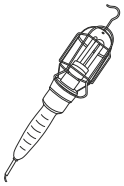
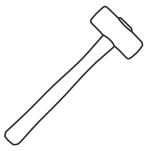
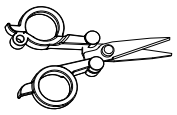
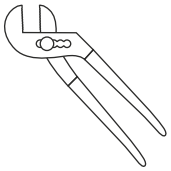
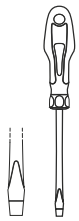
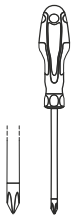
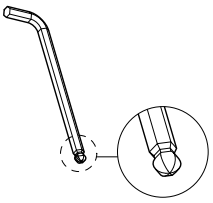
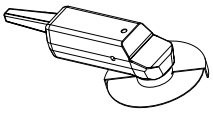
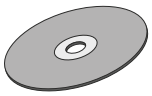
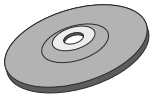
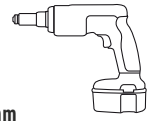
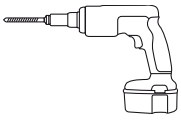
INFORMATION 4. TOOLS REQUIRED FOR INSTALLATION

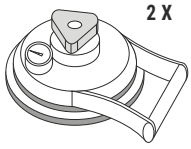
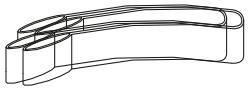
☐ TAPE MEASURE	☐ SPIRIT LEVEL	☐ PLUMB BOB	☐ DIGITAL MULTIMETER	☐ PORTABLE LAMP	☐ INSULATION TAPE
		 2 x			☐ DOUBLE-SIDED ADHESIVE 

☐ HAMMER	☐ RUBBER HAMMER	☐ SCISSORS FOR ELECTRICIANS	☐ PLIERS WRENCH
			

☐ FLAT BLADE SCREWDRIVER	☐ PHILIPS SCREWDRIVER	☐ STEPLESS RATCHET SPANNER	☐ BALL POINT LONG HEX KEY WRENCH
		 13 ÷ 19 mm	 2,5 ÷ 8 mm

☐ CORNER GRINDER	☐ METAL cutting disks	☐ metal grinding disks
		

☐ CORDLESS SCREWDRIVER	☐ DRILL	☐ CONCRETE DRILL BITS	☐ STEEL DRILL BITS
 6 ÷ 13 mm		 6 ÷ 22 mm	 2 ÷ 13 mm

☐ SUCTION CUPS 100 KG/EACH	☐ MANUAL HOIST, LOAD ≥ 500 KG, LENGTH ≥ 15 M	☐ LIFTING BELTS, LOAD ≥ 500 KG, LENGTH ≥ 2 M	☐ PLATFORM OR FOLDABLE SAFETY LADDER, 5 STEPS
 2 X			

5. PRELIMINARY CONTROLS

5.1. PRELIMINARY SAFETY CHECKS

⚠ WARNING

BEFORE STARTING THE INSTALLATION/MAINTENANCE, YOU NEED TO:

- Check that the main electrical system is up to standard and provided with adequate grounding; **Otherwise, stop the installation until the Customer has updated the system.**
- Check the presence of an efficient lighting system at the place of installation;
- Check the cleanliness of the shaft area/pit that there are no liquids (water, oil, ...) on the bottom;
- Check that the entrances to the work areas are properly closed.
- Check that all the holes and the housings for the electric cables are free, inspectable, well finished and dry;
- Check that there is adequate ventilation for the smoke exhaust;

5.2. PRELIMINARY CHECKS OF THE INSTALLATION SITE

NOTICE

BEFORE STARTING THE INSTALLATION, CHECK THE FOLLOWING MEASURES AND COMPARE THEM WITH THOSE ON THE PROJECT DRAWING:

- Width (distance between the side walls)
- Depth (distance between front and back wall)
- Base/Pit depth
- Travel
- Headroom height
- Plumbing of the shaft and any plumb parts already installed
- Dimensions of any necessary arrangements (breaking down the landing doors, distance between the guides,
- Determine the finished floor level of each floor;

Measure the width and length of the shaft at all levels. Perform the dimensional checks independently of the measurements taken by the building contractor.

5.3. OBLIGATIONS OF THE INSTALLER

BEFORE STARTING THE INSTALLATION, YOU NEED TO:

- Arrange a material deposit area near the work area, easily accessible and protected from the bad weather.
- Prepare any lifting equipment to be used.
- Check the presence of all materials, using the list.
- Check the state of all materials at the time of receipt on site and in case of damage or missing contact the supplier immediately.
- Periodically check the materials destined for long storage before installation to avoid possible deterioration caused by incorrect storage.
- Check the completeness of the attached documentation.

6. PRELIMINARY OPERATIONS

6.1. POSITIONING OF MATERIAL ON SITE

CAUTION

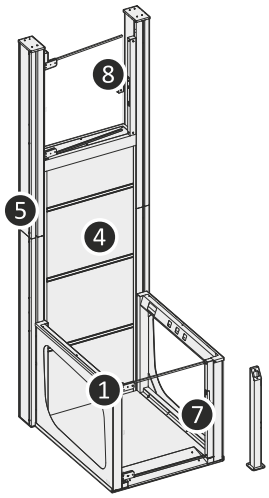
CRUSHING HAZARD:
Move and lift the parts using a suitable lifting device.

ALWAYS WEAR APPROPRIATE PPE.

NOTICE

POSITIONING OF MATERIAL:
Position the material correctly on the installation site to handle the components easily, avoiding the risk of injury and material damage.

EasyPlat is composed (in the standard configuration) of two pre-assembled units (fig. 1) to ensure maximum ease and speed of installation.



1. Platform
2. Carrier floor with integrated ramp
3. Carrier walls with integrated control panel
4. Machine body
5. Travel extension
6. Coupling system
7. Carrier gate
8. Landing gate

fig. 1

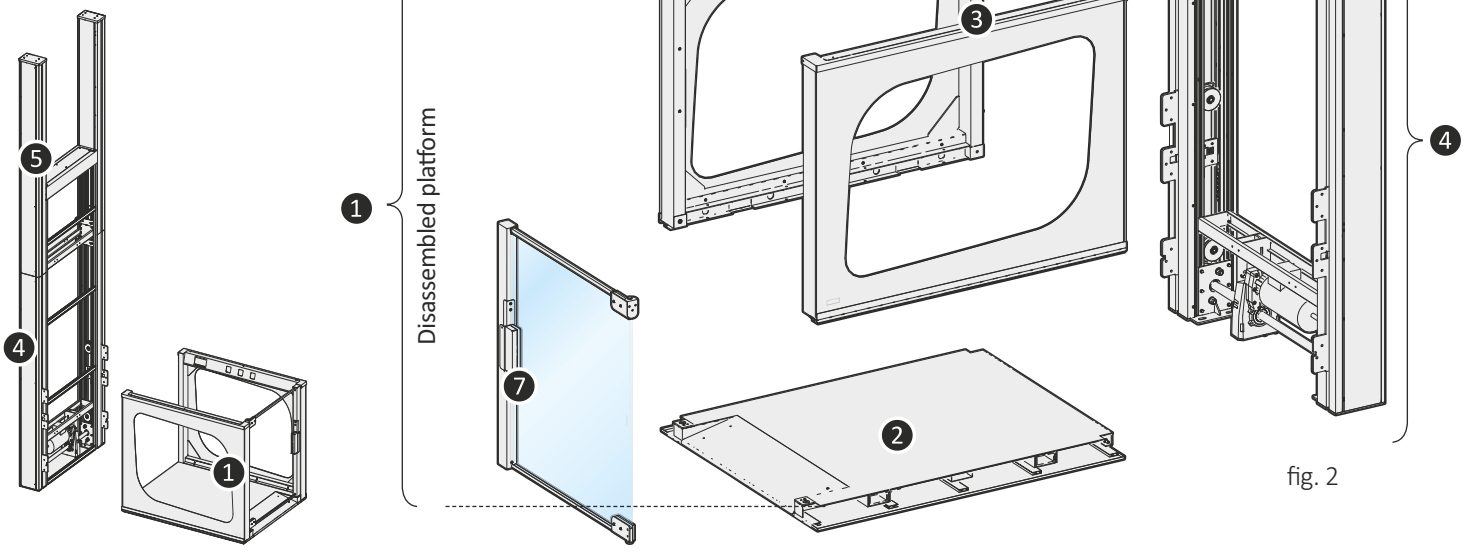
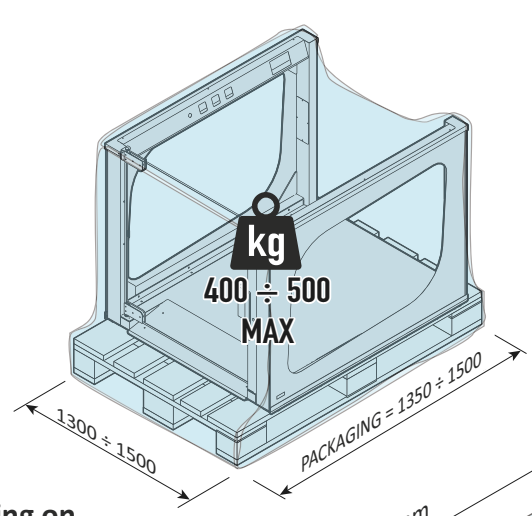


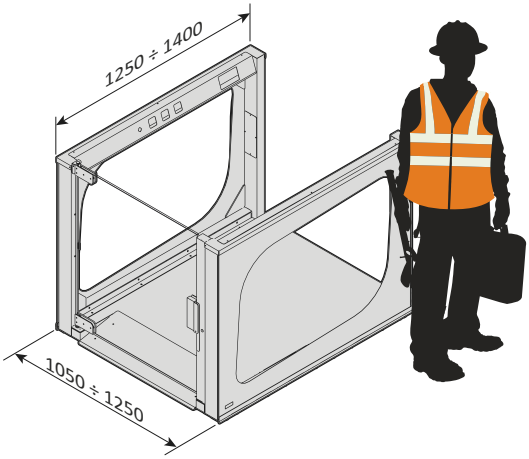
fig. 2

7. PRODUCT AND PACKAGING DIMENSIONS

INFORMATION

The platform is shipped in two separate and overlapping packages [platform (fig.1A) + mechanical unit (fig.1B)





Packaging on pallets with shrink wrap

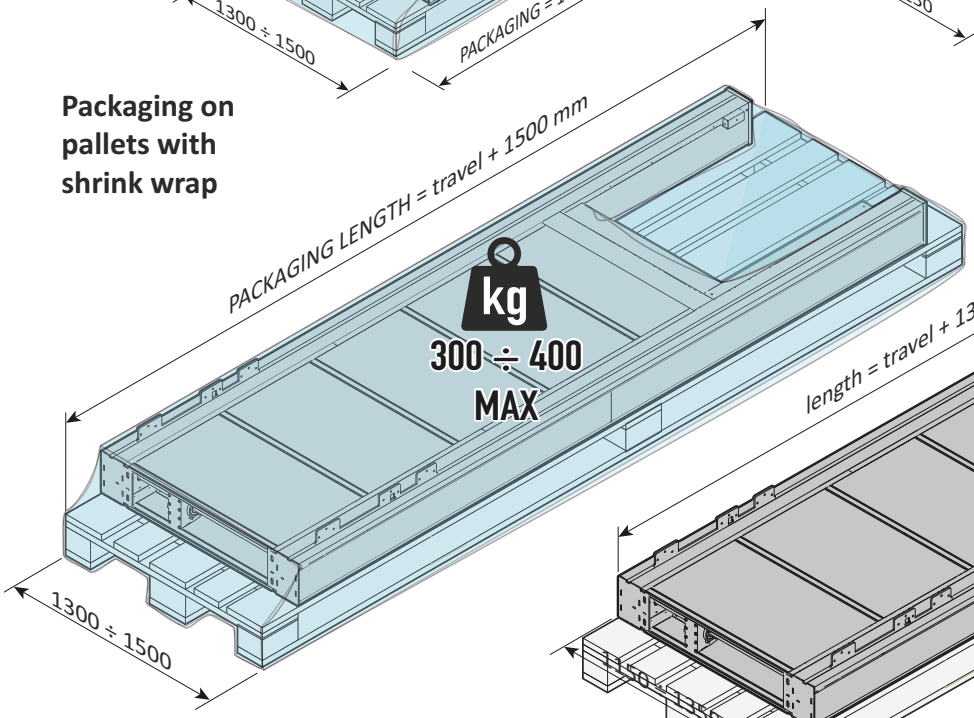
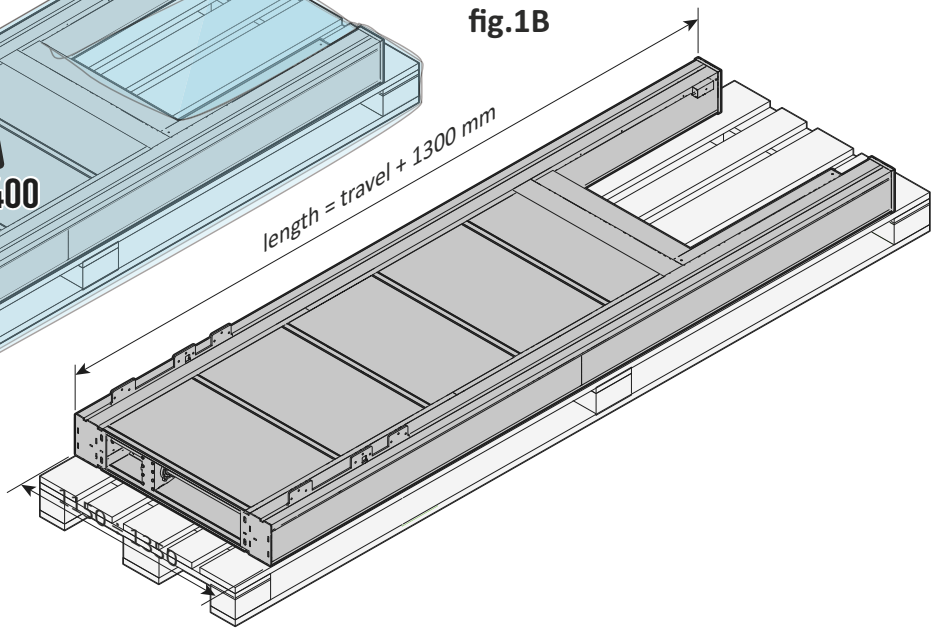


fig.1B



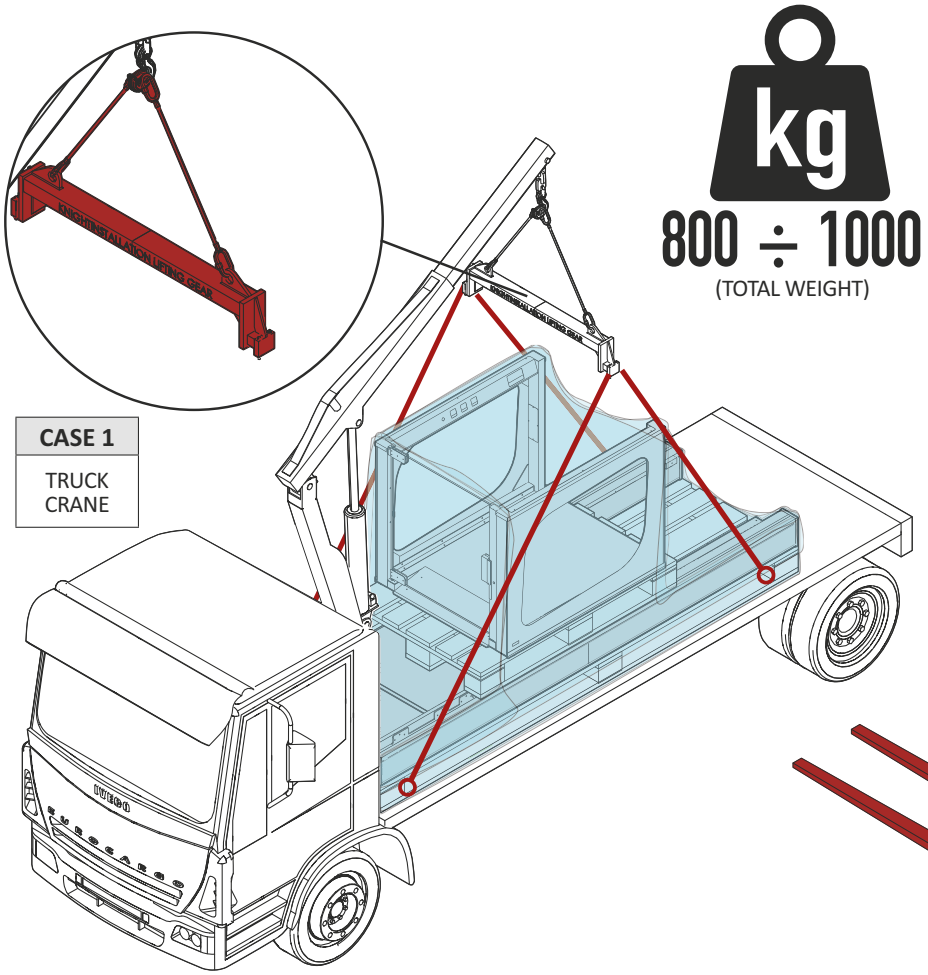
8. TRANSPORT AND UNLOADING ON SITE

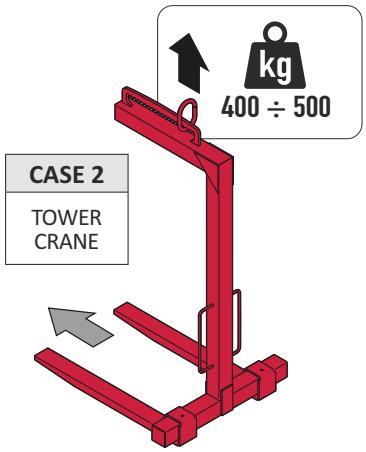
1. **TRUCK WITH CRANE**
   From the factory or courier warehouse to the installation site. If possible to access with the vehicle, position the **MECHANICAL ASSEMBLY** first, and the **PLATFORM ASSEMBLY** afterwards.

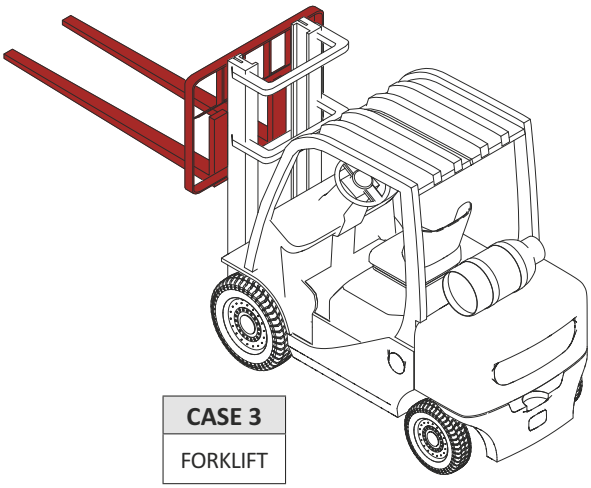
2. **TRUCK WITHOUT CRANE**
   From the factory to the installation site. There must be a suitable lifting / unloading vehicle on site such as, a **TOWER CRANE** (case 2) or **FORKLIFT** (case 3)

⚠ CAUTION

DANGER OF CRUSHING:
GIVEN THE DIMENSIONS AND WEIGHT OF THE PRODUCT, ALWAYS USE ADEQUATE UNLOADING AND HANDLING MEANS.







NOTICE

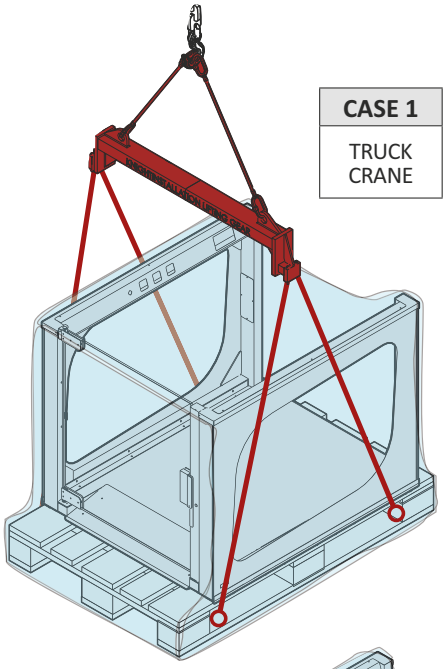
In order not to damage the product, ALWAYS lift the support pallet vertically with suitable means.

9. SEPARATION OF PACKAGES AND SITE HANDLING

9.1. SEPARATION OF THE TWO PACKAGES (MECHANICAL ASSEMBLY AND PLATFORM) AND HANDLING

CAUTION

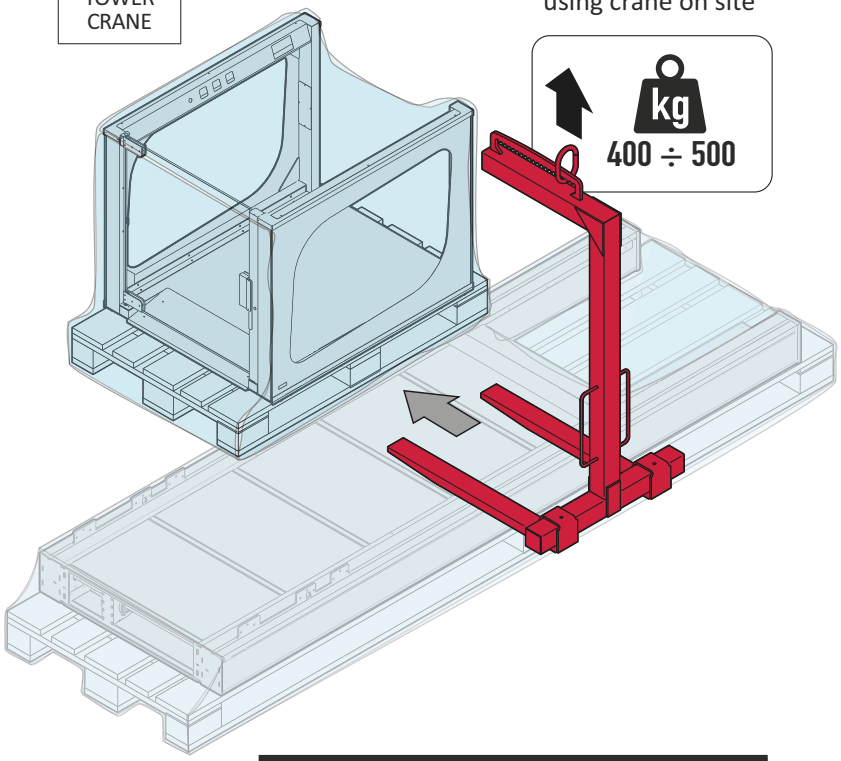
DANGER OF CRUSHING:
GIVEN THE DIMENSIONS AND WEIGHT OF THE PRODUCT, ALWAYS USE ADEQUATE UNLOADING AND HANDLING MEANS.

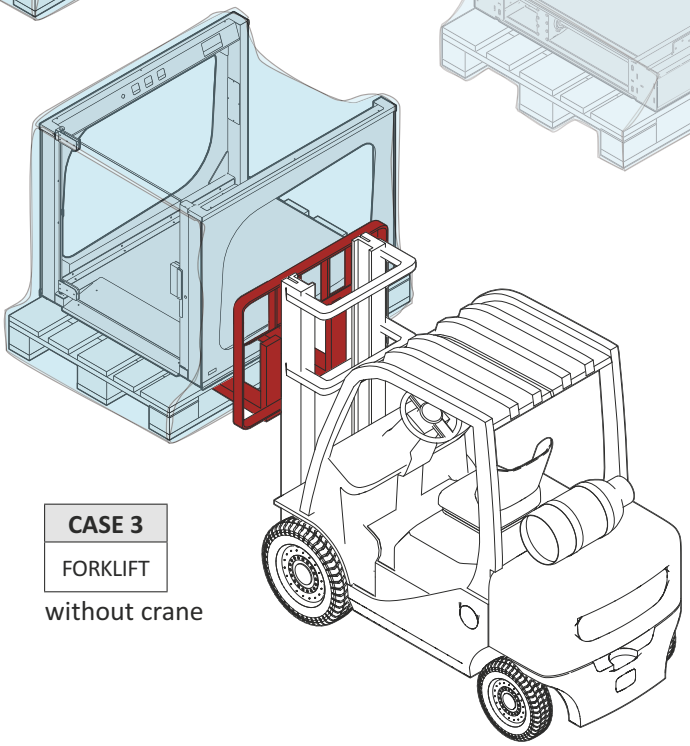


CASE 1
TRUCK CRANE

CASE 2
TOWER CRANE

using crane on site





CASE 3
FORKLIFT
without crane

NOTICE

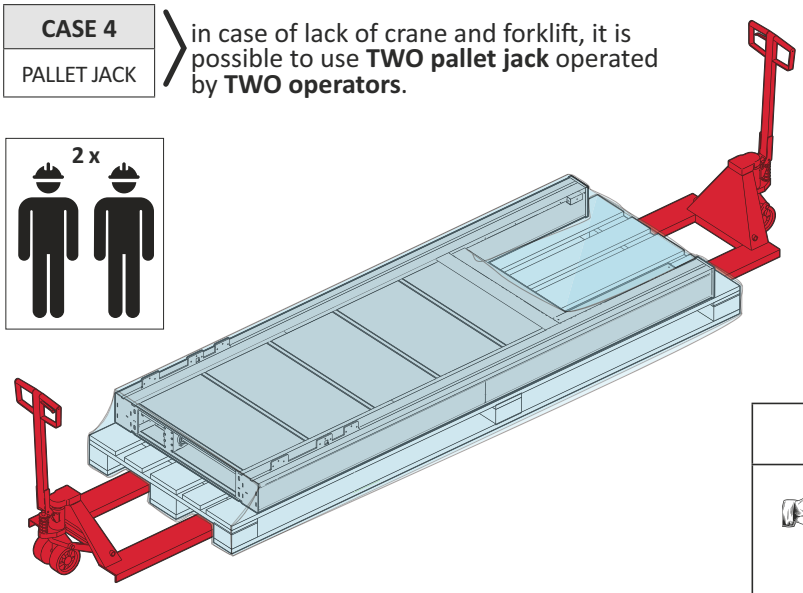
To move the platform including glass walls, **ALWAYS** lift the support pallet vertically with suitable means.

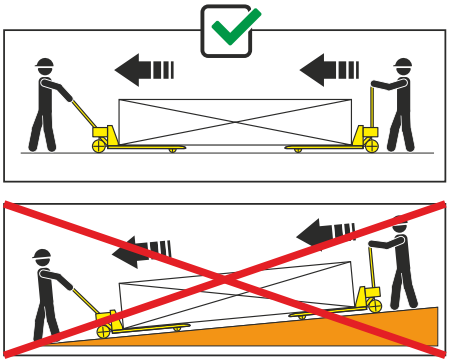
9.2. HANDLING AND POSITIONING OF THE MECHANICAL ASSEMBLY

For moving / approaching the mechanical assembly to the place of installation, see the examples given in the previous paragraph.

CASE 4
PALLET JACK

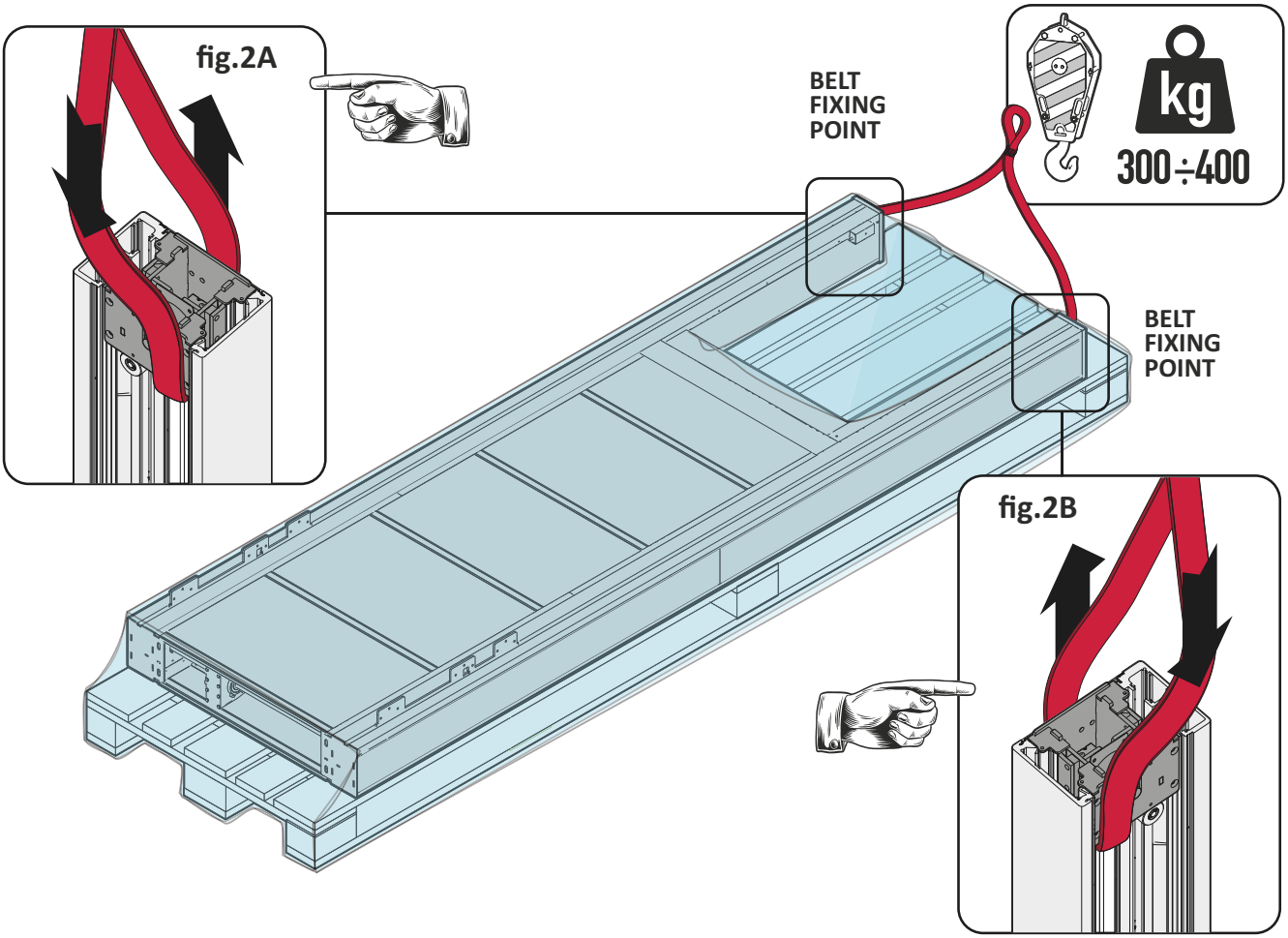
in case of lack of crane and forklift, it is possible to use **TWO pallet jack** operated by **TWO operators**.





INFORMATION

Once the mechanical assembly has been positioned at the installation point, attach the lifting belts to the locking blocks on the top (fig.2A and 2B).

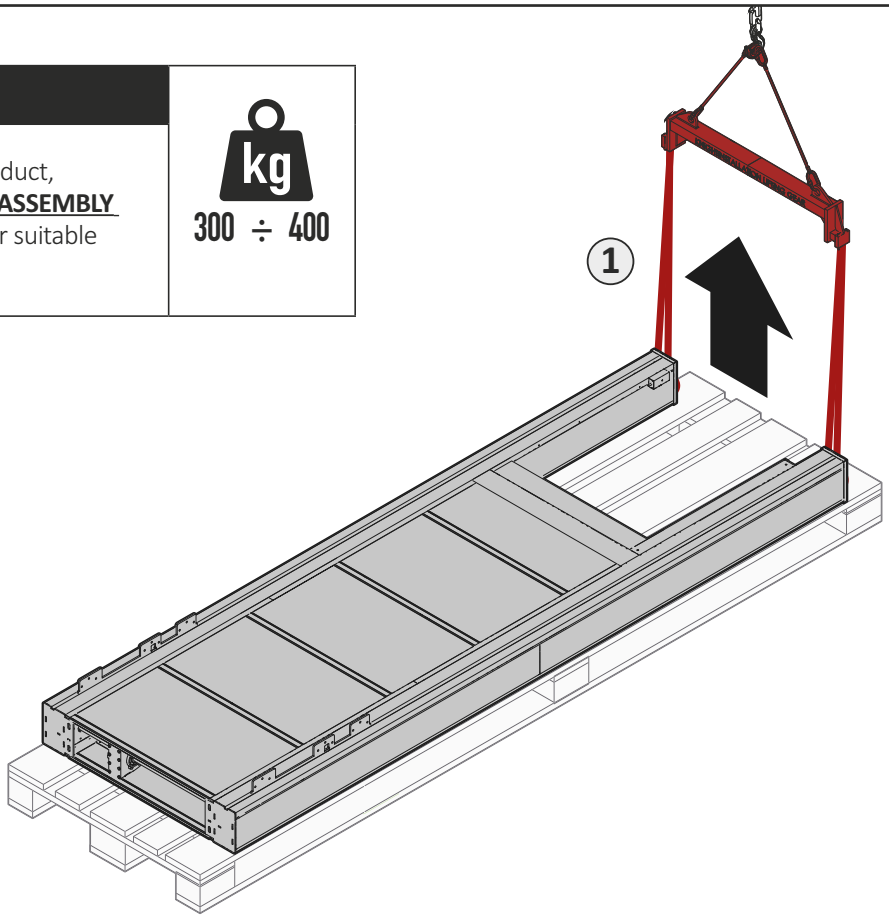


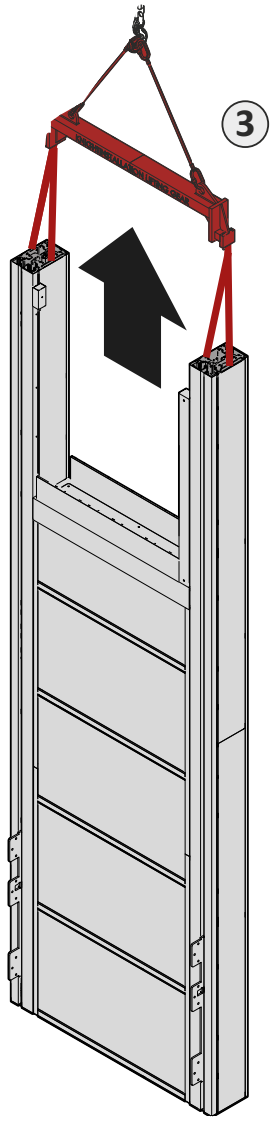
9.3. LIFTING AND POSITIONING OF THE MECHANICS ASSEMBLY

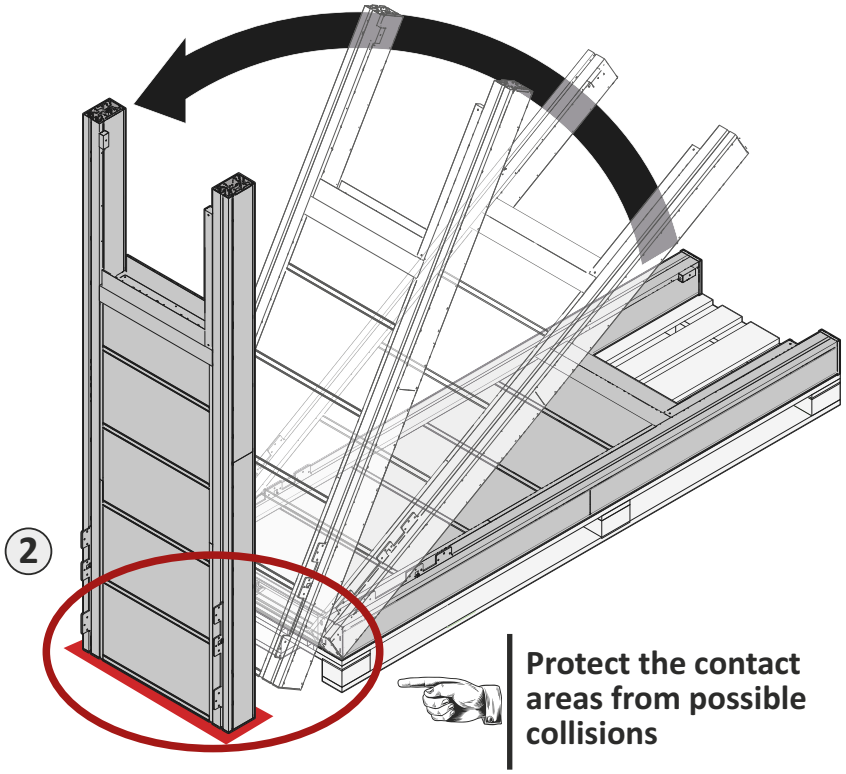
NOTICE

In order not to damage the product, **ALWAYS** lift the **MECHANICAL ASSEMBLY** vertically, using a crane or other suitable lifting means.

kg
300 ÷ 400

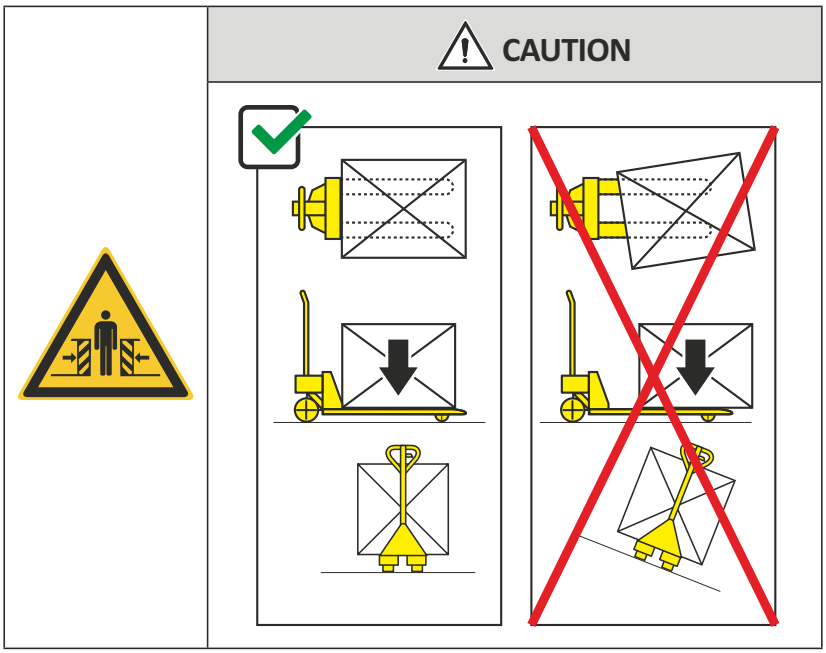


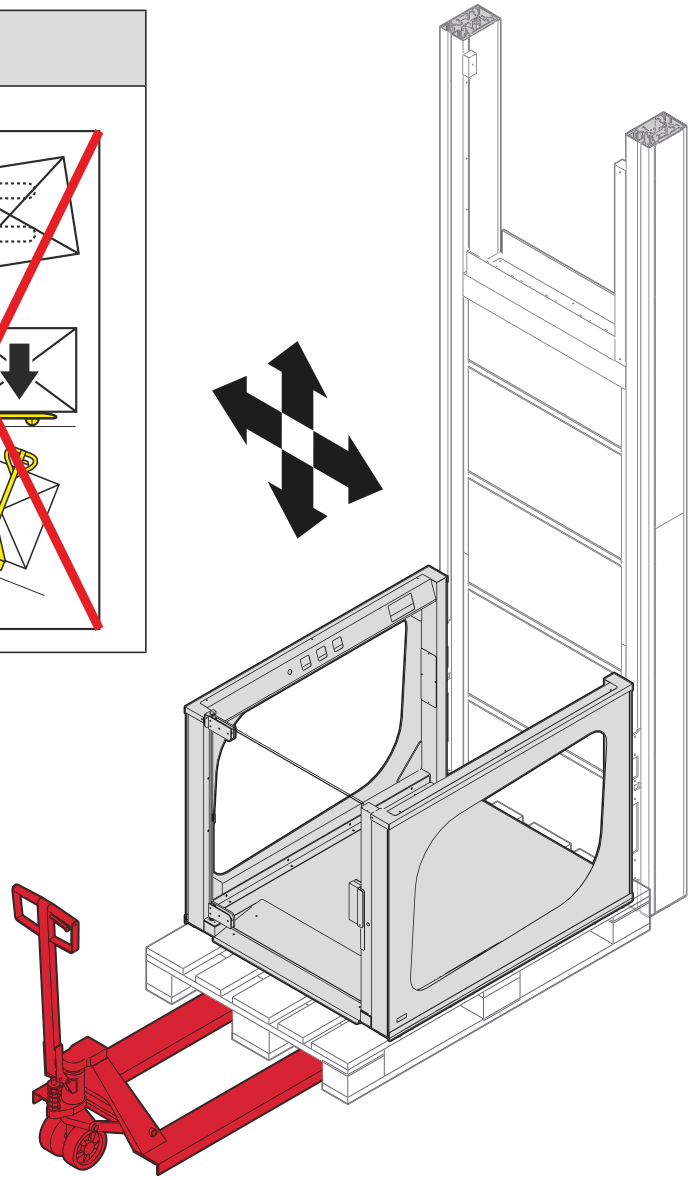




Protect the contact areas from possible collisions

9.4. HANDLING AND POSITIONING OF THE PLATFORM





INFORMATION

Use a forklift, a pallet jack or other suitable handling means to postition the **PLATFORM ASSEMBLY**.

This allows you to easily position the platform at the right height and easily fix it to the **MECHANICAL ASSEMBLY.**

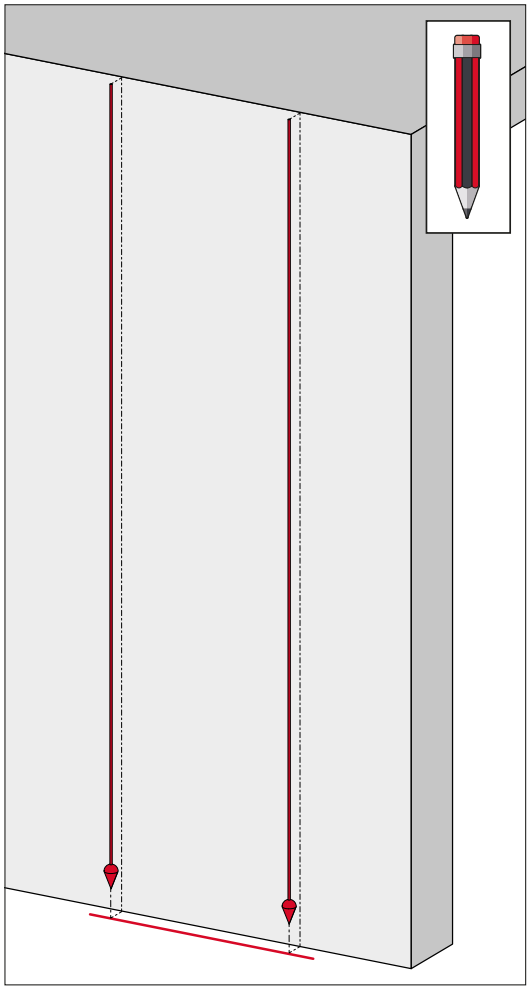
See the relative Installation Instruction Manual:
IM.TEC.114 - EASYPLAT - Installation and commissioning instructions.

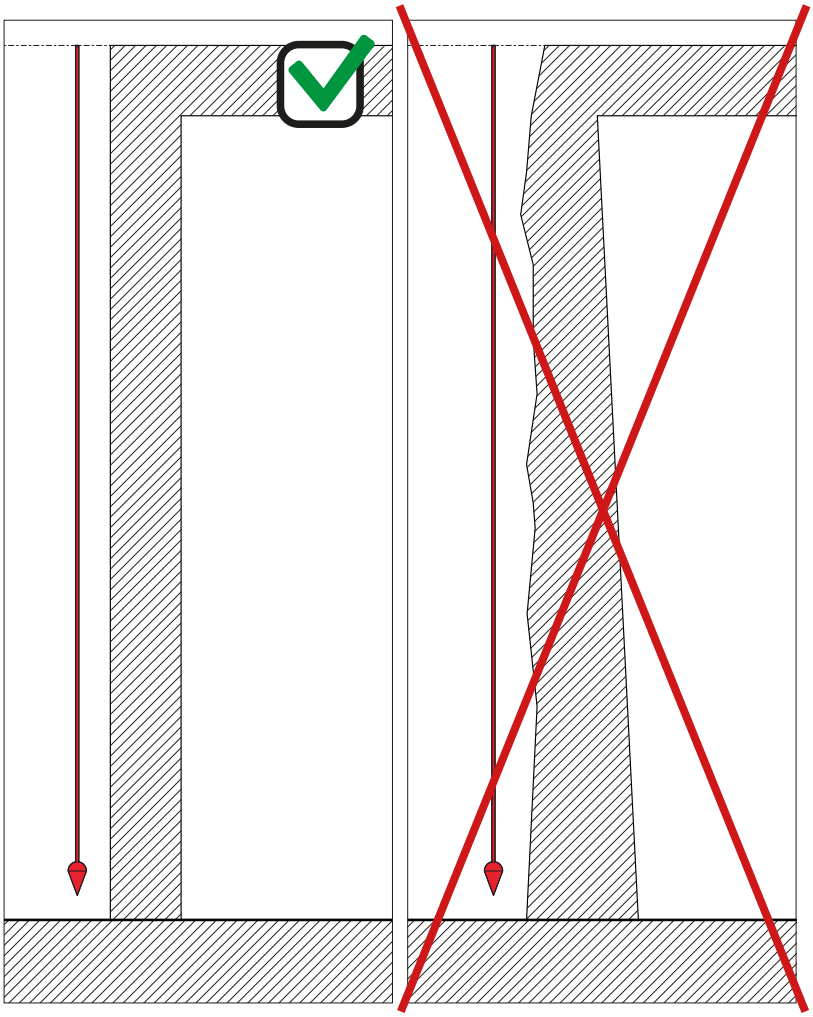
10. PRELIMINARY STRUCTURAL CHECKS

10.1. CHECK AREA FOR LIFT INSTALLATION

NOTICE

Check that the surface of the wall to which the machine body is going to be anchored is continuous, smooth, perpendicular, and is **structurally suitable for the anchoring of the platform** (see the project and the required technical specifications).



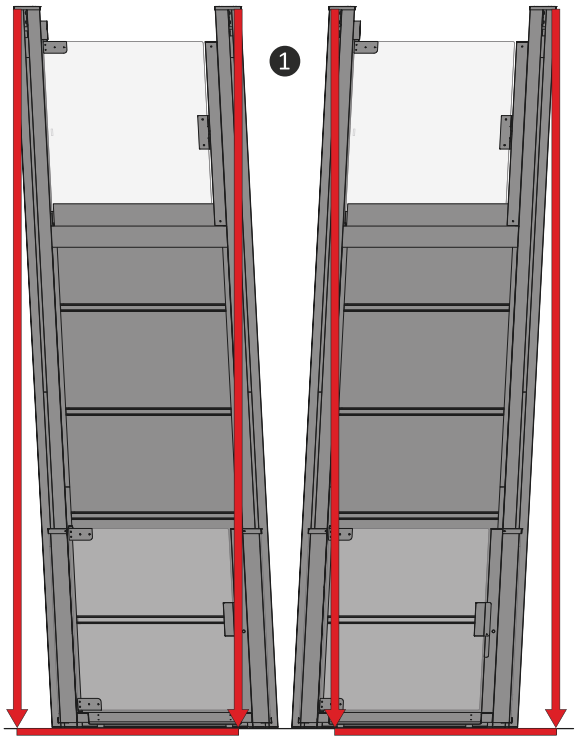


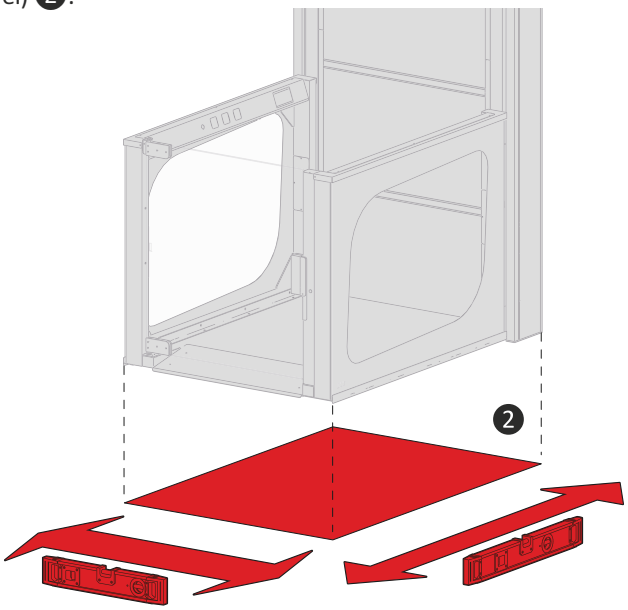
11. ASSEMBLY PROBLEMS AND SOLUTIONS

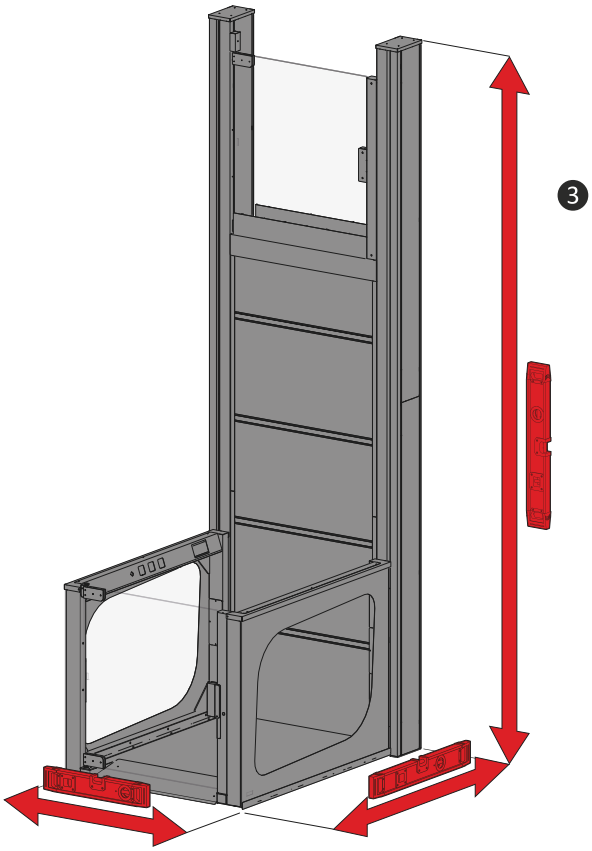
11.1. PROBLEM N.1 - TRANSLATION OF THE MECHANICAL ASSEMBLY

The first problem concerns the lateral misalignment or translation of the mechanical asembly ❶;
this causes the platform malfunction.
Pay attention to the following points:

1. Make sure that the lowest floor is completely horizontal (level) ❷.
2. Make sure all platform dimensions are level ❸.



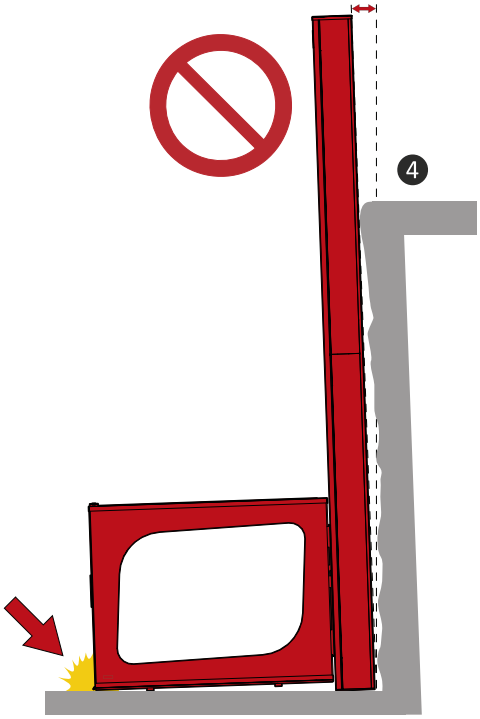


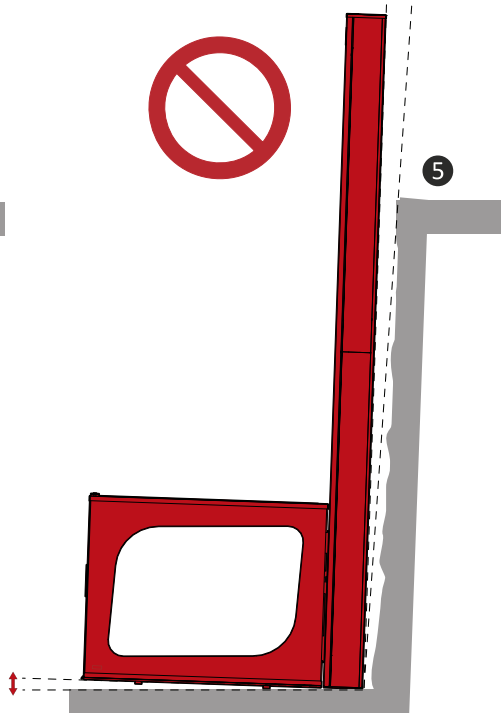


11.2. PROBLEM N.2 - FORWARD-BACK INCLINATION OF THE MECHANICAL ASSEMBLY

The second point to pay attention to is the forward ❹ or backward inclination ❺ of the mechanical assembly; this causes the platform malfunction.
pay attention to the following points:

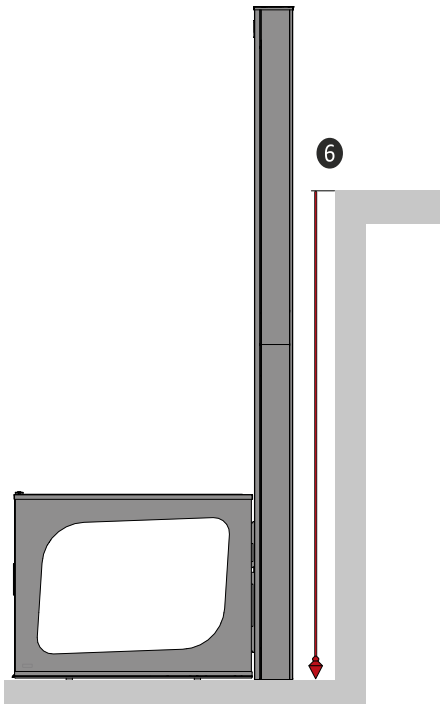
1. Make sure that the anchoring wall / slab is perfectly plumb ❻.
2. Otherwise, adjust the anchoring areas by bringing them plumb ❼.





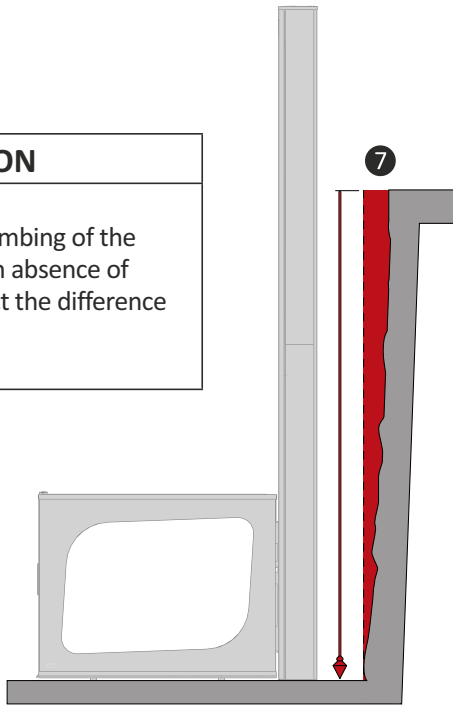
In the case of forward inclination of the mechanical unit ❹, the platform will first rest on the cam area, with possible deformation of it.

If the mechanical assembly ❺ is inclined backwards, the platform will be raised, creating a gap and making difficult to enter it



INFORMATION

Always check the plumbing of the anchoring wall ❻, in absence of this condition, correct the difference in height ❼.

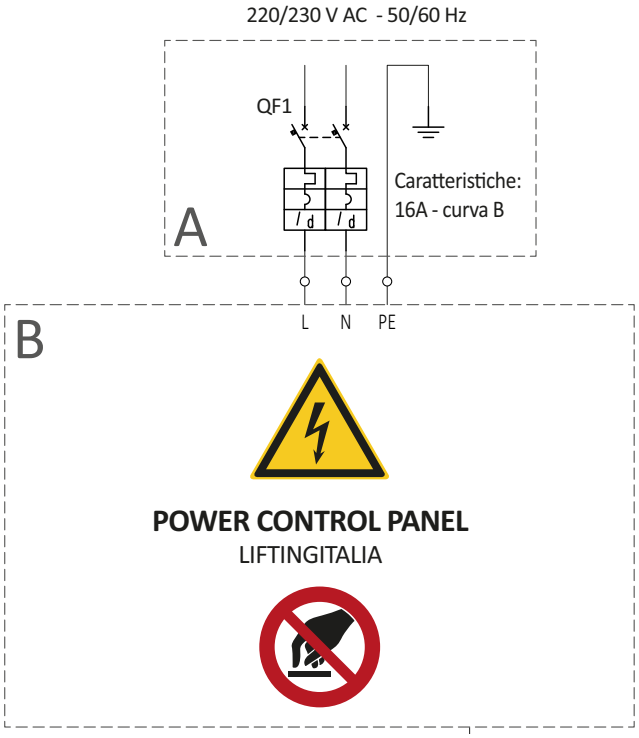


12. ELECTRICAL SYSTEM PRELIMINARY CHECKS

12.1. PREPARING THE ELECTRICAL SYSTEM BEFORE THE PLATFORM

The client must guarantee the protections suitable for the electrical power distribution system and the relative short-circuit current for the Power Supply Panel, according to standard CEI 64-8 et seq. (thermal-magnetic circuit breaker of adequate size and 30mA differential protection).
The main disconnecting switch for the motor power, also supplied by LiftingItalia, is installed below the threshold of the upper floor.

After installing the power supply panel, record it has been checked in accordance with point 2.1 of the “Final Checks” manual.



Legend:	
A	general electrical panel of the building
B	POWER CONTROL PANEL LIFTINGITALIA

WARNING

RISK OF ELECTROCUTION:
The lighting and power supply systems must meet the requirements of the system and the regulations in force. Check that it has an effective earth. **If they do not meet all the requirements, interrupt the installation until the system has been brought up to standard** by the customer.

12.2. INTERCOM DEVICE INSTALLATION

Taking into account the principal users of these platform lifts (people with limited mobility), LIFTINGITALIA S.r.l. recommend a permanent phone connection be established (phone assistance). Should there not be a ground phone line, a GSM system must be provided.

12.3. GENERAL CHECKS

a. GENERAL CHECKS OF THE WORK AREA

- Provide a material storage area close to the work area, easily accessible and not exposed to the elements;
- Prepare any lifting equipment to be used;
- Check that all materials are available, using the bill of materials;
- Check the condition of all materials upon receipt at the installation site and in case of damage or failure contact the supplier immediately;
- Periodically check materials destined for long storage before installation to avoid possible deterioration caused by incorrect storage;
- Check the completeness of the attached documentation.

b. GENERAL CHECKS ON THE SHAFT

The shaft structure shall comply with national building regulations and shall be capable of withstanding at least the forces that can be caused by the lifting platform, the guides during the intervention of the safety devices, loading and unloading, etc.
The shaft must have the following features:

- Smooth, plastered walls and continuous up to the pit/threshold.
- Maximum out of plumb over the entire height of the shaft (“net plumb shaft”), unless otherwise specified in the project drawing: ± 2.5 cm on the machine side.

- Concrete base/pit bottom having the resistance to withstand the loads indicated in the project drawing.
- Provide a through-hole for the pit protection device drive cable as shown on the project drawing.
- Check that the entrances to the work areas are properly closed;
- Check that all holes and housings for electrical cables are free, inspectable, well-finished and dry.

c. CHECKING THE VERTICAL MEASUREMENTS OF THE SHAFT

Check that the measurements of

- Stroke
- Header
- Plumb

correspond to the same dimensions as those shown on the project drawing of the shaft section.

13. MECHANICS - INSTALLATION

13.1. POSITIONING AND ANCHORING OF THE MACHINE BODY

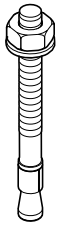
CAUTION

CRUSHING HAZARD:
Move and lift the parts using a suitable lifting device.

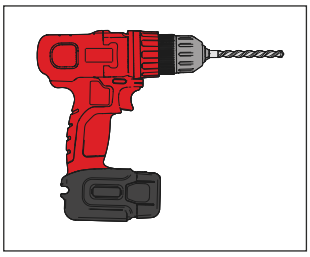
ALWAYS WEAR APPROPRIATE PPE.

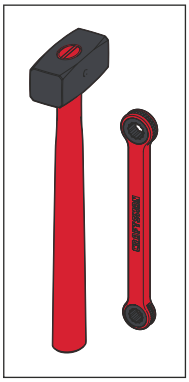
- Position the machine body of the platform using suitable lifting means.
- Drill the anchor holes in the wall (see design drawing).
- Anchor the machine body to the wall **from both sides of the machine body** (1), in a position corresponding to the two jambs using the included rawplug KIT.
- Anchor the machine body to the slab/floor (2)

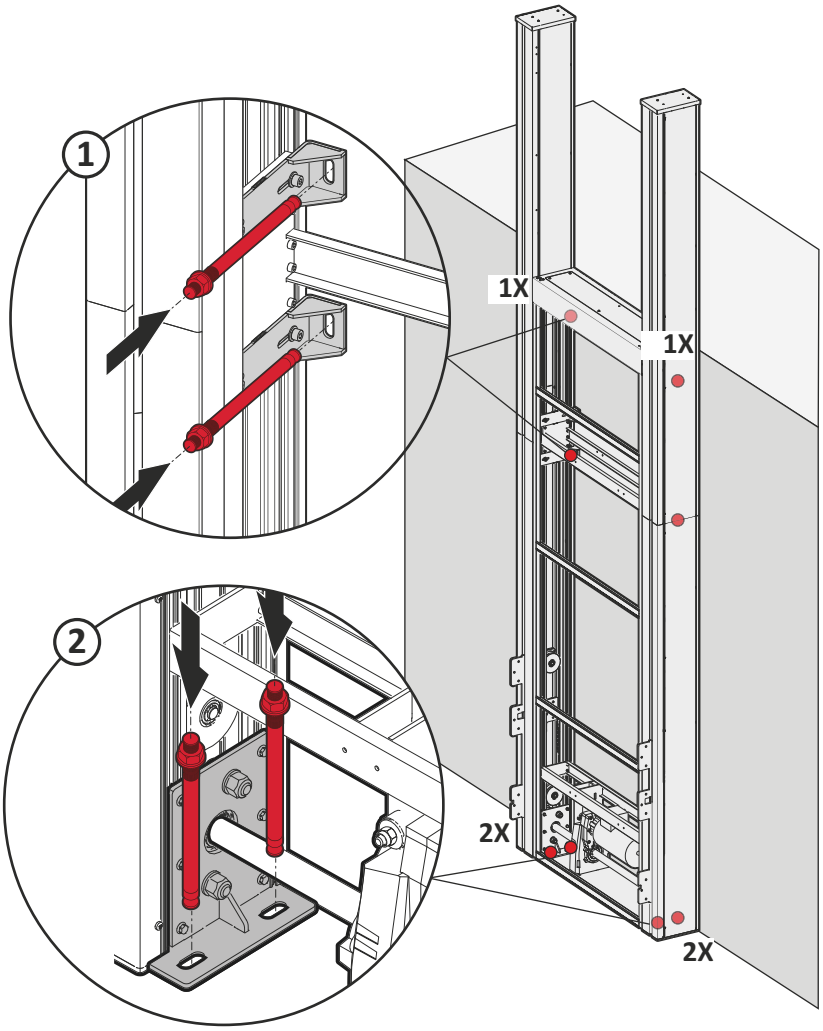
S000.23.0012
STRUCTURE SIDE ANCHORING KIT



2 x M10x200



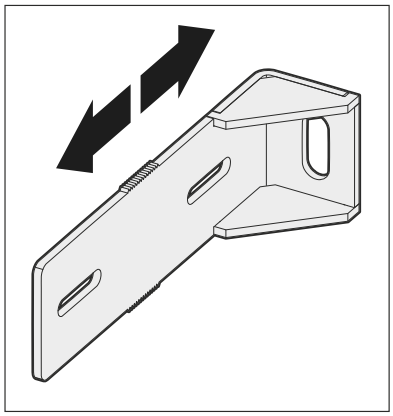


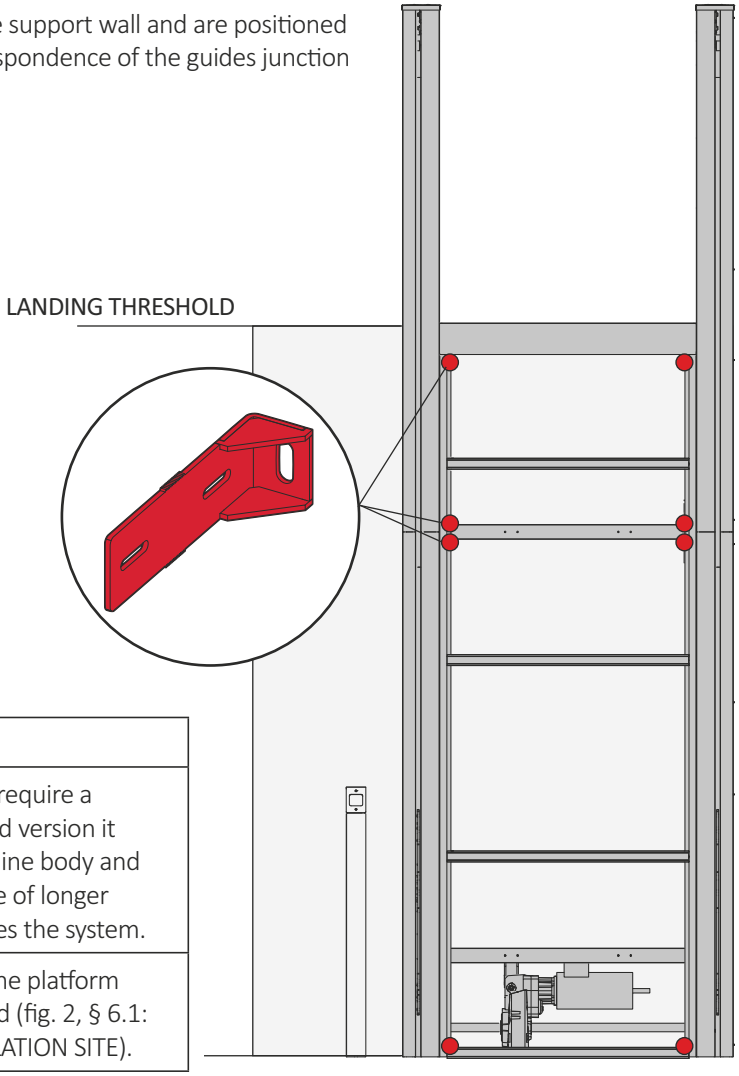


NOTICE

Anchor the machine body to the load-bearing wall and floor **before attaching the platform.**

- The guide rail fixing brackets should be attached to the support wall and are positioned immediately below the landing threshold and in correspondence of the guides junction (in case of supply of guides split into 2 parts)
- The machine body must be installed perpendicular, the adjustment can be done with the horizontal slots on the guide rail fixing brackets.





INFORMATION

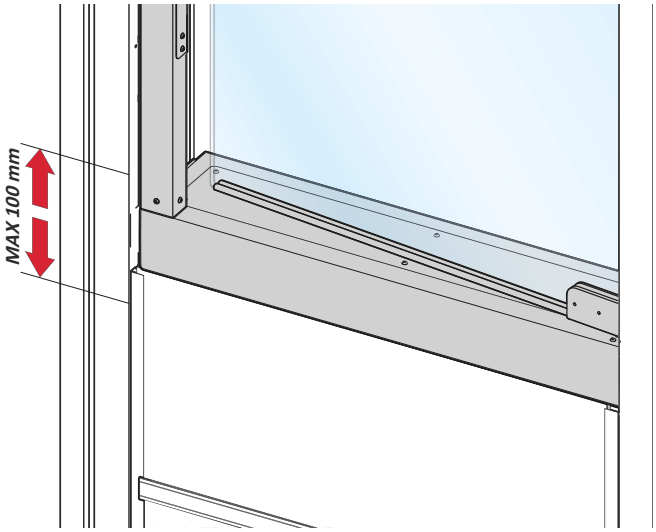
The installation of the EasyPlat system does not require a masonry shaft or metal structure. In the standard version it consists of two main pre-assembled units (machine body and platform), to which an extension is added in case of longer travels. A landing gate (pre-assembled) completes the system.

In case of need (difficulty of access/transport), the platform unit can be easily disassembled and reassembled (fig. 2, § 6.1: POSITIONING OF THE MATERIAL AT THE INSTALLATION SITE).

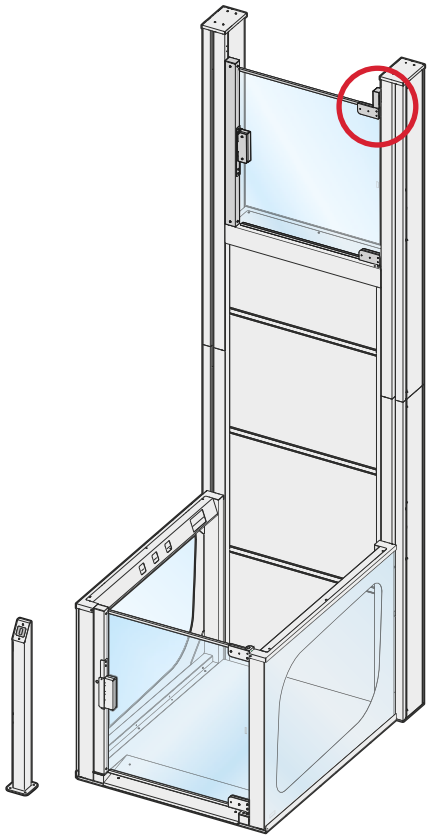
13.2. THRESHOLD-GATE ADJUSTMENT

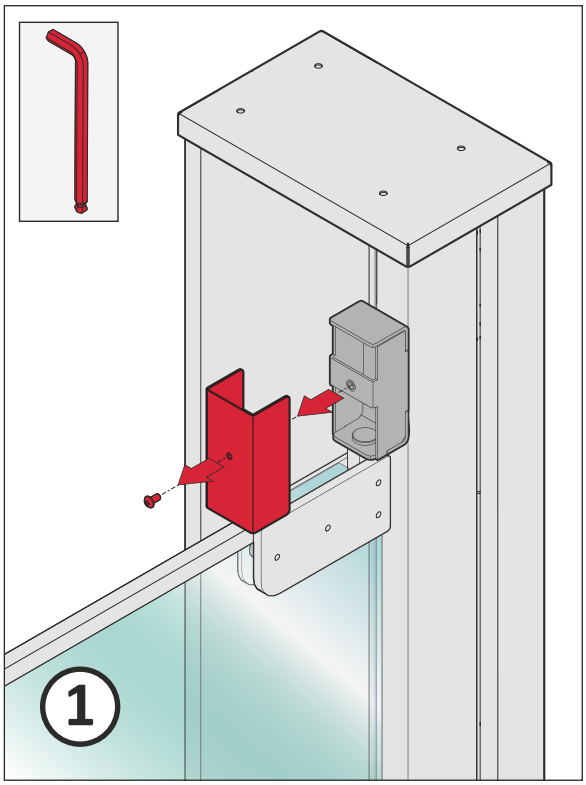
INFORMATION

The landing threshold and gate have an adjustment range of +/- 50 mm which allows any adjustment directly at the installation site.

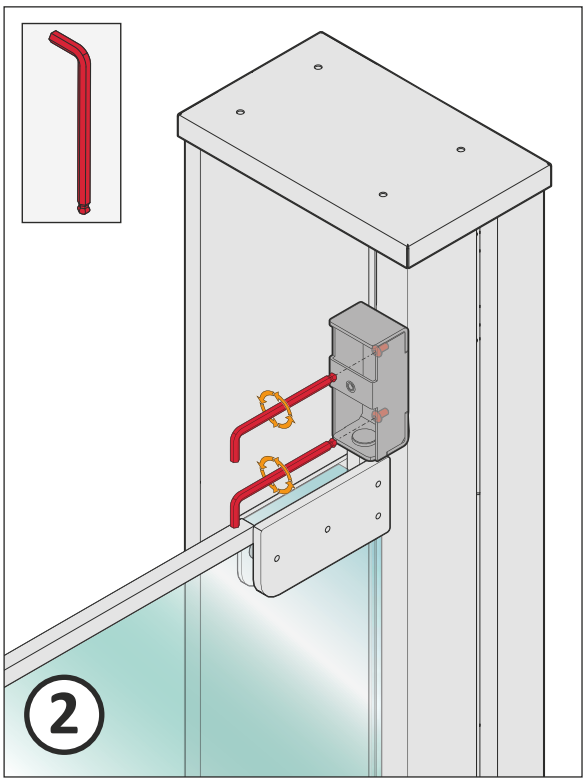


13.3. UPPER HINGE - ADJUSTMENT

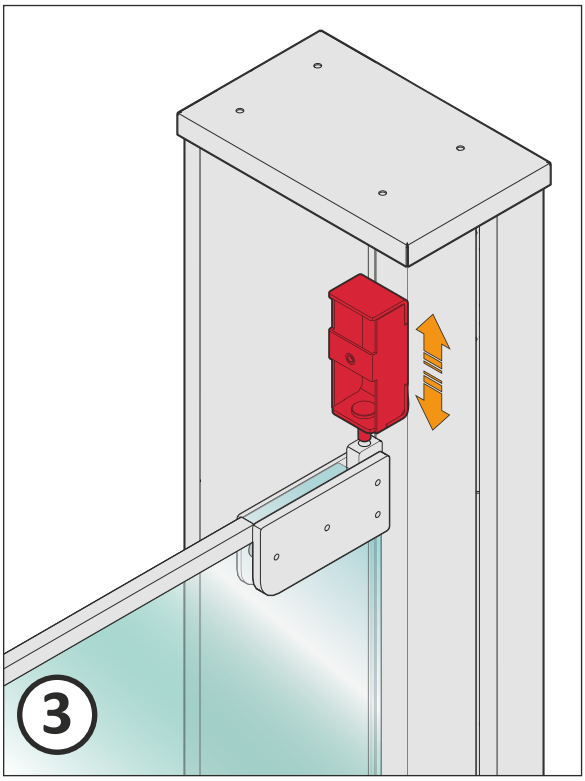




(1) Remove the top hinge cover **A**.



(2) Loosen the hinge fixing screws **B**.

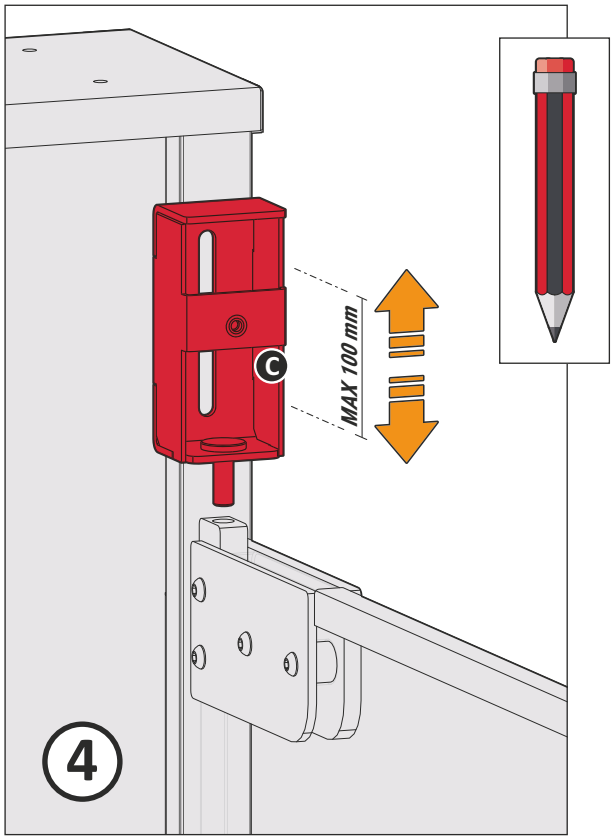


(3) Adjust the position of the hinge **C**.

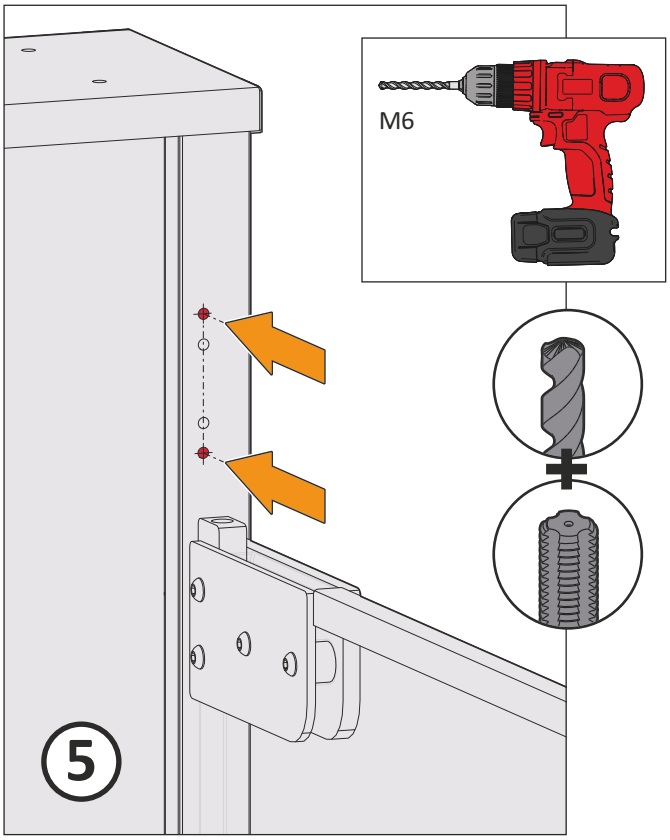
EXTRA ADJUSTMENT

INFORMATION

The landing threshold and gate have a standatd adjustment range of **+/- 25 mm without drilling**.
To further move the threshold and gate (+/- 50 mm), follow the instructions below.

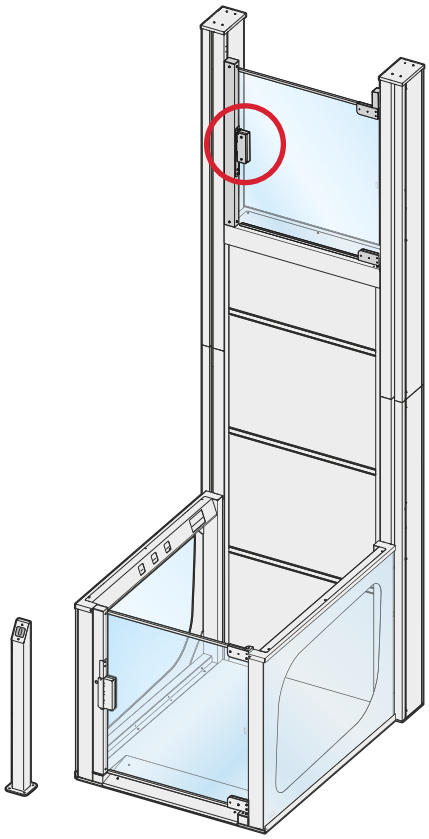


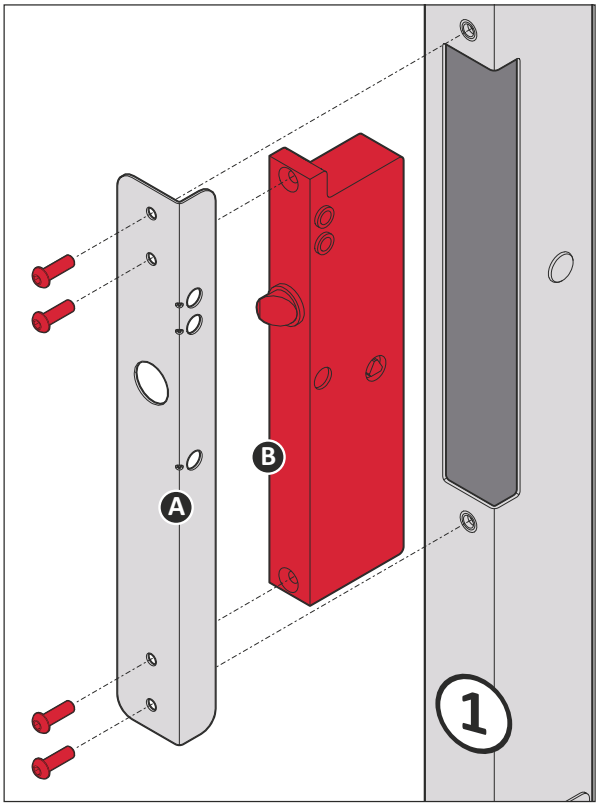
④ After adjusting the position of the hinge **C**, mark the position of the holes.



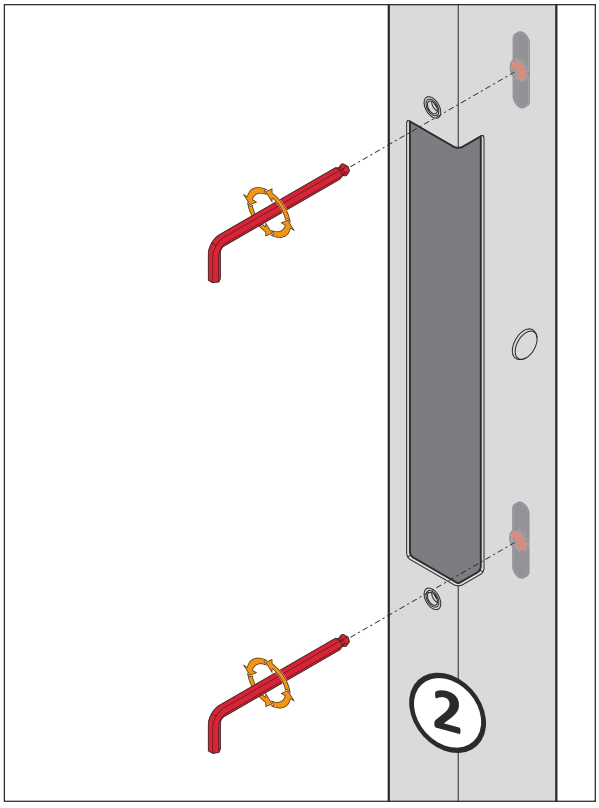
⑤ Drill holes (M6), thread the holes and fix the hinge.

13.4. GATE STOP - ADJUSTMENT

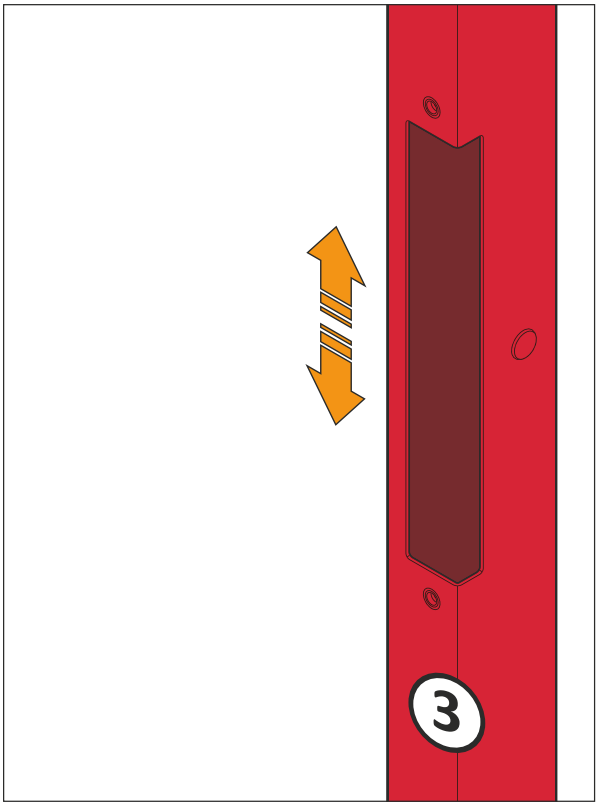




(1) Rimuovere la copertura (A) e la serratura (B) .

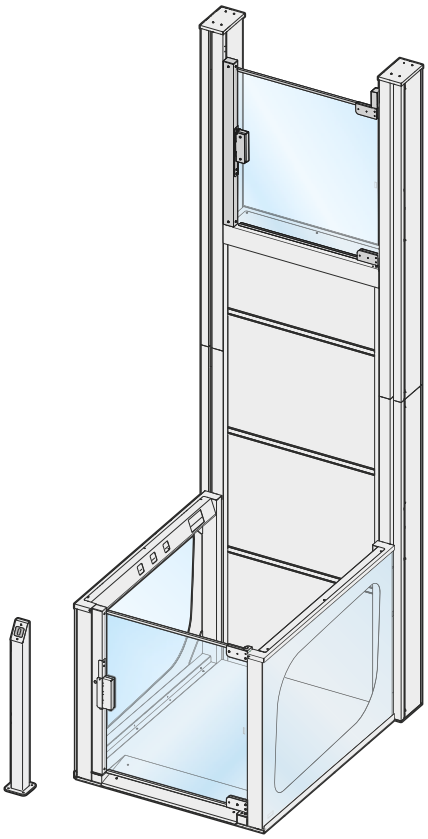


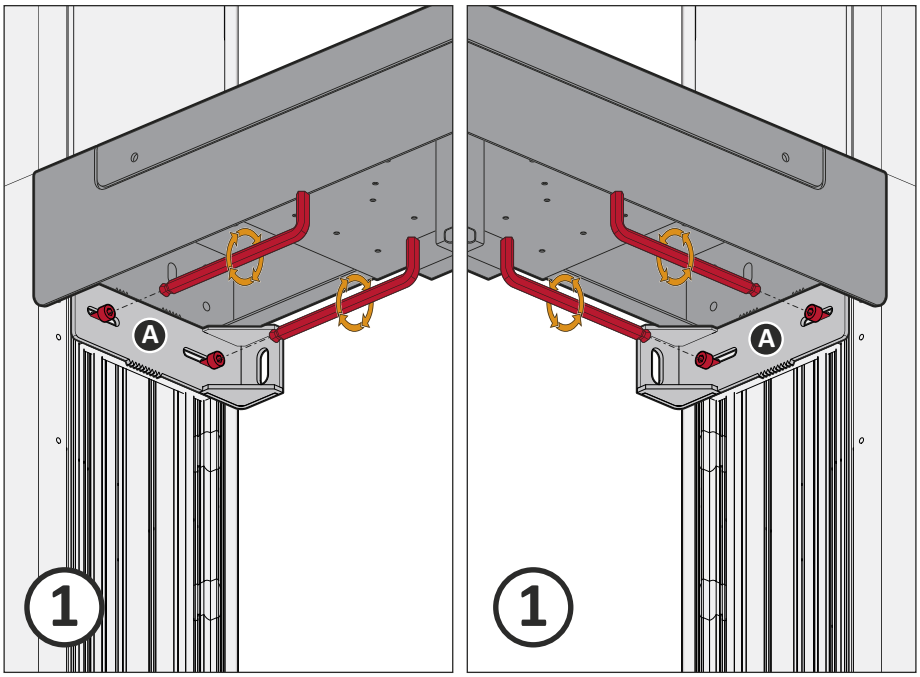
(2) Loosen the screws of the gate stop.



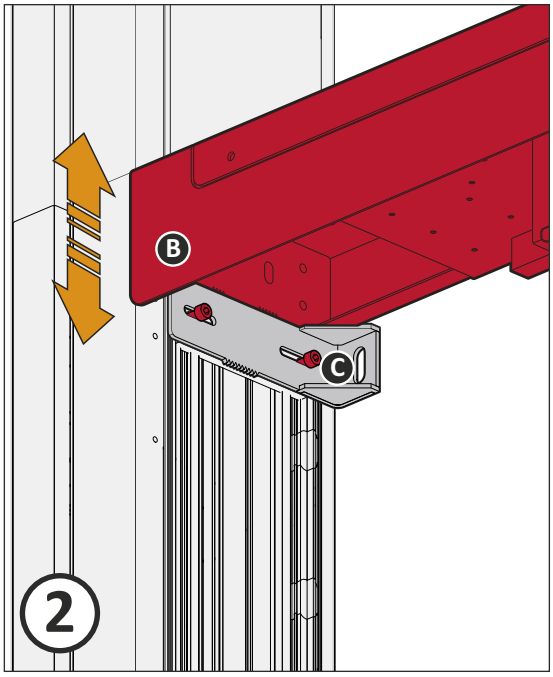
(3) Adjust the height and tighten the screws again.

13.5. SILL - ADJUSTMENT





(1) Loosen the sill's fixing screws on the brackets **A** .

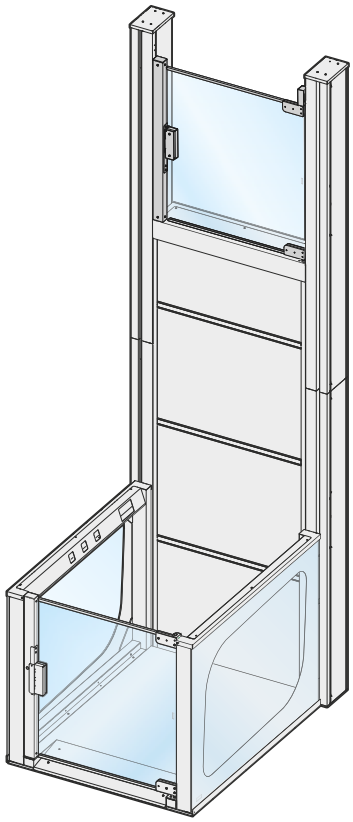


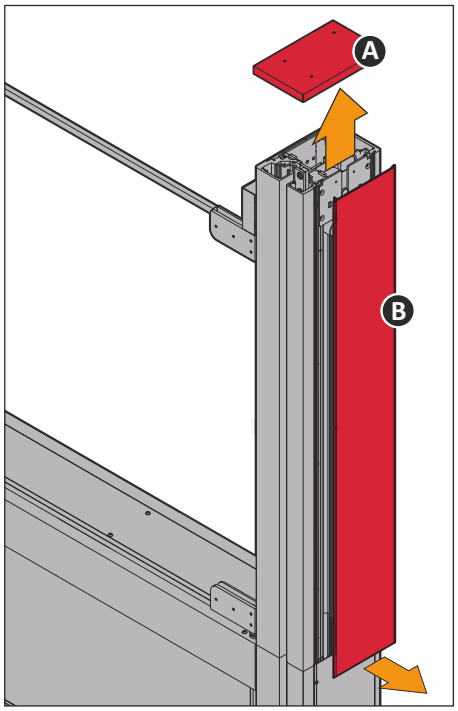
(2) Adjust the sill height **B** and tighten the fixing screws **C**.

INFORMATION

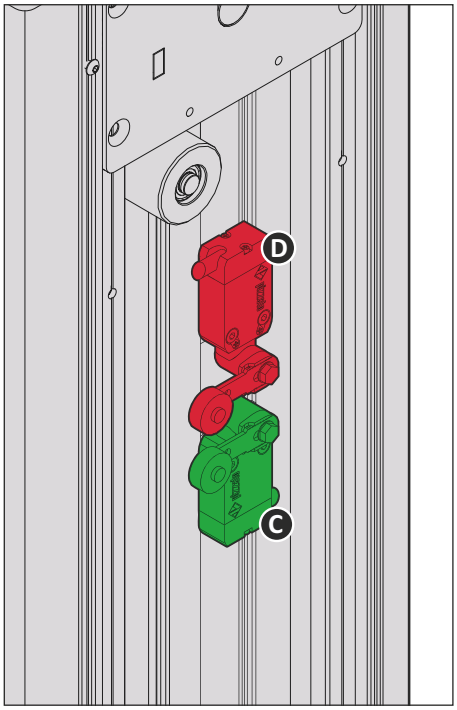
If the cladding is already installed, remove it following the instructions given in **Chapter 14**.

13.6. LIMIT SWITCH AND OVERRUN LIMIT SWITCH - ADJUSTMENT

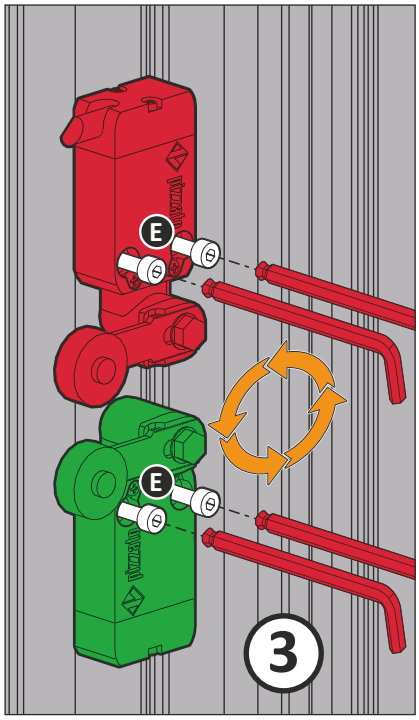




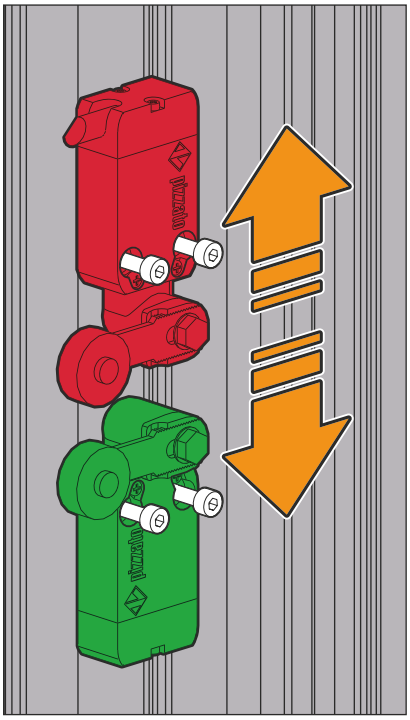
(1) Remove the cap (A) and the infill panel (B) of the upright.



(R) Identify the limit switch (C) and the overrun limit switch (D).



(3) Loosen the contact fixing screws (E).



(4) Adjust the limit switch and overrun limit switch according to the sill shift and tighten the screws.

INFORMATION

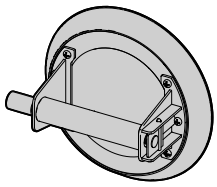
Carry out the same operation with the overrun limit switch present in the other upright.

14. REMOVAL AND INSTALLATION OF INFILL MATERIALS

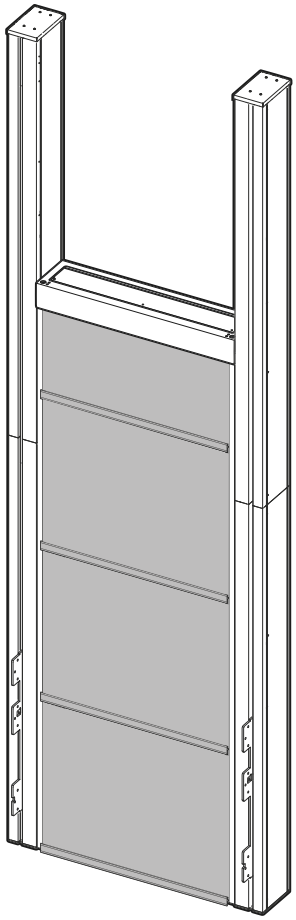
14.1. INFILL PANELS - REMOVAL

INFORMATION

To access the shaft and carry out the operations of wall anchoring and electrical wiring connections, it is necessary to remove the pre-assembled infill panels.

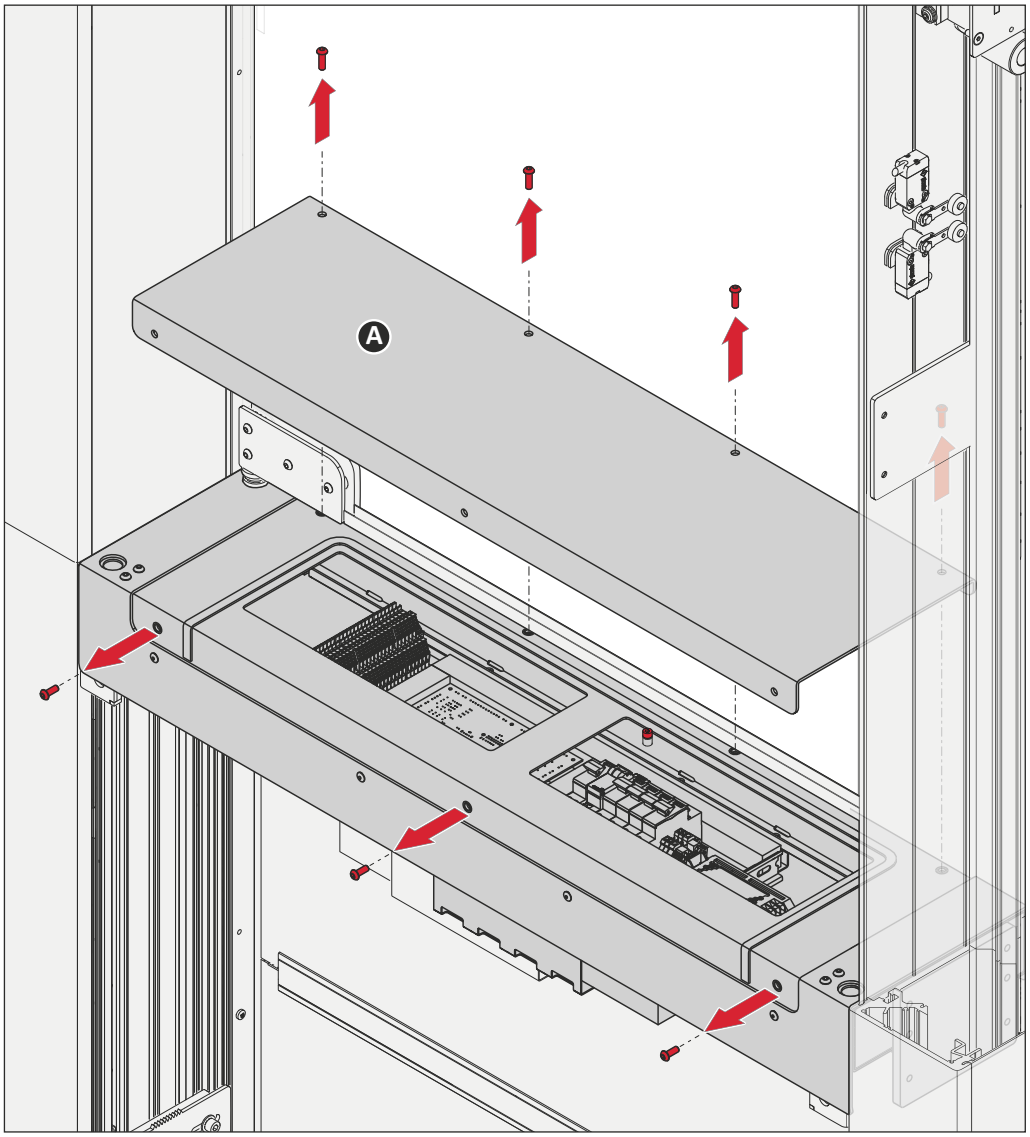


To remove the infill panels, it is necessary to use the specific load lifting suction cups.

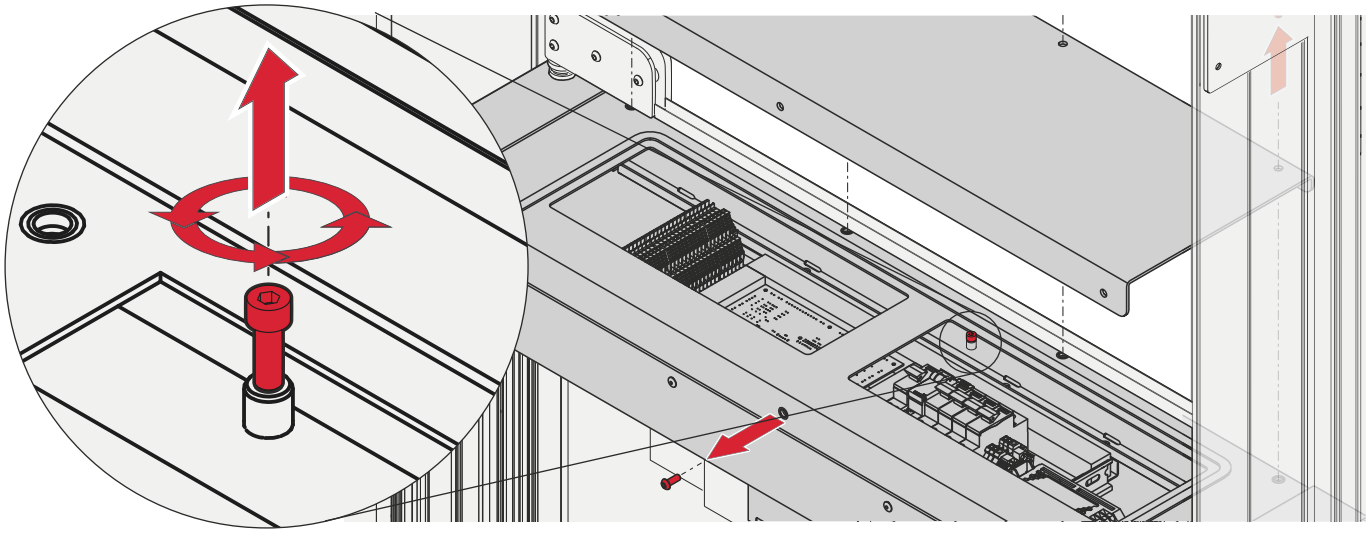


- To remove the infill panels, carry out the following procedure:

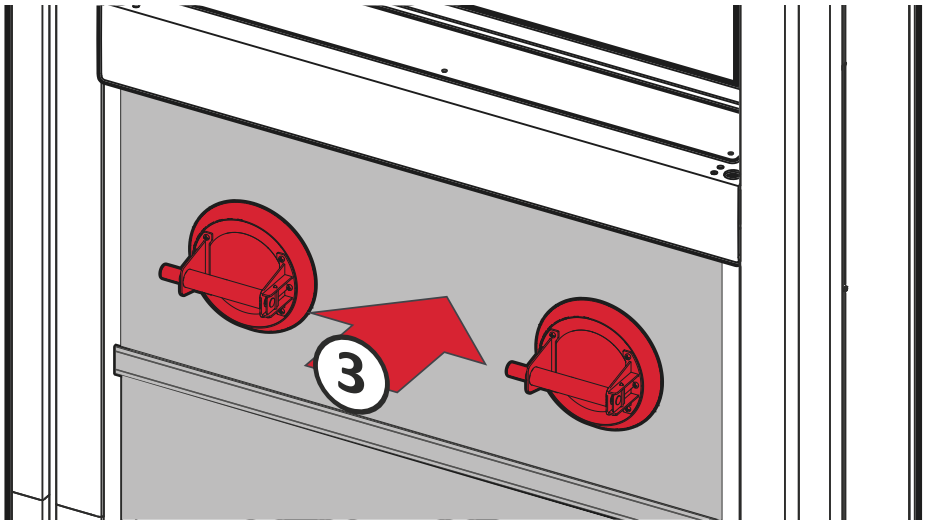
  ① Remove the screws and the threshold closing plate Ⓐ;



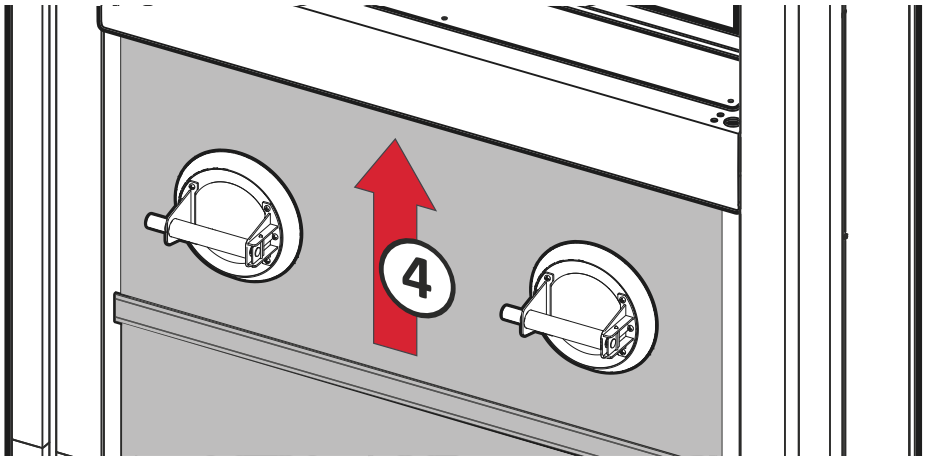
② Unscrew the locking/safety screw of the infill panels;



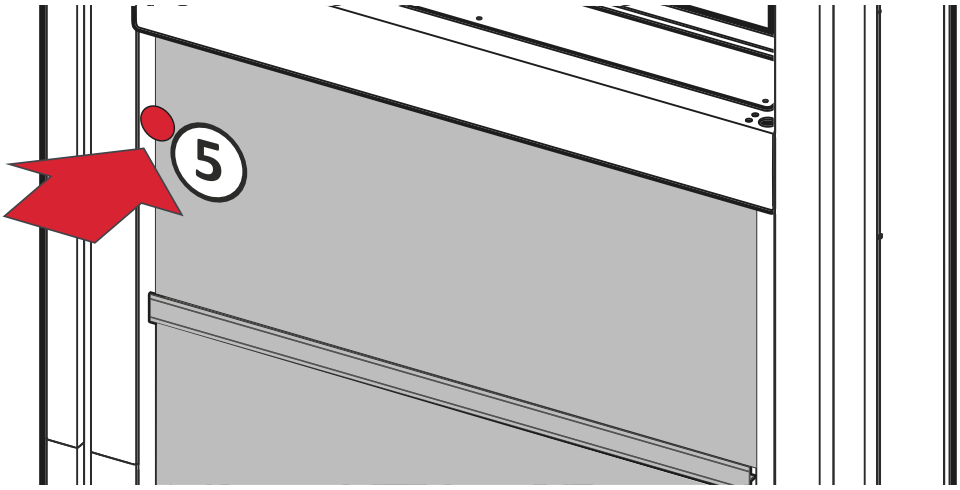
③ Apply the lifting suction cups;



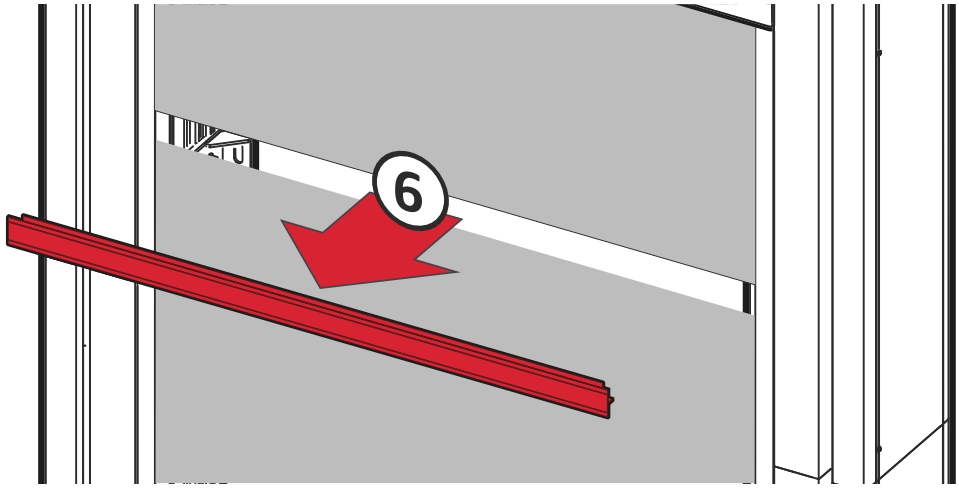
④ lift the panel vertically;



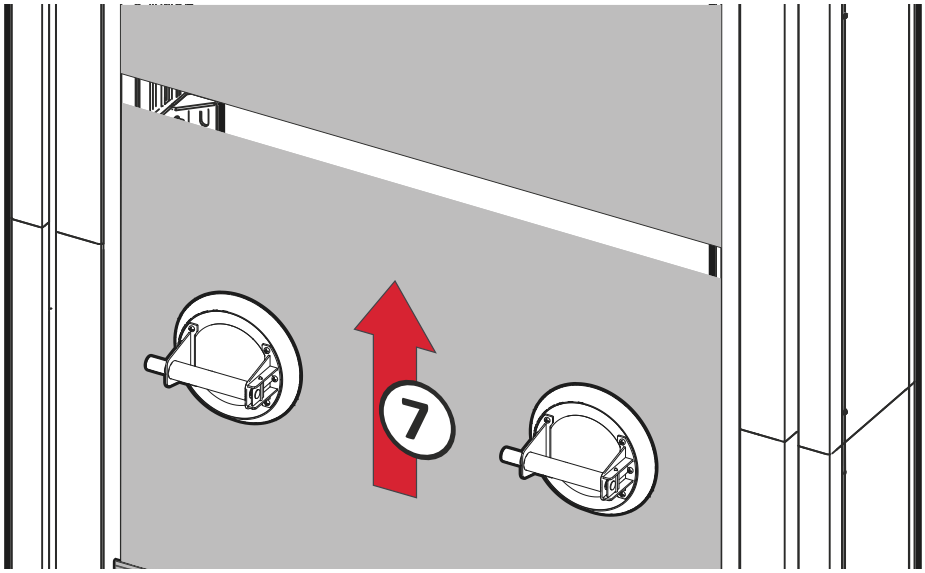
⑤ secure the panel in raised position using the specific safety screw;



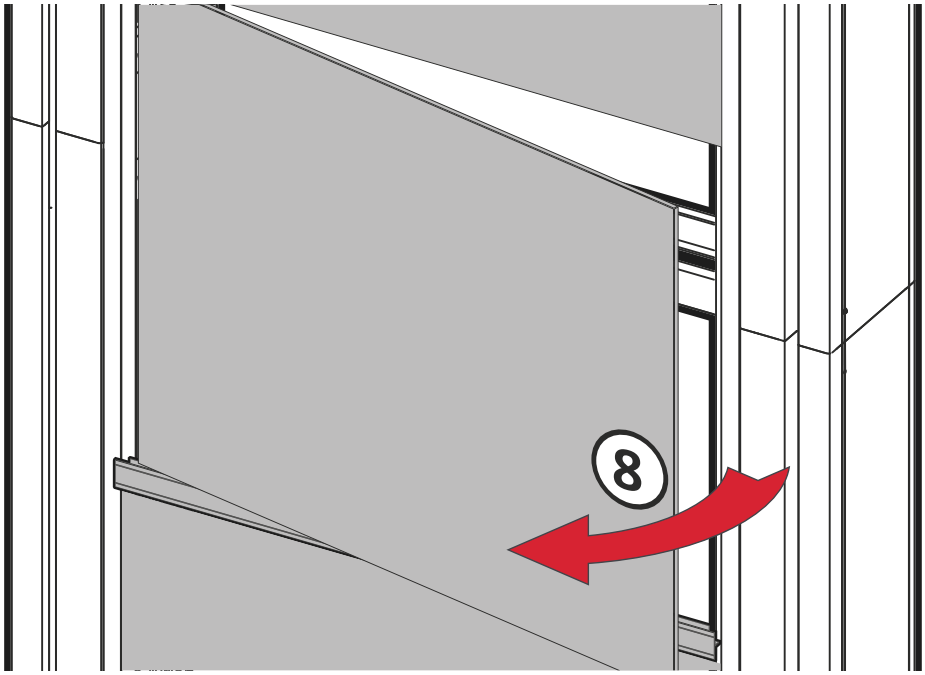
⑥ pull out the H-shaped fixing profile;



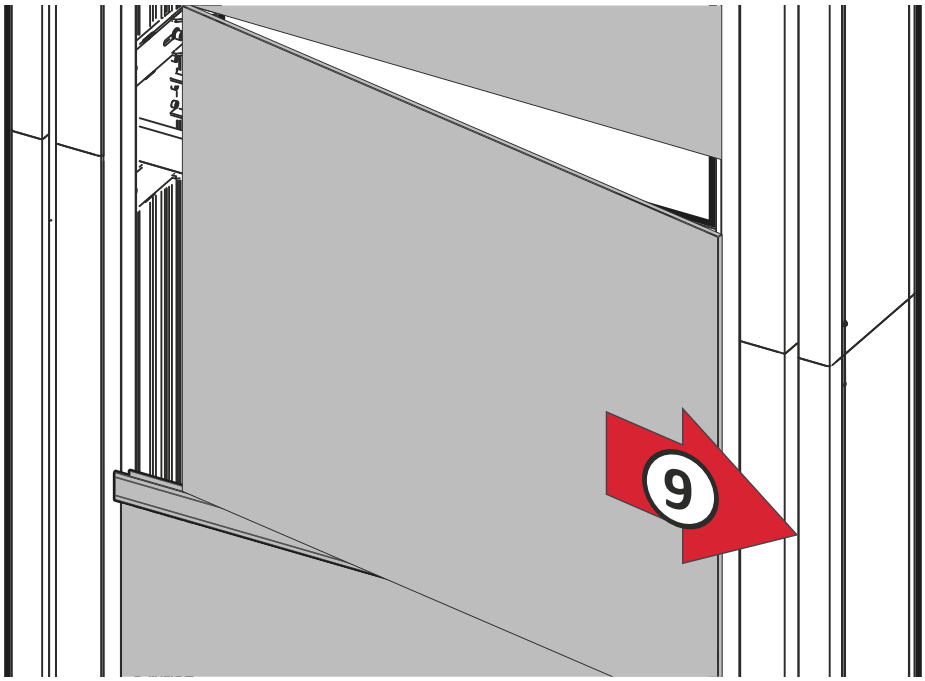
⑦ lift the underlying panel;



⑧ rotate the panel so that it exits the guides;



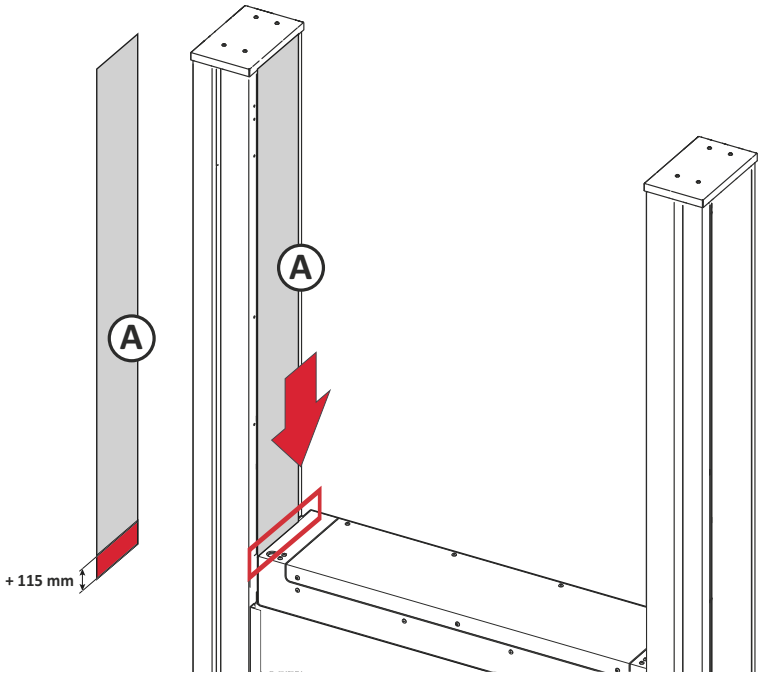
⑨ pull out the panel;



⑩ repeat steps 6, 7, 8, 9 until the panels are completely removed.

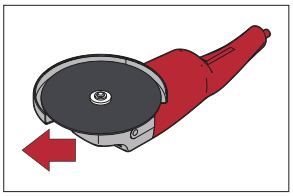
INFORMATION
To refit the infill panels, reverse the procedure.

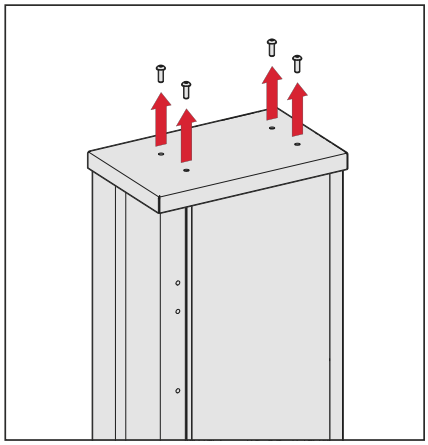
14.2. INFILLING OF THE THRESHOLD/LANDING JAMB



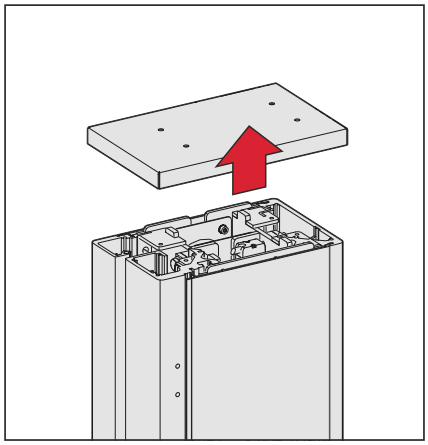
INFORMATION

After having fastened the threshold at the level of the landing surface, trim the lower excess infill of the jamb (A).

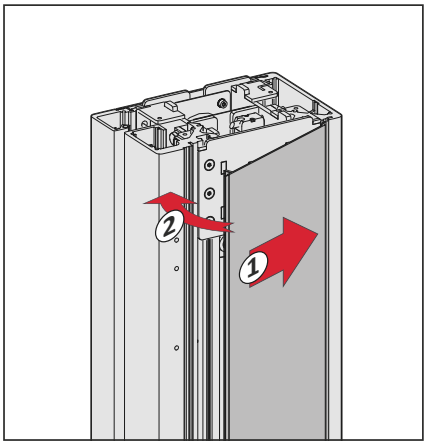




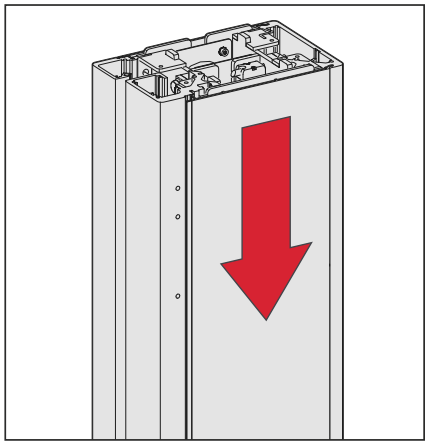
• Remove the retaining screws



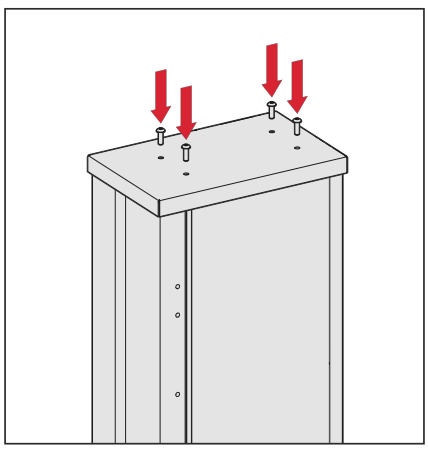
• remove the jamb plug,



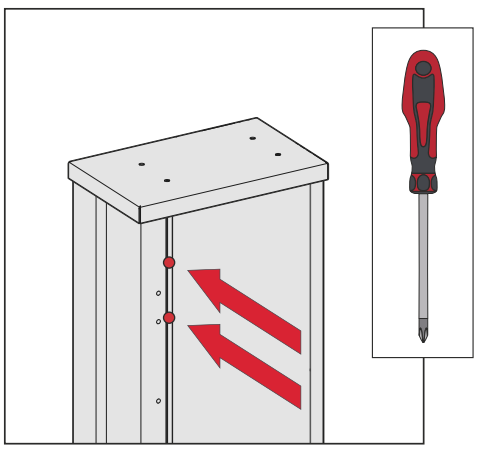
• position the last H-shaped coupling profile,



• slide the H-shaped profile down into the specific seat.



• refit the jamb plug,



• secure it with the 2 retaining screws (pre-assembled).

15. FITTING / REMOVING THE CARRIER*

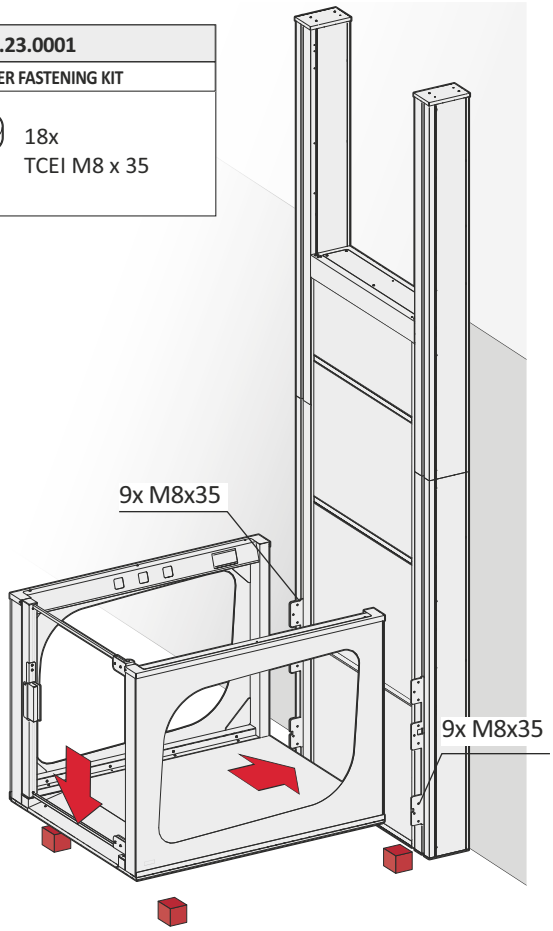
15.1. CARRIER - FASTENING TO THE MOTOR UNIT (SLING)

INFORMATION

If the installation site does not allow the passage or removal of the entire (pre-assembled) carrier, it is possible to disassemble and reassemble it with the few steps described below.

- Place shims (e.g. wooden blocks) under the carrier basement (B) to level it and secure it to the motor unit.
- make the electrical connections between the carrier and the machine body as indicated in the electrical diagrams provided.

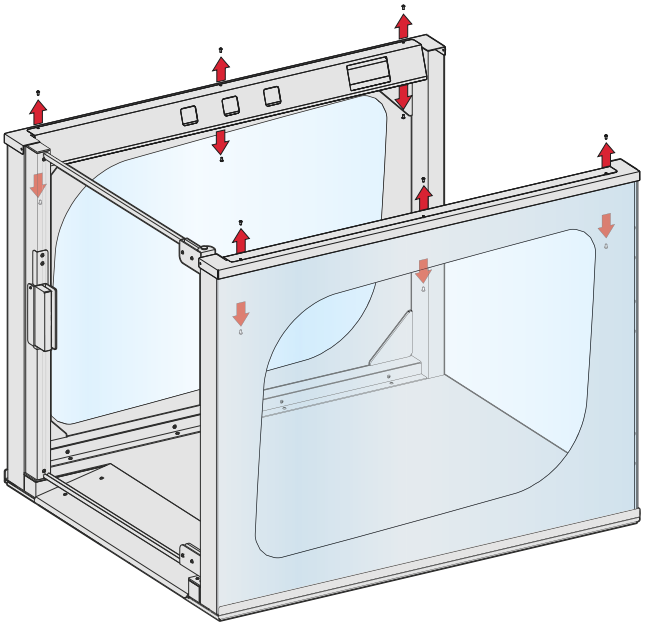
F500.23.0001
CARRIER FASTENING KIT
18x TCEI M8 x 35



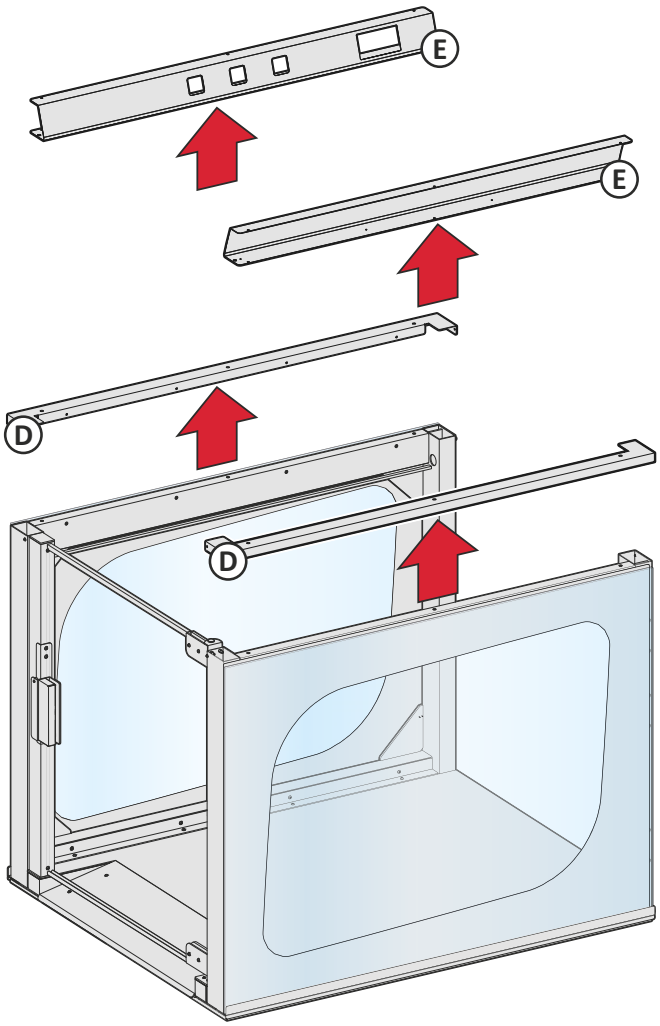
INFORMATIOMN

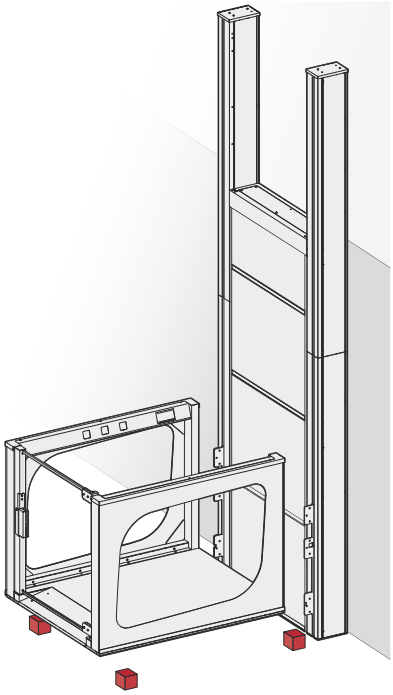
Store any excess wiring in the specific slots on the carrier jambs.

- Remove the fixing screws of the control station and of the glazing beads (C)

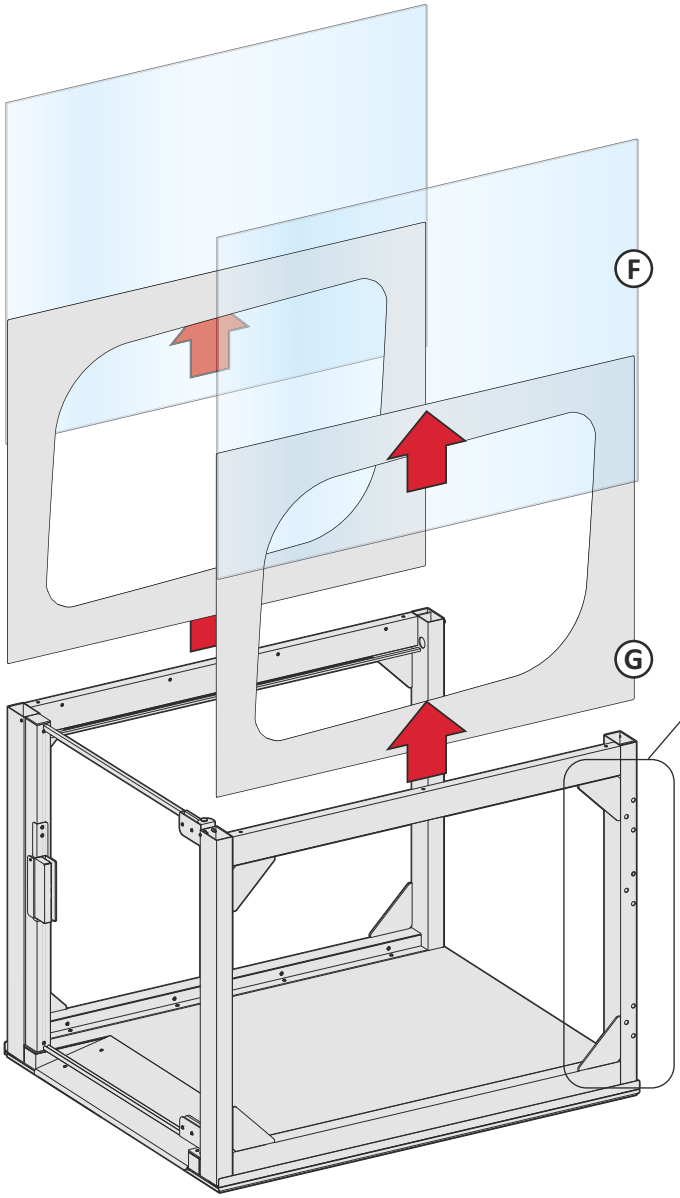


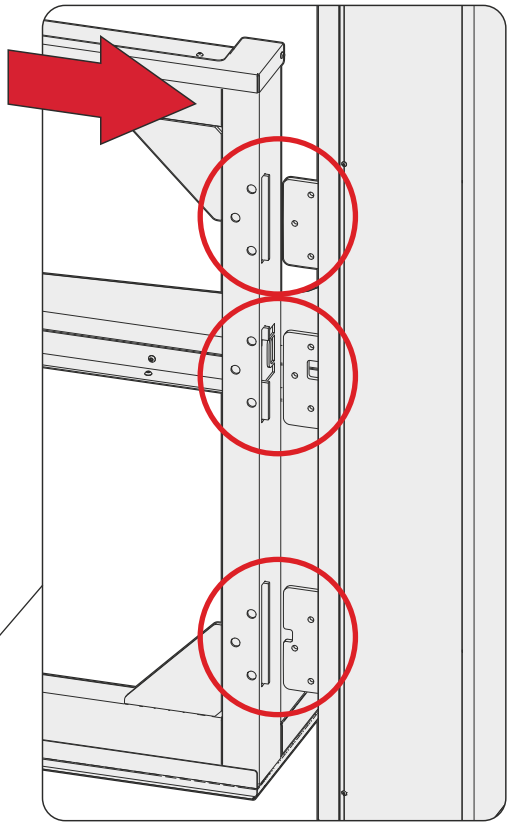
- Remove the glazing beads (D) and the control station (E)





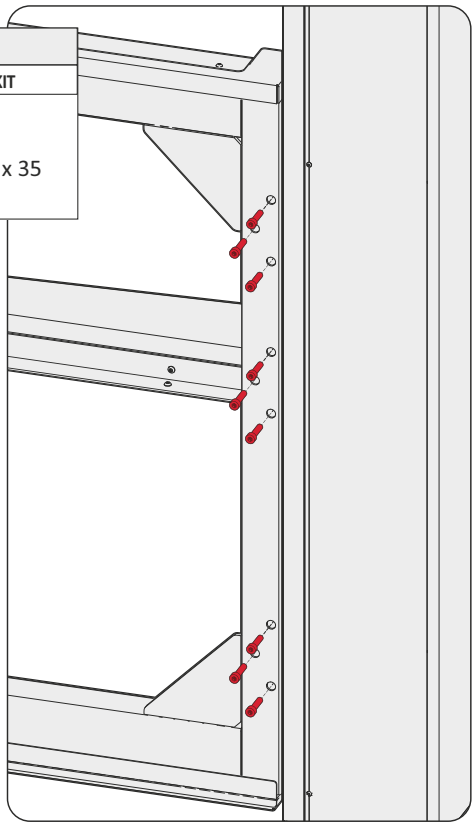
- Now it is possible to extract the glazing (F) and the plate (G), revealing the mounting holes on the carrier jambs (H).





F500.23.0001
CARRIER FASTENING KIT

18x
TCEI M8 x 35



- Check that the carrier is correctly aligned,
- Insert the lifting brackets (I) into the fixing holes on the carrier jambs (H).
- Secure the carrier to the sling using the appropriate mounting screws (KIT F500.23.0001)
- Refit all removed parts ((I),(H),(G),(F),(E),(D),(C))

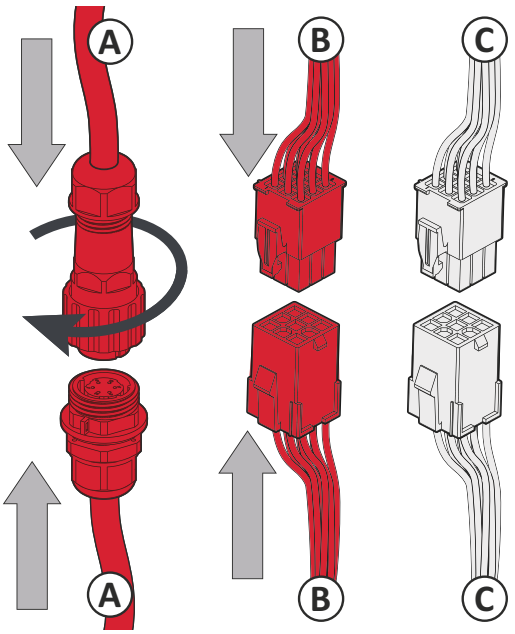
INFORMATION

Before securing the bolts, connect the plug and play cables (§ 10.2). Simply connect the connectors and insert the cables into the appropriate housings in the carrier jambs.

16. ELECTRICAL AND ELECTRONIC DEVICES

16.1. WIRING CONNECTION

- Make the electrical connections between the power line and the on-board control panel, according to the electrical diagrams, through the electrical line routing indicated on the machine layout.
- Screw all the connectors as shown in the figure. All connections are different in order to avoid errors.



INFORMATION

All connectors are marked with the relevant numbers/letters.

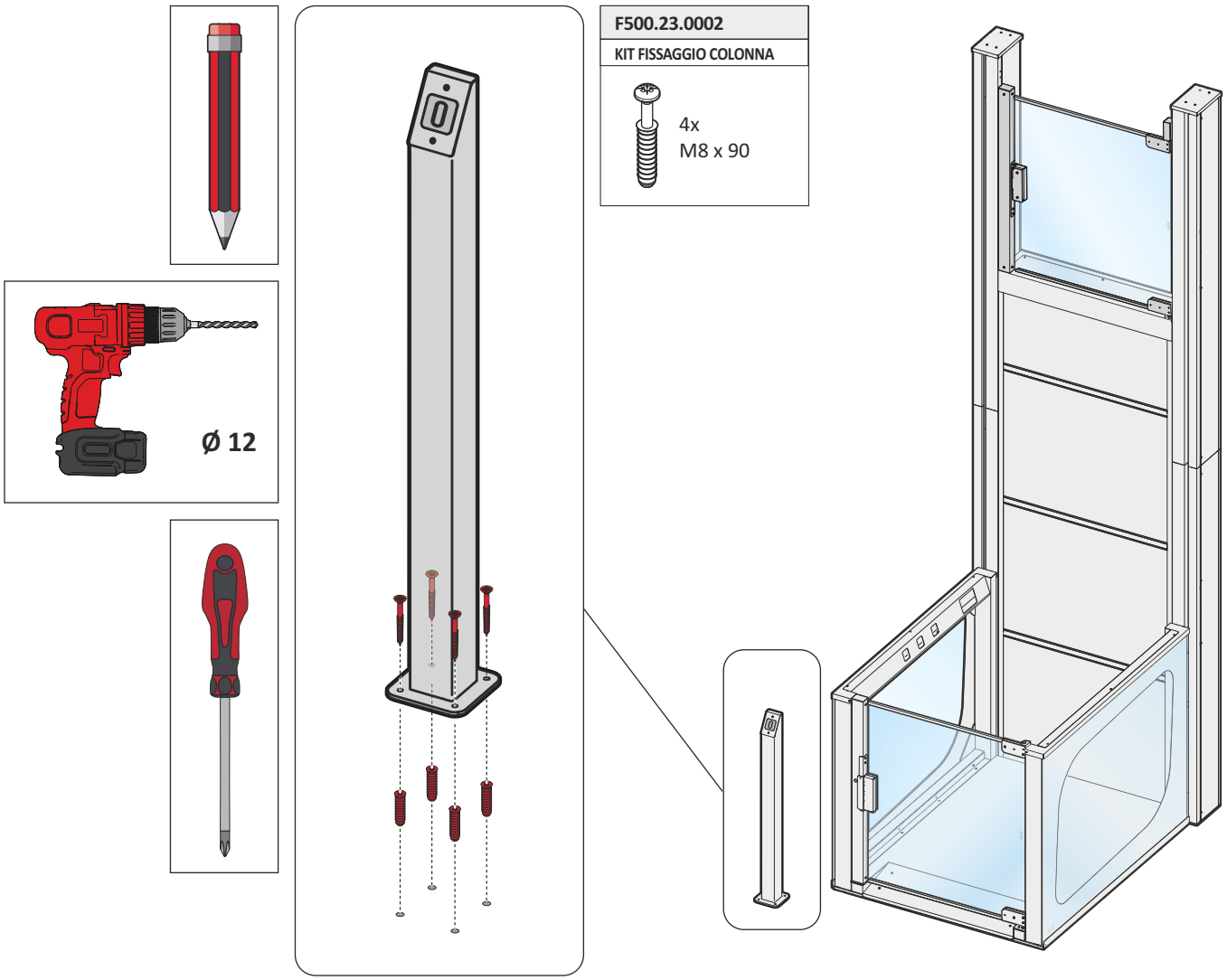
Ⓐ	Waterproof screw connector
Ⓑ	Mini Universal MATE-N-LOK connector

16.2. CONTROL PANEL - POWER SUPPLY

For the electrical connections, reference should be made to the design wiring diagram and the installation instructions supplied with the materials.
The first connections to be made in the lift controller are:
1. with the connector of the earthing system;
2. with the gneral power supply panel of the building;

17. LAST INSTALLATIONS

17.1. INSTALLATION OF THE CONTROL COLUMN AT THE FLOOR (if provided)



- Mark on the floor the anchor points using the column as a template;
- remove the column;
- drill the slab and clean the holes with compressed air;
- insert the nylon rawplug until it is flush
- rest the column in place;
- insert the screws and screw fully.

INFORMATION	
	The control column works with a WiFi transmission system. Ensure proper operation before fastening to the floor

17.2. SYSTEM COMMISSIONING

To operate the system:

- Power the lift controller;
- Remove any wooden blocks previously positioned under the platform;

NOTICE		
	**RISK OF DAMAGE TO THE SYSTEM:** Before moving the platform via the controller, it is necessary **<u>to clean and dry the guides thoroughly</u>** with product suitable for the purpose, (for example a universal spray lubricant like wd40) and a clean cloth.	

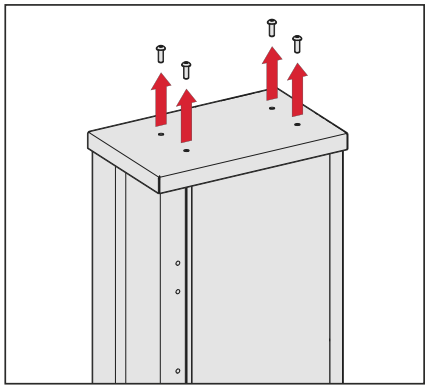
It is also recommended to:

- Visually check that there are no visible obstacles or protruding materials along the shaft that could interfere with the sling and the basement.
- Check that all STOPS are disabled.
- Check that the distance between the car and the head room is the same as that indicated by the drawing.
- Power the controller by operating it and carry out some maneuvers.
- Check for abnormal noises.

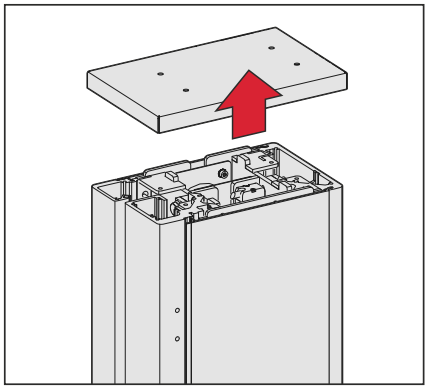
18. SAFETY GEAR DEVICE

18.1. ACCESS AND EXTRACTION OF THE SAFETY GEAR DEVICE

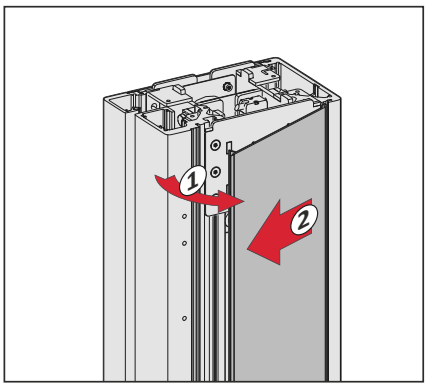
To access the safety gear device, carry out the following operations:



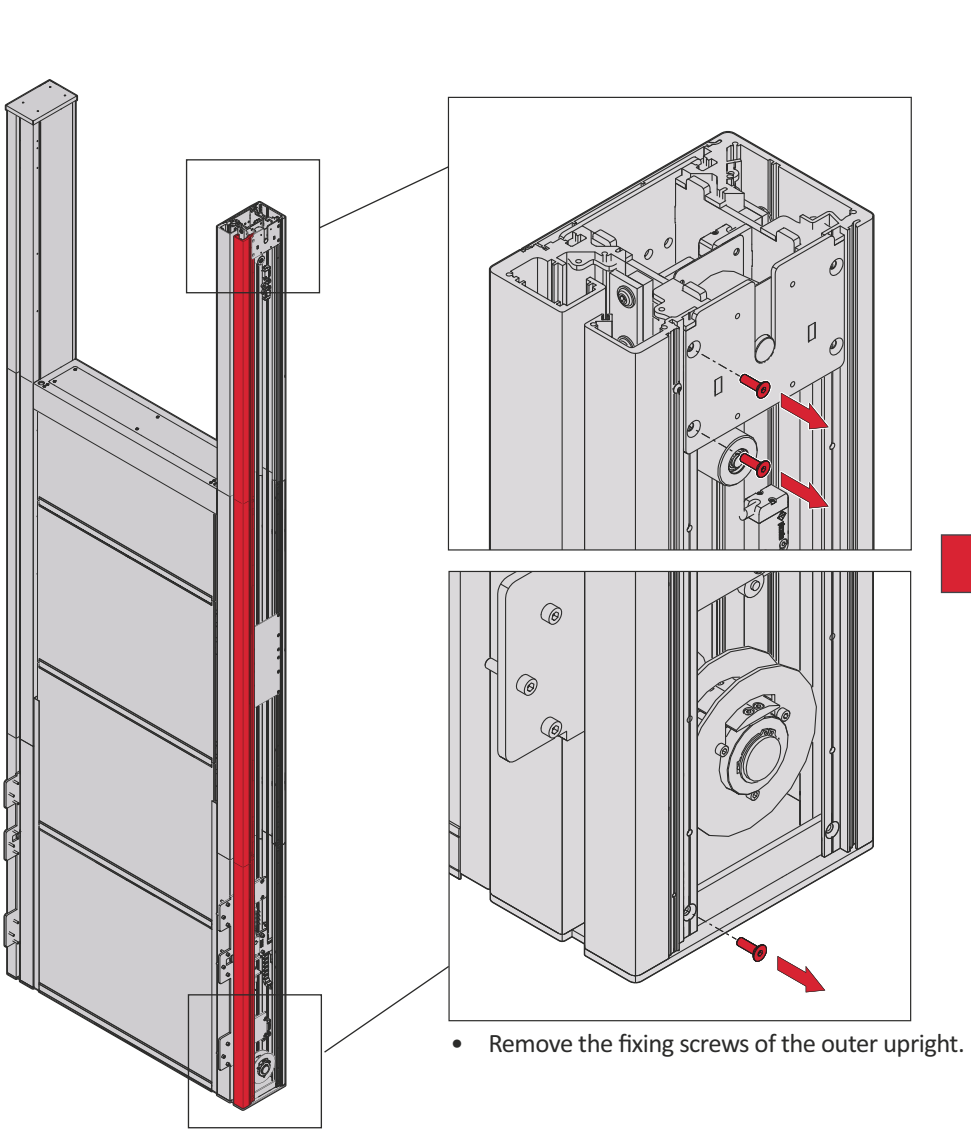
- Remove fixing screws



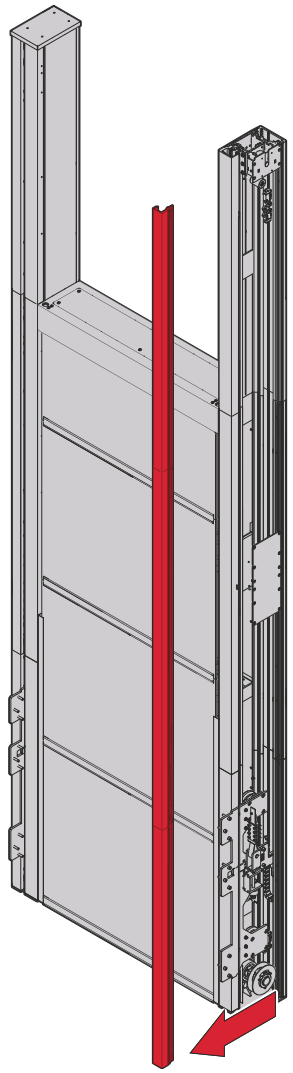
- Remove the upright cap.



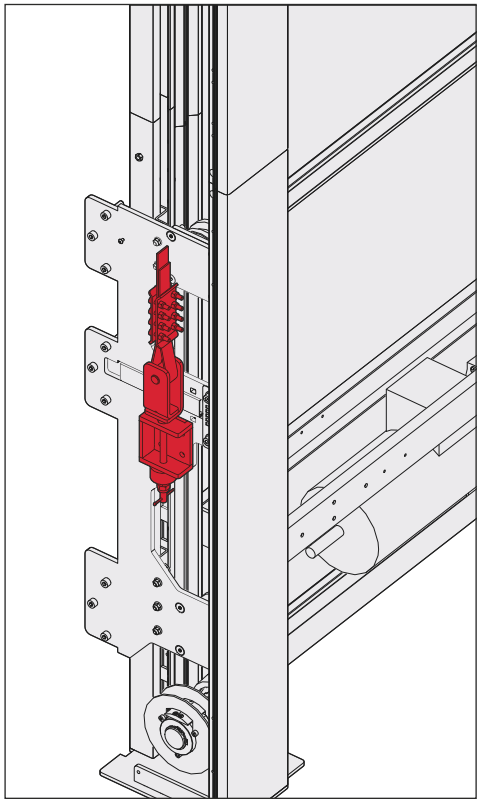
- Remove the upright cladding.

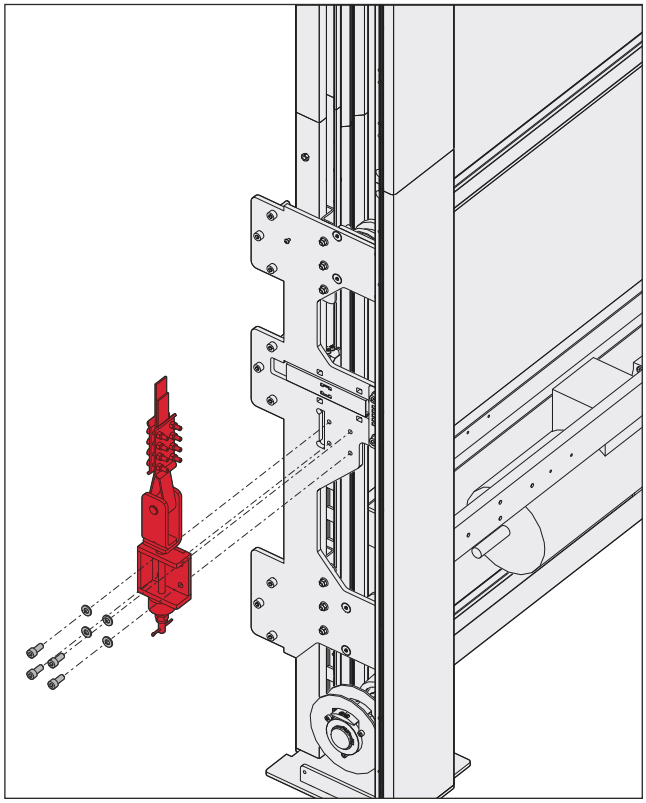


- Remove the fixing screws of the outer upright.

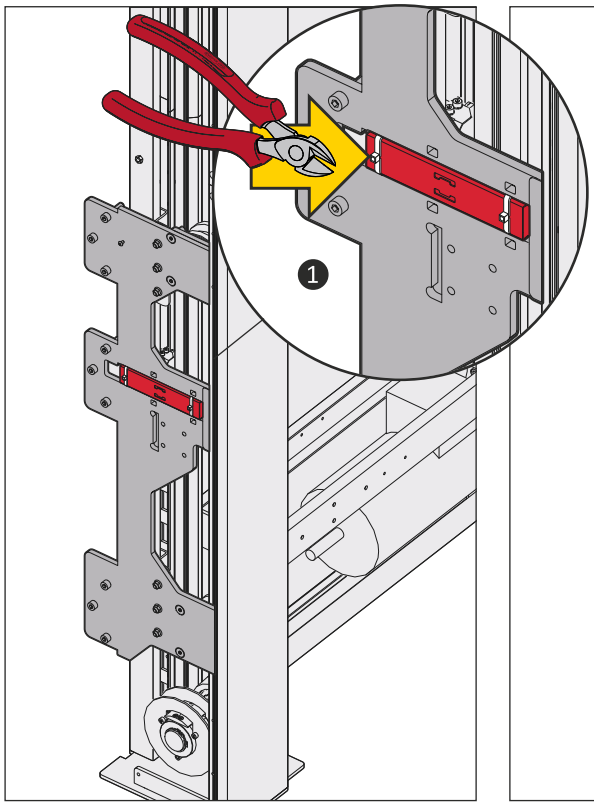


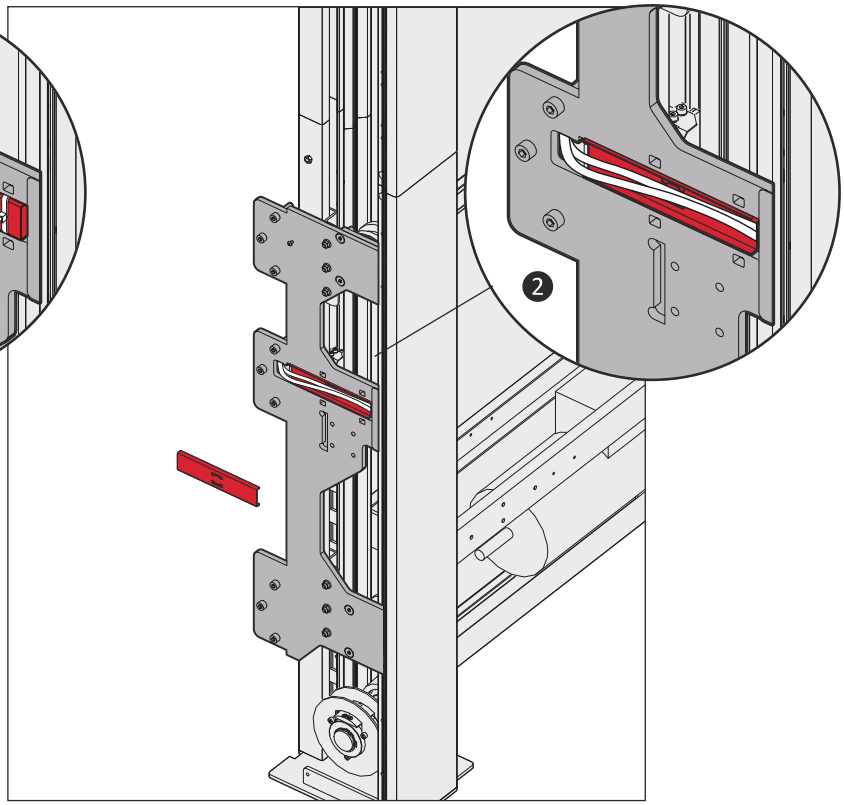
- Remove the outer upright.



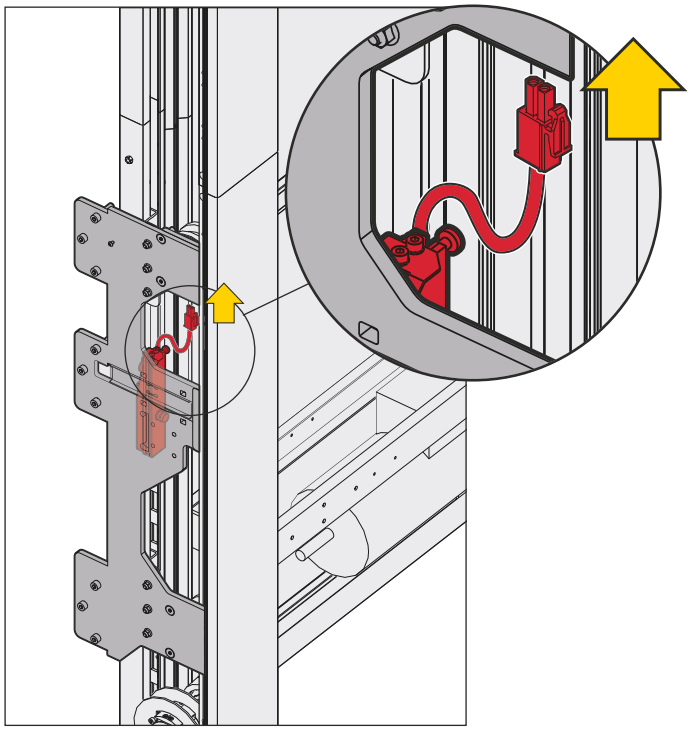


- Remove the movable head assembly, removing the fixing screws.

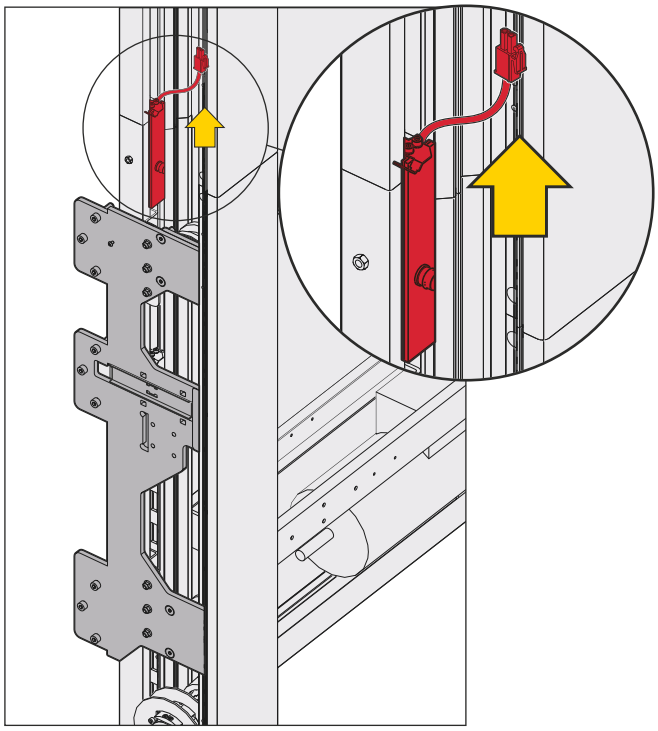




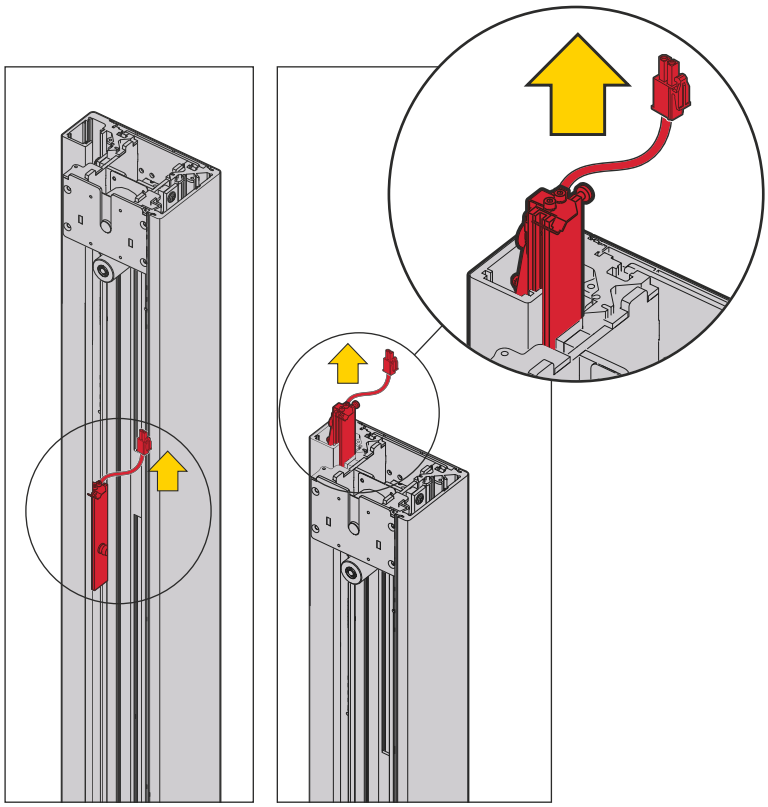
- cut the bands that hold the cable gland ❶ and open it to access the cables ❷.



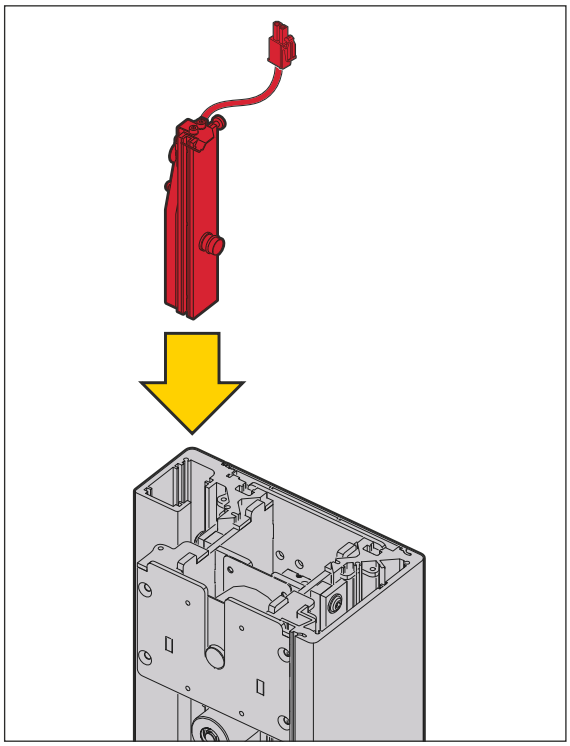
- Disconnect the safety gear wiring and pull it out.



- Slide the safety gear along the rail (if necessary using the cables to pull the safety gear).



- Slide the safety gear along the rail until the top and extract it from its seat.



- Once repairs / replacements have been made, reverse this procedure.

19. FIRST TEST RUN AND SHAFT COVER CLOSURE

It is recommended to perform a full run with the sling in advance:

- Thoroughly clean the guides and then lubricate them with suitable oil (e.g. ISO VG-220 EP or higher grade);
- Visually check that there are no visible obstacles or protruding materials along the shaft that could interfere with the sling and the basement.
- Check that all STOPS are disabled.
- Check that the pit protection device is disabled.
- Check that the distance between the platform and the head room is the same as that indicated by the design.
- Power the controller by operating it in SERVICE mode.

With the sling stationary at the top floor:

1. Check that the sling upper travel margin on the guides corresponds to the design drawing.
2. Adjust the position of the limit switch so that it triggers after a lifting of approximately 30mm above the floor.
3. Lower the sling to the lower floor.
4. Pay close attention to the proper length of the flat cable and any interference during the travel.
5. Adjust the position of the lower limit switch so that it triggers after a downward travel of approximately 30mm below the lowest access.
6. Perform a few full runs, checking:
7. the movement of the flat cables.
8. Any abnormal noise.
9. That the limit switches do not encounter obstacles.

Record the check as per section 2.1 of the "Final Checks" manual.

20. FINAL TEST AND ADJUSTMENT

INFORMATION

Once the installation is completed, please carry out a final check on the whole lift, in order to guarantee good travel comfort and follow through with the acceptance tests, in accordance with standards (**see point 2 on the "Final tests" manual**).

Only qualified personnel with the relevant skills are allowed to perform the above-mentioned tasks

20.1. GENERAL STEPS

Make sure the lift features match the contract details, the project drawings and the electrical scheme.
In particular:

- Tension values in general and for each electrical device.
- Duty load.
- Speed.
- Plate data of motor and gearbox (power, voltage, motor absorption, reduction ration, etc.).
- Triggering of motor protection devices.
- Plartform landing levelling.
- Difference in height between emtpy and full platform when at stops.
- Type and function of landing doors.
- Safety chain.
- Safety distances.
- Electrical insulation towards grounding, between operation circuit and driving force and between operation circuit and lighting.

20.2. MOTOR UNIT

- It is not possible to change the raising speed as this is determined by the maximum torque transmitted by the motor and by the reduction ratio achieved by the pulleys.
- The geared motor selected at the design stage allows for a maximum speed of 0.15 m/s.
- This value should be checked during the final test (**see paragraph 2.5 of the manual "Final checks"**).

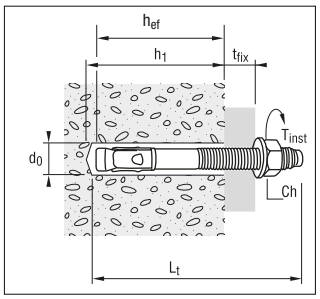
21. NOISE LEVEL

- The sources of noise are the motor, the brake and sliding of the shoes on the guide rails.
- The motor is positioned in the rear part of the sling between the guide rails and behind the protection casing.
- The operator will stand inside the car and therefore will not be directly subject to the sound emissions of the sources of noise. Nonetheless, as a precautionary measure the measurements were made directly around the above mentioned sources, in an industrial environme nt with no other machines in operation.
- In the different configurations considered, all the sound pressure levels measured were below 30dB(A).

A1. ANCHORAGE TO THE SHAFT WITH MECHANICAL OR CHEMICAL ANCHOR

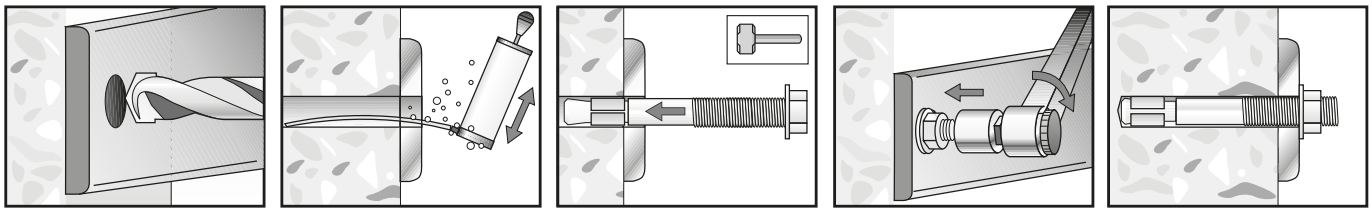
A1.1 CONCRETE SHAFT

Unless otherwise specified, all anchoring plugs are M10 in size and require a hole made in the wall with a 10 mm bit



h_1	=	Minimum hole depth
L_t	=	Dowel length
d_0	=	Hole diameter
t_{fix}	=	Fixable thickness
t_{inst}	=	Tightening torque
Ch	=	Wrench
h_{ef}	=	Depth of anchorage

ASSEMBLY SEQUENCE



A1.2 LOAD-BEARING MASONRY SHAFT

INFORMATION

In order to anchor the uprights in the masonry shaft (**made with materials suitable for construction of load-bearing/structural***), the distance between clamps must be reduced to cope with the lower mechanical resistance of the shaft wall.

*** Construction materials suitable for the realization of load-bearing walls even in seismic areas, calculated and built in compliance with the relevant legislation in the places of installation (IT - Technical Regulations for Construction: D.M. 14.01.0, NTC2018 etc.).**

NOTICE

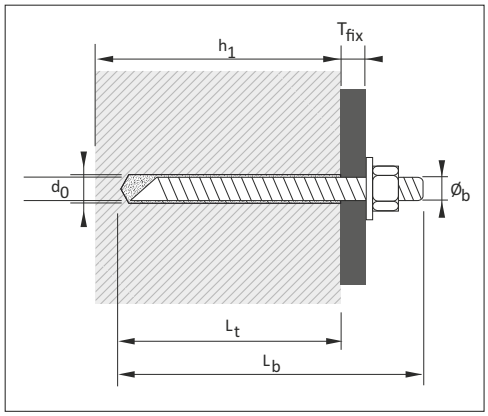
For all cases not covered by the described types, an inspection and a project by a qualified technician are requested.

A1.2.1 ANCHORAGE in a LOAD-BEARING MASONRY SHAFT WITH SOLID AND COMPACT ELEMENTS

The special kit F350.23.0026V01 for chemical bolts application is composed of:

- n° 16 zinc plated THREADED RODS 45° cut (anti rotation) (M10x130 GALVANISHED CHEMSET STUD);
- n° 2 pcs 300 ml CARTRIDGES of ANCHORING ADHESIVE*, to be used with standard caulking guns (skeleton gun);
- n° 2 multipurpose MIXERS ø9 mm, additionally to the 4 mixers foreseen for the cartridges.

Each kit is sufficient for 8 brackets, required for approx. 1 stop.
For instance, 3 F350.23.0026V01 kits are required for a 3 stops' lift, the brackets being positioned as per the sample drawing.

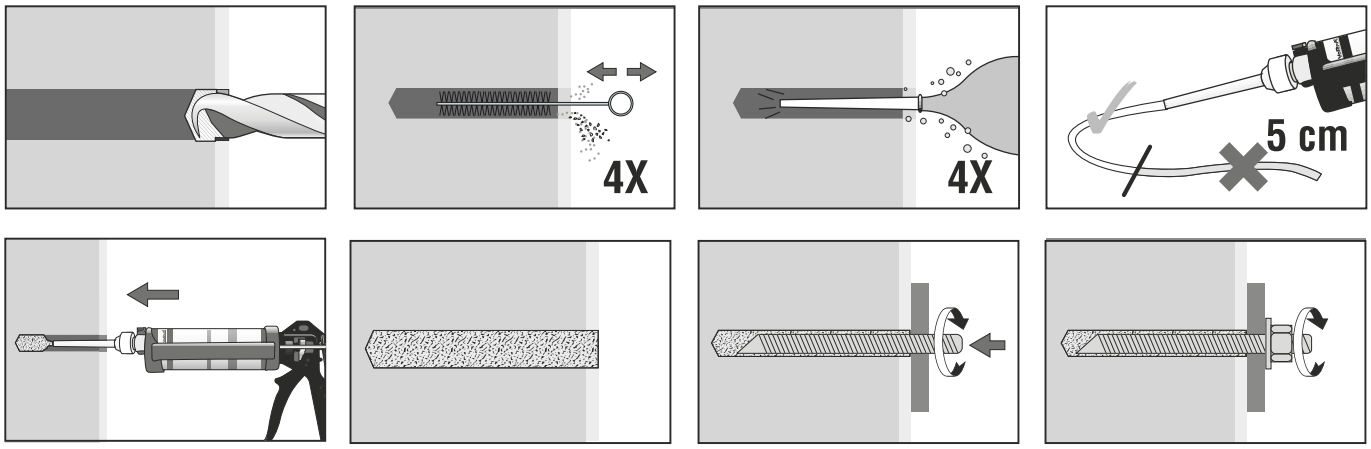


h_1	=	Minimum hole depth
L_b	=	Rods length
L_t	=	Dowel length
d_0	=	Hole diameter
$Ø_b$	=	Rods diameter
T_{fix}	=	Fixable thickness

Threaded rods length calculation:

$L_b = L_t + T_{fix}$

ASSEMBLY SEQUENCE



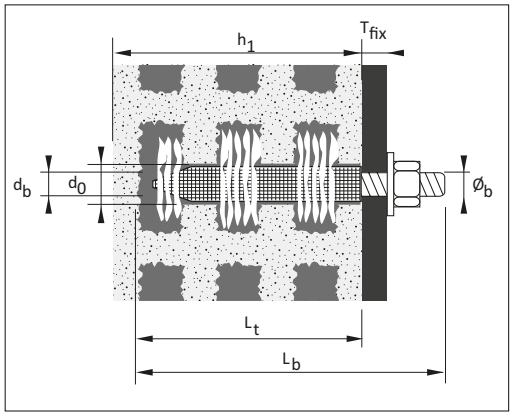
Carefully clean the hole before installation.

A1.2.2 ANCHORAGE in a LOAD-BEARING MASONRY SHAFT WITH HOLLOW ELEMENTS

The special kit F350.23.0025V01 for chemical bolts application is composed of:

- n° 16 zinc plated THREADED RODS 45° cut (anti rotation) (M10x130 GALVANISHED CHEMSET STUD);
- n° 2 pcs 300 ml CARTRIDGES of ANCHORING ADHESIVE*, to be used with standard caulking guns (skeleton gun);
- n° 2 multipurpose MIXERS ø9 mm, additionally to the 4 mixers foreseen for the cartridges;
- n° 2 FINE METAL MESH SLEEVE ø16 mm, length 1 mt each.

Each kit is sufficient for 8 brackets, required for approx. 1 stop.
For instance, 3 F350.23.0025V01 kitskits are required for a 3 stops' lift, the brackets being positioned as per the sample drawing.

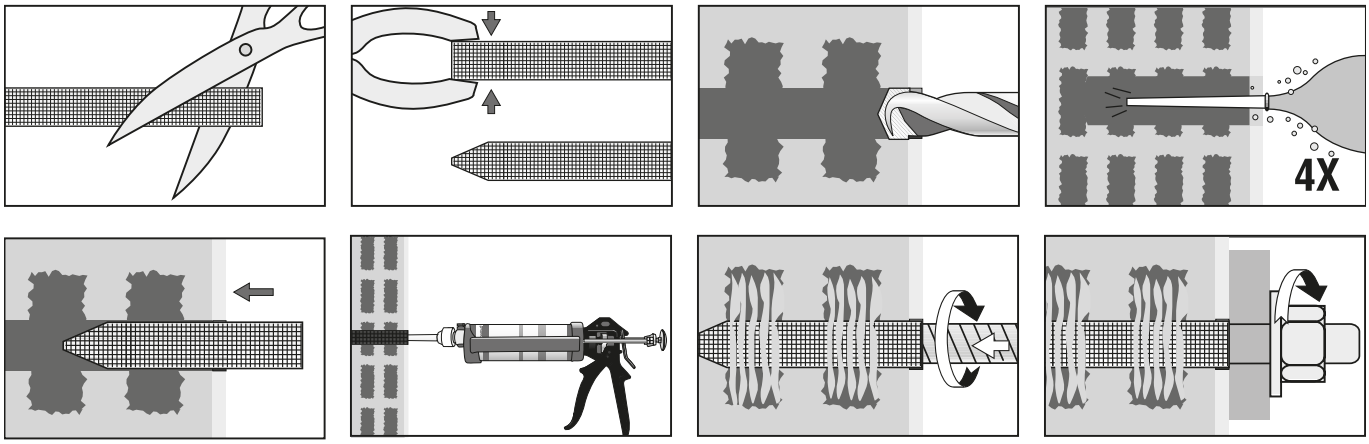


h_1	=	Minimum hole depth
L_b	=	Rods length
L_t	=	Dowel length
d_0	=	Hole diameter
d_b	=	Metal Mesh Sleeve diameter
$Ø_b$	=	Rods diameter
T_{fix}	=	Fixable thickness

Threaded rods length calculation:

$L_b = L_t + T_{fix}$

ASSEMBLY SEQUENCE



Carefully clean the hole before installation.

NOTE:

* Valid for elements in: concrete, natural stone, solid and hollow brick.