

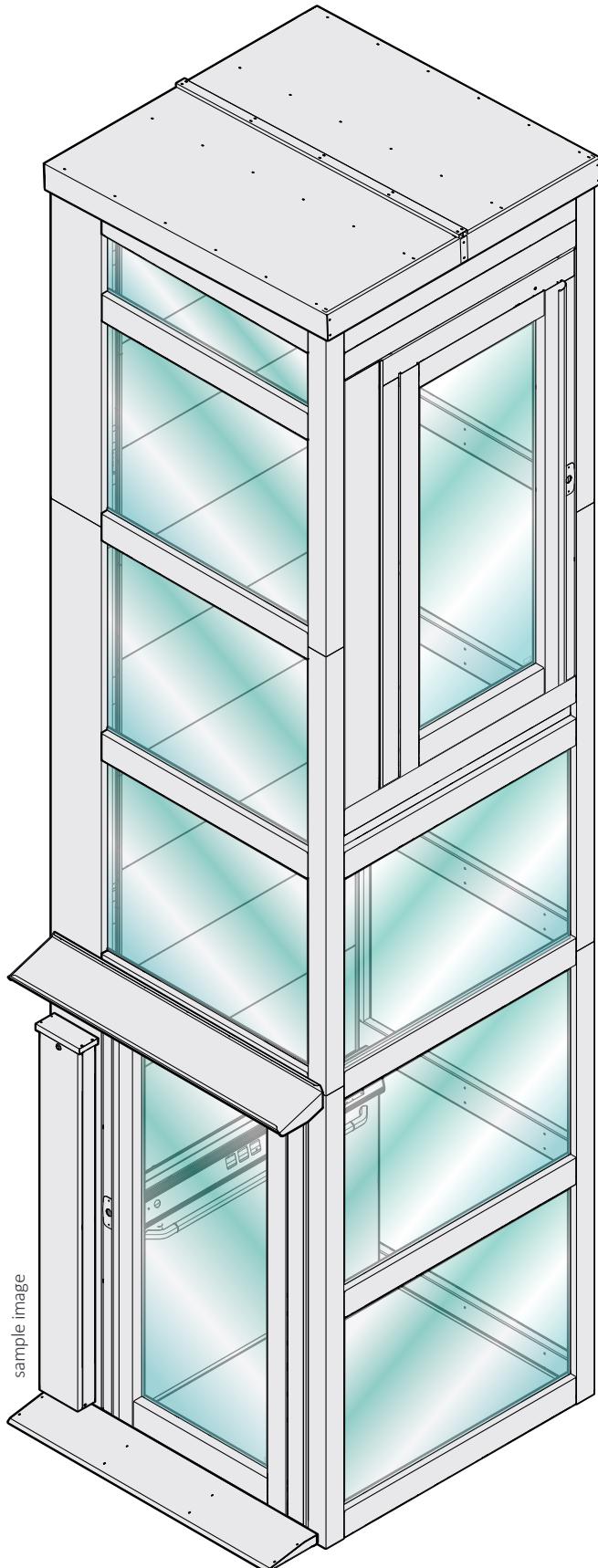
DomoFlex®

in Cross 50.2 structure and masonry shaft

Electric screw driven platform lift

INSTALLATION AND COMMISSIONING INSTRUCTIONS

(Rev.1.8)



AREALIFTING®

THE VERTICAL MOBILITY MANUFACTURER

DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

20250313

TABLE OF CONTENTS

1. Manual reading guide	6
1.01. Preliminary information	6
1.02. Personal security and risk recognition	7
2. Safety and information Signs	8
2.01. DANGER Signs	8
2.02. PROHIBITION Signs	8
2.03. MANDATORY Signs	8
2.04. Information symbols and infographics	8
3. Liability and warranty conditions	9
4. General requirements and installation site management	10
4.01. General requirements	10
5. Tools required for installation	11
6. Box content - screws kit	13
7. Preliminary checks and shaft preparation	16
8. Installing the scaffold	17
9. Load lifting devices	18
10. Steel structure	19
10.01. Upright recognition and positioning	19
10.02. Transom - recognition and positioning	21
10.03. Structure - assembly	22
10.03.01 STRUCTURE - PARTS IDENTIFICATION	22
10.03.02 STRUCTURE - RECOGNITION OF FIXING ELEMENTS	22
10.03.03 FIRST TURN IN PIT - RAIL SIDE - ASSEMBLY	23
10.03.04 FIRST TURN IN PIT - RAIL-guides SIDE - MOUNTING PLATES	24
10.03.05 UPRIGHTS - RAIL-GUIDES SIDE CONNECTION	25
10.03.06 UPRIGHTS - OPPOSITE SIDE GUIDE RAIL JUNCTION (NARROW UPRIGHT)	26
10.03.07 FIRST TURN IN PIT - OPPOSITE SIDE GUIDES - MOUNTING AND ANCHORING	27
10.03.08 STRUCTURE ASSEMBLY - GUIDES SIDE	27
10.03.09 STRUCTURE ASSEMBLY - OPPOSITE RAILS SIDE	29
10.03.10 DOOR TRANSOMS - ASSEMBLY	30
10.03.11 DOOR TRANSOM SUPERIMPOSED ON UPRIGHTS JUNCTION - ASSEMBLY	31
10.04. Rear mechanical infill panels - assembly	32
10.05. Structure roof - assembly	33
10.05.01 ANGLE PLATES (FOR TIE RODS) - PRE-ASSEMBLY	33
10.05.02 INNER ROOF - ASSEMBLY	33
10.05.03 UPPER BRACES (CROSS BRACES) - ASSEMBLY	35
10.05.04 OUTER ROOF - ASSEMBLY	36

DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

10.06. Structure - anchoring	39
10.07. WALL ANCHORAGE	39
10.07.01 ANCHORAGE IN THE PIT.....	39
10.08. Structure - anchoring by ties (optional)	40
10.08.02 ANCHORING TIES - WALL ANCHORING	41
11. Mechanics - arrangement	42
11.01. Pit bottom template - assembly.....	42
11.02. Rail guides	44
11.02.01 RAIL GUIDES - PREPARATION.....	44
11.02.02 RAIL GUIDES - POSITIONING AND FIXING	46
11.02.03 RAIL-GUIDES - JUNCTION.....	48
11.02.04 RAIL-GUIDES - ANCHORING TO THE STRUCTURE.....	49
11.03. Support bars for sensors and flat cable - assembly.....	50
11.04. Overhead beam and transoms - assembly	51
11.05. Platform installation in masonry shaft.....	52
11.05.01 PIT BOTTOM TEMPLATE - FLOOR ANCHORING	52
11.05.02 RAIL-GUIDES - WALL MOUNTING.....	52
11.05.03 OVERHEAD TRANSOM - WALL FASTENING (ONLY FOR MASONRY SHAFT).	53
11.06. Structure - plumb / wall anchoring	54
12. Electrical system preliminary checks	55
12.01. Electrical system before the platform - Preparation	55
13. Mechanics - installation	56
13.01. Geared motor - installation	56
13.02. Pit stop - installation.....	56
13.03. Safe Pit - installation	57
13.04. Maneuvering screw - checks and precautions.....	58
13.05. Screw column - pre-assembly and installation	59
13.06. Safety nut - verification of correct spacing	61
13.07. Platform car sling (with mechanics) - predisposition	62
13.08. Platform wall (with mechanics) - handling	63
13.09. Platform car sling (with mechanics) - assembling.....	64
13.09.01 SHOES - CORRECT POSIZTIONING.....	66
13.10. Travelling cables - installation and connection	68
13.11. Headroom safety contact	69
13.12. Magnet support brackets - contacts - ramps	69
13.13. Electric connections for first start-up	70
13.13.01 SHAFT ELECTRICAL CONNECTIONS.....	71
13.13.02 DOOR ELECTRICAL CONNECTIONS.....	72
13.14. Operations to be performed before operating the platform	73
13.15. Platform floor - handling.....	74

13.16. Platform carrier - installation	75
13.17. Landing door - assembly (only for masonry shaft)	76
13.17.01 MOUNTING WITH BRACKETS	76
13.18. Sensitive edge (safety device)	79
13.18.01 SENSITIVE EDGE CONTACT - CONNECTION	79
13.19. Control cabinet	80
13.19.01 CONTROL CABINET - ASSEMBLY	80
13.19.02 CONTROL CABINET - CABLE ROUTING	81
13.19.03 CONTROL CABINET - ASSEMBLY - UPRIGHT HOLE CLOSURE	83
13.19.04 SAFE-PIT - EXTERNAL CONTROL LEVER CONNECTION	84
13.20. Landing door - assembly	85
13.21. Landing door - adjustments	88
13.21.01 LANDING DOOR - STOP ADJUSTMENT	88
14. Infills	89
14.01. Structure infills - preliminary information	89
14.02. Structure infills - correct positioning	90
14.03. Infill under the floor door (different from ground floor)	91
14.04. Structure and mechanics infills - assembling	92
14.04.01 Structure infills - PREPARATION AND ASSEMBLY	92
14.04.02 INTERNAL INFILL OF THE MECHANICS - PREPARATION AND ASSEMBLY	93
14.04.03 MECHANICS INTERNAL INFILL - PANELS RECOGNITION	96
14.04.04 MECHANICS INTERNAL INFILL - MOUNTING	97
14.04.05 MECHANICS INTERNAL INFILL - ADDITIONAL SAFETY FASTENING	98
14.05. Mechanics internal infill - removal	99
14.06. Platform protection infill and handrail - assembly	100
15. Additional installations	101
15.01. Protective canopy (if supplied)	101
16. Operations to be performed before moving the platform	103
16.01. Technical cleaning - pre-movement of the platform	103
16.02. Lubrication of guides	103
16.03. Lubrication of the manoeuvring screw	103
17. First test travel	104
18. Platform completion assembly	105
18.01. Wiring cover profile	105
18.02. Overload contact setting	106
18.03. OPEN version	108
19. Safety signs to be applied on the platform lift	110
20. Final checks and adjustments	112
21. Platform noise	112

1. Manual reading guide

IMPORTANT!



EN: Translation of the original instructions

This product may only be commissioned if these instructions are available to you in an official EU language that you understand and you have understood the contents. If this is not the case, please contact your Lifting Italia S.r.l. contact partner.

READ THIS MANUAL CAREFULLY

BEFORE INSTALLING AND USING THE PRODUCT

Retain the technical documentation near the lifting platform for the entire lifecycle of the product. In case of change of ownership, the technical documentation must be provided to the new user as an integral part of the product.

1.01. Preliminary information

NOTICE



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 unauthorized 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.



Technical specifications may be subject to change without notice due to product improvement development.

The drawings included in this manual are to be considered as indicative and are NOT an exact reference to the product concerned.

1.02. 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 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.
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 of the risk of injury to persons, the risk of possible property damage may also be caused at the same time.

WARNING	
	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.

2. Safety and information Signs

2.01. DANGER Signs



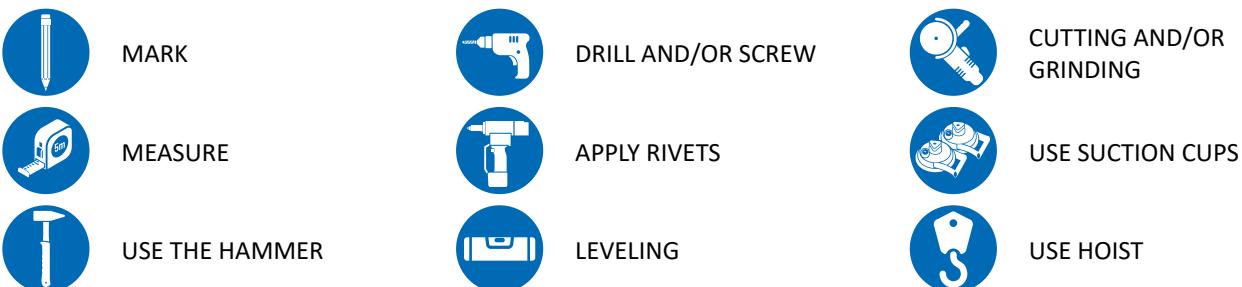
2.02. PROHIBITION Signs



2.03. MANDATORY Signs



2.04. Information symbols and infographics



	INFORMATION Symbol that identifies information that is useful to the installer but is not mandatory for the installation, nor does it pose a risk to the user..
	IMPORTANT! Symbol that identifies important information to be scrupulously observed.
	ELECTRICAL CONNECTIONS Symbol that identifies the connection of an electrical component.

3. Liability and warranty conditions

RESPONSIBILITY OF THE INSTALLER

IMPORTANT!



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 persons authorized to carry out installation, maintenance, and rescue operations are those in possession of an elevator maintenance authorization certificate, issued according to the regulations in force in the country where the assembly is carried out.

The elevator / platform (and each of its components) 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 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.

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.



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

3.01. Legal warranty and its free extension up to 60 months



The manufacturer warrants the lift under the condition that the instructions in the installation and current maintenance manual of the machine are strictly followed.

The lift has a legal warranty of 1 year and a free extension for a further 4 years according to the following conditions and exclusions:

A. The period of legal warranty of the product is 12 months from the date of the 'Goods Ready' notice.

The warranty does not cover:

- ordinary maintenance and adjustment activities;
- normal wear and tear of items such as, but not limited to: shoe seals (arch, doors), hydraulic cylinder and valve unit seals, transmission belts, brakes, batteries, lamps, LED strips, rolling bearings, electric motors subject to belt pull, idler pulleys, push buttons (after 12 months from commissioning), oils and lubricants, dulling of paintwork, glass and mirrors arrived on site in undamaged packaging.

The warranty does not cover damage caused by:

- abnormal use, incorrect operation, improper service, alteration or removal of parts, use of the lift not in line with the recommended operation and work cycle, incorrect installation i.e. not in accordance with the installation manual; use of parts or accessories that are not original or authorised by Arealifting; use of oils or lubricants other than those indicated by the manufacturer, installation in an environment or application not in line with the manufacturer's recommendations, incorrect maintenance or repair, failures due to insufficient power supply, fortuitous events or force majeure.
- B. The Warranty shall be effective if the defects are reported within 2 weeks of their actual discovery. The Seller reserves the right to repair or replace the defective part at their sole discretion. The Seller shall bear the transport costs of the defective part but reserves the right to charge for the same if it is found not to be defective or not subject to warranty. Excluded from Warranty and/or reimbursement are customs duties and any additional charges resulting from the uninstallation and subsequent restoration of the defective part on the lift.
- C. The Warranty on the machine will be extended free of charge, for a period of a further 48 months beyond the legal warranty period, when:
 - the product is installed by a customer who is registered on the Seller's 'Warranty' portal;
 - the purchaser has carried out training provided by the Seller, or undertakes to do so within a period of 12 months from the purchase order;
 - the Sentinel module is continuously connected - wireless or GSM - once the lift has been put into service, if it is equipped as standard. If, on the other hand, it is not equipped, the Buyer must manually register it on the Warranty Portal. Should the Seller be requested to activate the GSM SIM card, the Seller shall only activate it upon payment of the relevant five-year fee.
 - the lift is regularly maintained according to the instructions in the Maintenance Manual.

4. General requirements and installation site management

4.01. 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.

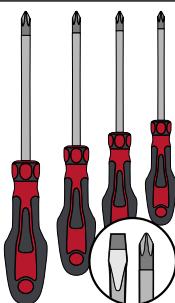
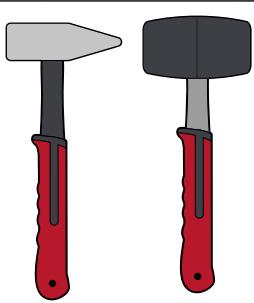
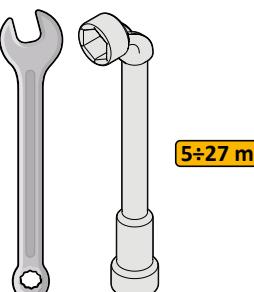
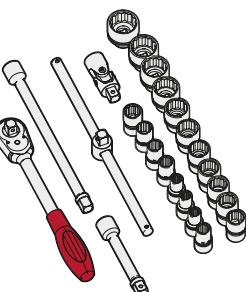
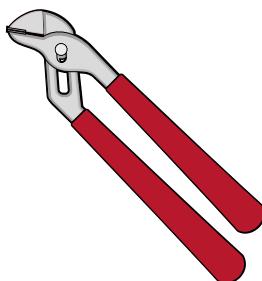
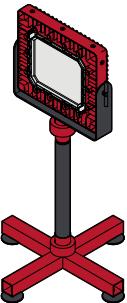
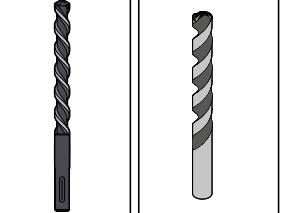
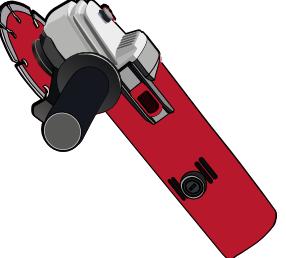
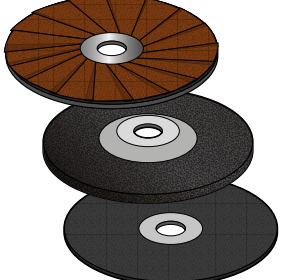
WARNING

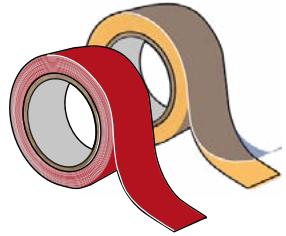
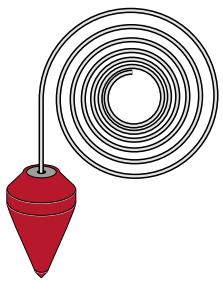
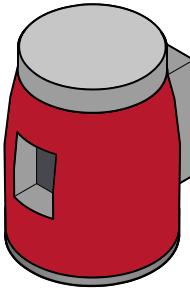
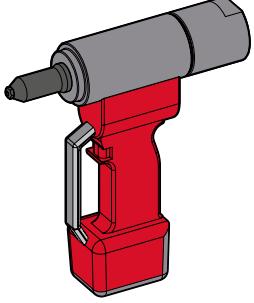
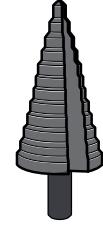
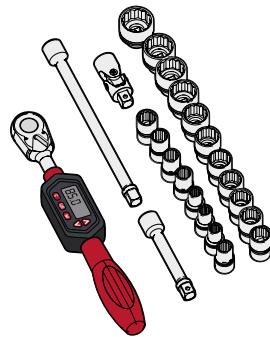
	<p>SAFETY AND SITE MANAGEMENT - OVERALL DISPOSITIONS:</p> <ol style="list-style-type: none"> 4. Always secure tools and any objects against falling; 5. Pay the utmost attention to all the steps described in this; 6. While assembling the parts making up the system or after installation, be careful of any sharp burrs (machining residues). <ul style="list-style-type: none"> • 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.)..
--	--

CAUTION

	 <p>The assembly must be performed by a MINIMUM 2 people</p>	  <p>Use a suitable lifting equipment for handling the components if the load is greater than 50kg</p>
--	--	--

5. Tools required for installation

BALL POINT LONG HEX KEY WRENCH 	ELECTRICIAN SCREWDRIVER SET 	HAMMER + RUBBER HAMMER 	TAPE MEASURE 
SPIRIT LEVEL 	SCISSORS FOR ELECTRICIANS 	SPANNER + SOCKET WRENCH  5-27 mm	RACKETING RING SPANNER SET 
PLIERS WRENCH 	PORTABLE LAMP 	SAFETY LADDER 5 STEPS 	LIFTING BELTS  kg 500 2x ≥ 2 m
DRILL + ELECTRIC SCREWDRIVER 	DRILL BITS  CONCRETE from 6 to 22 mm STEEL from 2 to 13 mm	CORNER GRINDER 	CUT-OFF AND GRINDING WHEELS 

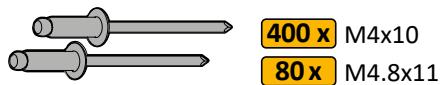
VACUUM LIFTER WITH MANOMETER	MANUAL HOIST	INSULATING TAPE + DOUBLE-SIDED ADHESIVE	PLUMB BOB
 kg 100	 kg 500 ≥ 15 m		
DIGITAL MULTIMETER	LASER LEVEL	CORDLESS RIVETER GUN	HSS STEP DRILL BIT
			
TORQUE WRENCH SET WITH EXAGONAL INSERT	HOLESAW FOR METAL		
	 20-40 mm		

6. Box content - screws kit



Each box with its identification code represents how many pieces per item are contained in each package (KIT).

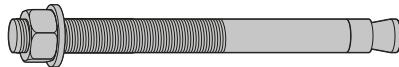
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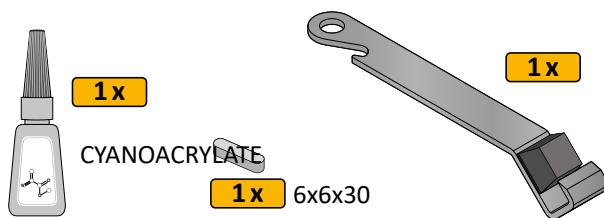
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F353.23.0001



10 x M12x125

F353.23.0003

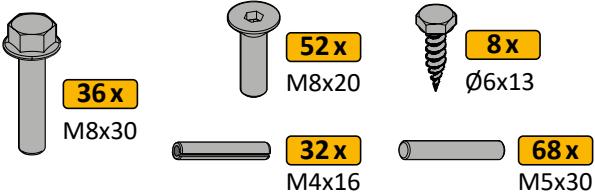


1 x

CYANOACRYLATE

1 x 6x6x30

F353.23.0004



36 x

M8x30

52 x

M8x20

8 x

Ø6x13

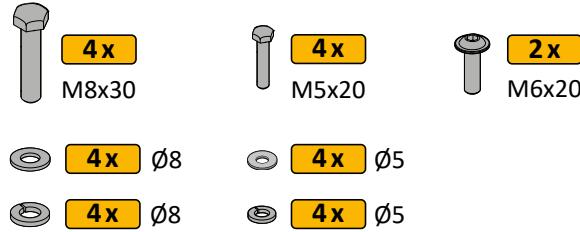
32 x

M4x16

68 x

M5x30

F353.23.0002



4 x

M8x30

4 x

M5x20

2 x

M6x20

4 x

Ø8

4 x

Ø5

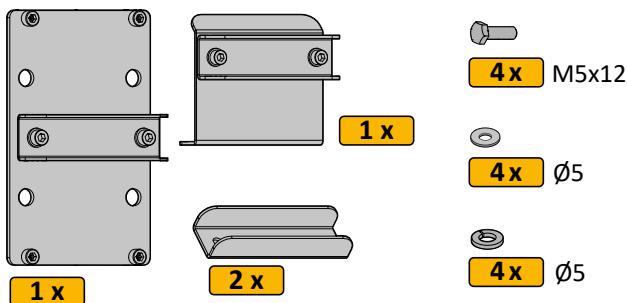
4 x

Ø8

4 x

Ø5

F353.23.0007



1 x

2 x

4 x

M5x12

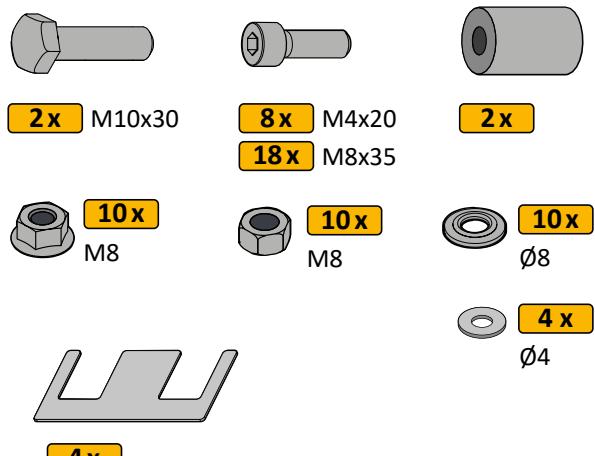
4 x

Ø5

4 x

Ø5

F353.23.0006



2 x

M10x30

8 x

M4x20

2 x

18 x

M8x35

10 x

M8

10 x

M8

10 x

Ø8

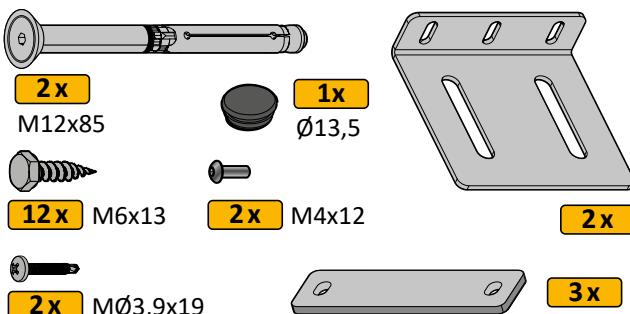
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Ø4

4 x

6 x

F353.23.0010



2 x

M12x85

1 x

Ø13,5

12 x

M6x13

2 x

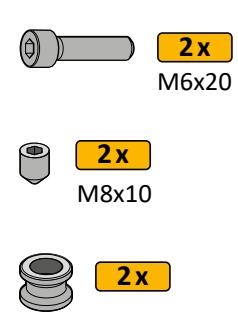
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2 x

MØ3,9x19

D003.23.0001



2 x

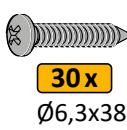
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M8x10

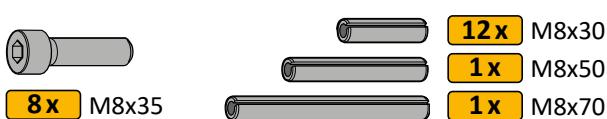
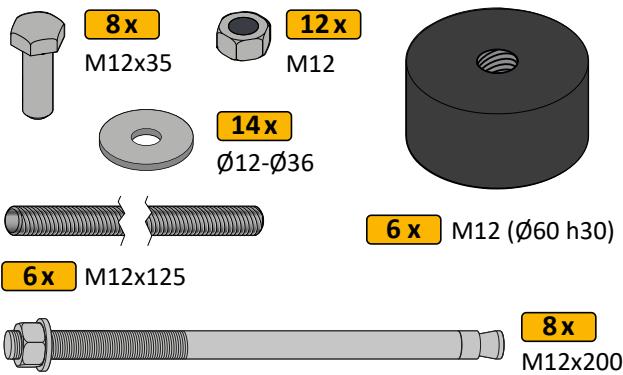
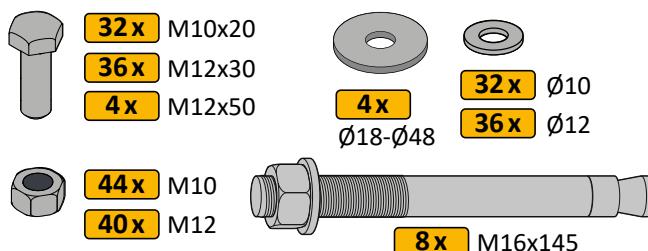
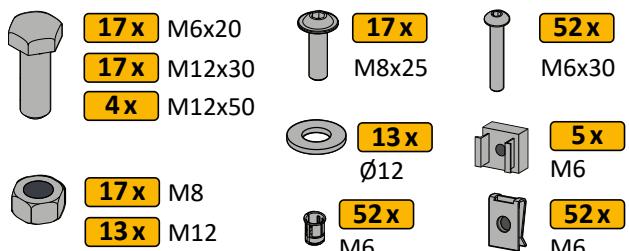
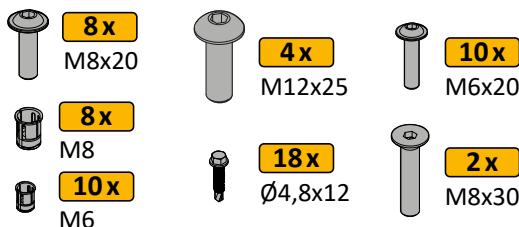
2 x

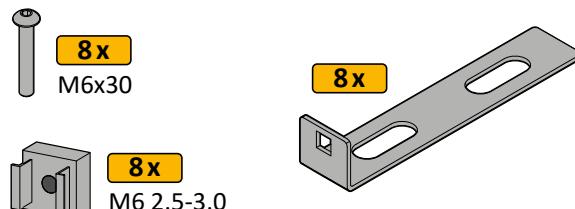
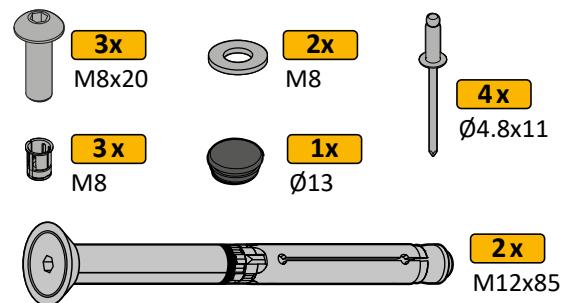
F353.23.0017



30 x

Ø6,3x38

F353.23.0008

F353.23.0009

S001.23.0002 - KIT FISSAGGIO FOSSA - TESTATA

S001.23.0001 - KIT MONTANTI - TRAVERS

F353.23.0011

S001.23.0004

S001.23.0010

F353.23.0012


NOTICE

 FOLLOW THE TIGHTENING TORQUES INDICATED FOR THREADED COUPLINGS.

In order to avoid the risk of bolt or component loosening or stress, with a deformation and breakage risk, please follow the screw tightening torques indicated in the table.

TIGHTENING TORQUE GUIDE		
SCREW	COUPLE MAX (Nm)	COUPLE MIN (Nm)
M3	1.2	1.0
M4	2.6	2.1
M5	5.1	4.1
M6	9.0	7.0
M8	21.0	17.0
M10	42.0	34.0
M12	71.0	57.0
M16	175.0	145.0

7. Preliminary checks and shaft preparation

IMPORTANT!



The checks can only be carried out by direct confirmation with the final GAD in its latest approved revision.

- Check the vertical free dimensions along the entire shaft, in vertical projection of the pit, as indicated on the GAD.
- Check that the dimensions of the pit, storey heights and headroom are the same as those specified in the GAD.

IMPORTANT!

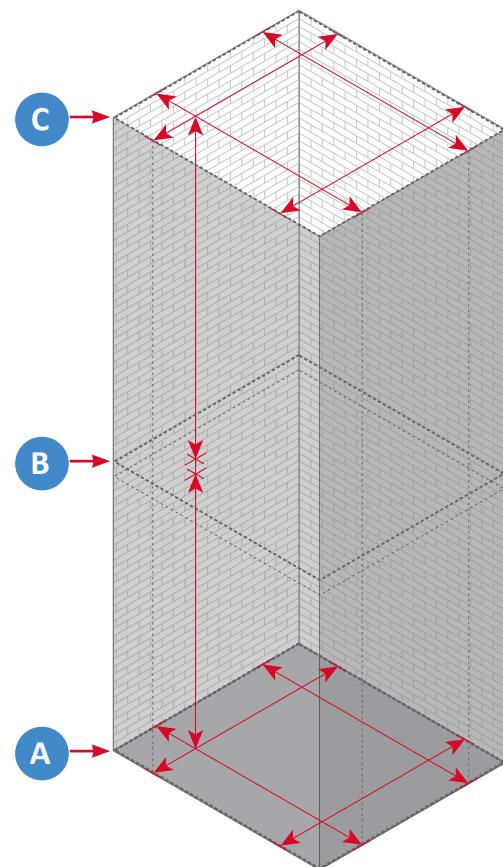


The GAD indicates the permissible deviation tolerances from the nominal dimensions.

A = PIT

B = LANDING STOP

C = HEADROOM



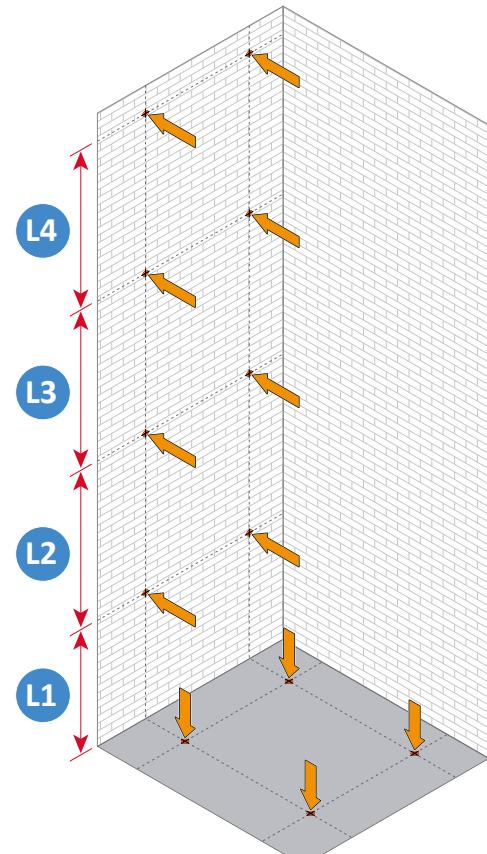
- Check that the fixings of the structure / guide rails can be realized at the points specified in the GAD, by direct fixing to a load-bearing wall or tie.

WARNING



FAILURE TO OBSERVE THE DISTANCE BETWEEN ANCHOR POINTS COULD COMPROMISE THE STABILITY OF THE PLATFORM!

The distance between the fixing points cannot for any reason exceed the dimensions indicated in the project.



8. Installing the scaffold

WARNING



RISK OF FALLING DUE TO A DROP:

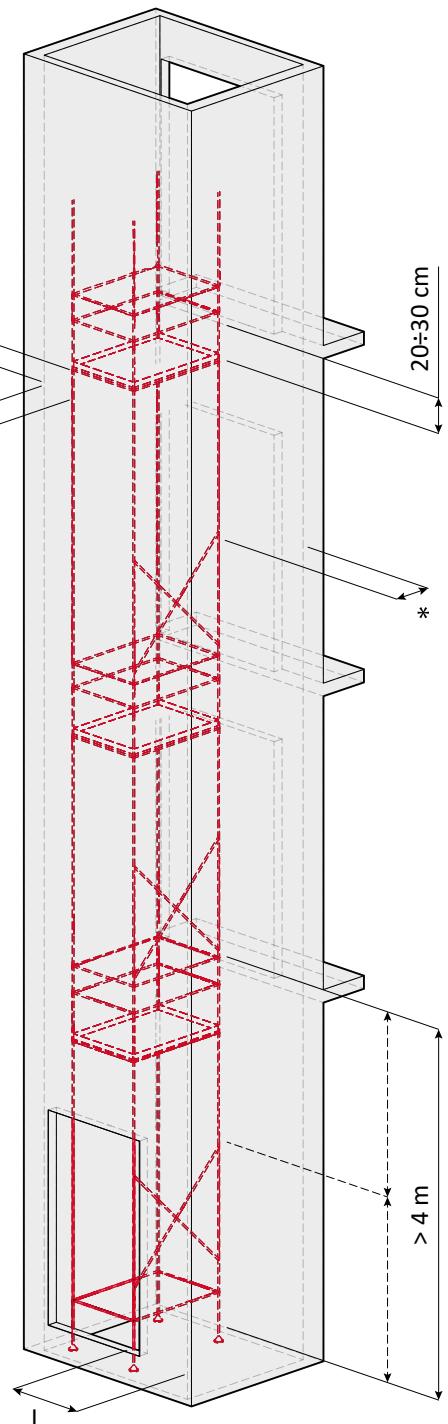
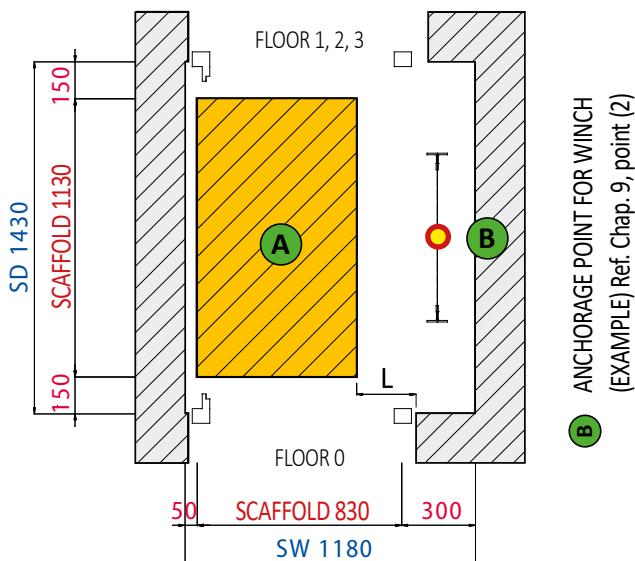
In order to minimize the risk of falling, the scaffold must **ALWAYS** be installed by qualified personnel, in compliance with the regulations in force.

IMPORTANT!



Rispettare lo spazio max disponibile per l'installazione dei ponteggi **(A)**, da eseguirsi nel rispetto delle norme vigenti

Assemble the scaffold INSIDE THE SHAFT where the system is to be installed (even in the case of a shaft in a metal frame). Install the scaffold in such a way that the guides can be moved inside the shaft.



THE SCAFFOLD MUST BE ASSEMBLED ACCORDING TO THE FOLLOWING CHARACTERISTICS:

- Use anti-slip panels with anti-tip stops;
- Keep the distance from the shaft walls as per the project drawing.
- If the distance between the scaffold and the shaft walls is > 20 cm, install the fall protection parapets;
- It is necessary to provide a support surface 20+30 cm below each stop;
- If the distance between one floor and another is > 4 m, an intermediate support surface must be provided in the scaffold.



The images are purely indicative, check the design drawing for correct positioning of the scaffolding

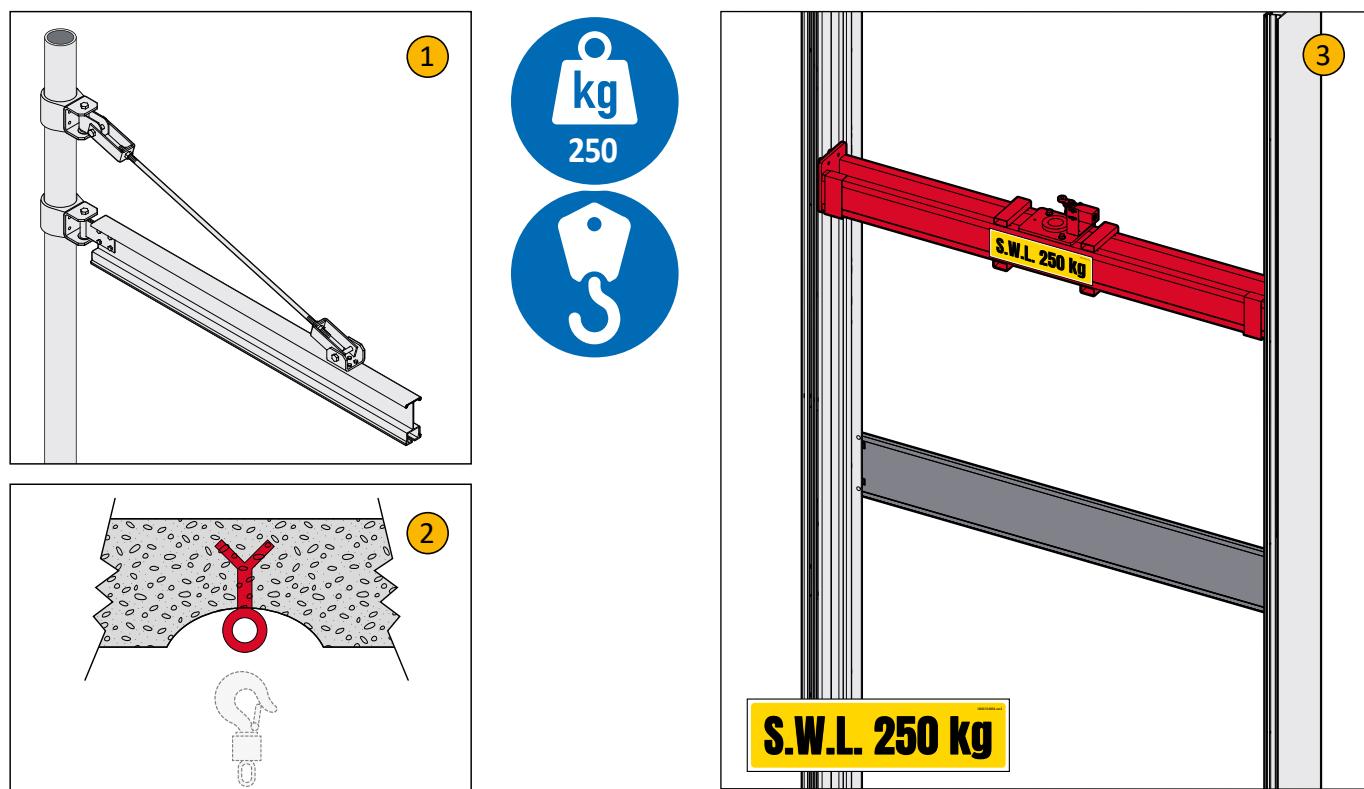
* = indicated on the project drawing
L = machine width

9. Load lifting devices

WARNING	
 DANGER SUSPENDED LOAD: The use of load lifting devices involves risks, therefore the safety instructions provided by the lifting device manufacturer must be followed.	The masonry work to prepare the slab for installing the hook must be carried out in accordance with the regulations in force.

For the handling of loads inside the shaft, we recommend:

- ① The use of a jib winch/jib hoist to be anchored to the scaffold (recommended for shafts with an open header in structure or masonry).
- ② The use of a winch/hoist to be hung from an approved hook provided in the ceiling of the header (recommended solution for masonry shafts with closed header)..
- ③ In cases where it is not possible to use the devices mentioned in points 1 and 2, it is possible to attach the winch/hoist to the header beam, respecting the Safe Working Load (S.W.L.) of 250 kg.



TIPS FOR LIFTING LOADS INSIDE THE SHAFT:

WINCH AT HEIGHT

- Check the compatibility of the forces applied with the requirements of the scaffold tower manufacturer and/or the manufacturer of the jib used..
- Install the jib (crane) ① at the highest point of the scaffold.

IMPORTANT!



The images and information provided here are purely indicative and are intended to assist the installer in his work. Always refer to the appropriate technical documentation.

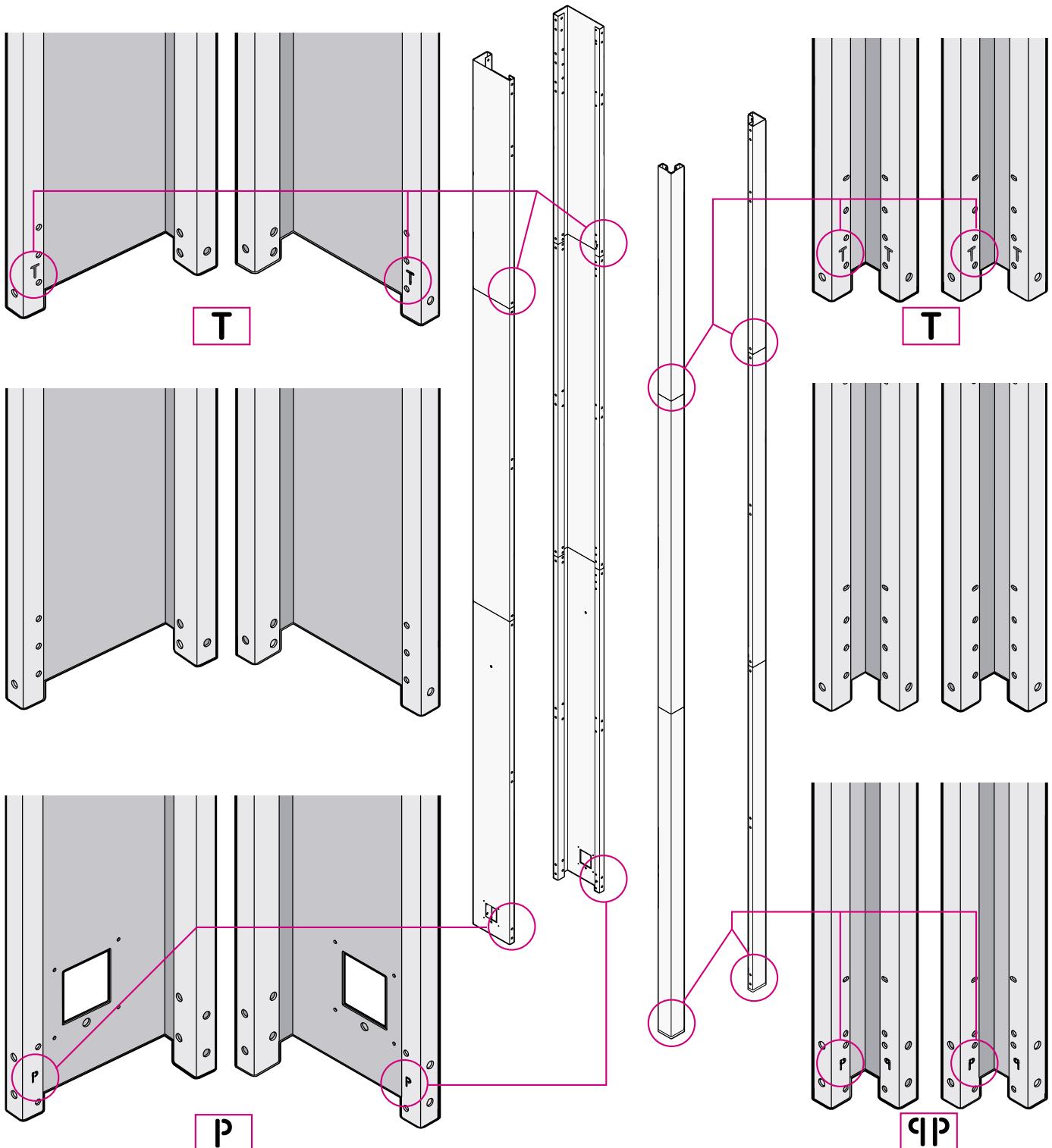
10. Steel structure

10.01. Upright recognition and positioning

IMPORTANT!



PIT UPRIGHTS BEAR THE LETTER "P" ENGRAVED ON THE INNER SIDE.
HEADER UPRIGHTS BEAR THE LETTER "T" ENGRAVED ON THE INNER SIDE.
INTERMEDIATE UPRIGHTS ARE NEUTRAL AND INTERCHANGEABLE.
The arrangement of letters for the correct layout is indicated on the design drawing.



NOTICE



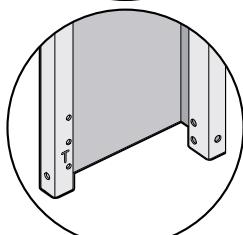
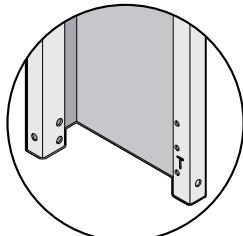
ALWAYS ADHERE TO THE INSTALLATION DIAGRAM AS SHOWN ON PROJECT DRAWING.

NOTE: Pit and header uprights have a fixed position, while intermediates are symmetrical.

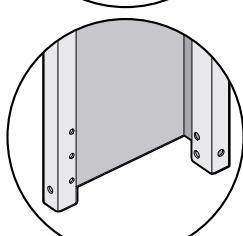
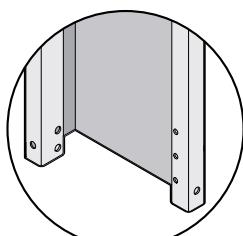
MACHINE SIDE

OPPOSITE SIDE OF THE MACHINE

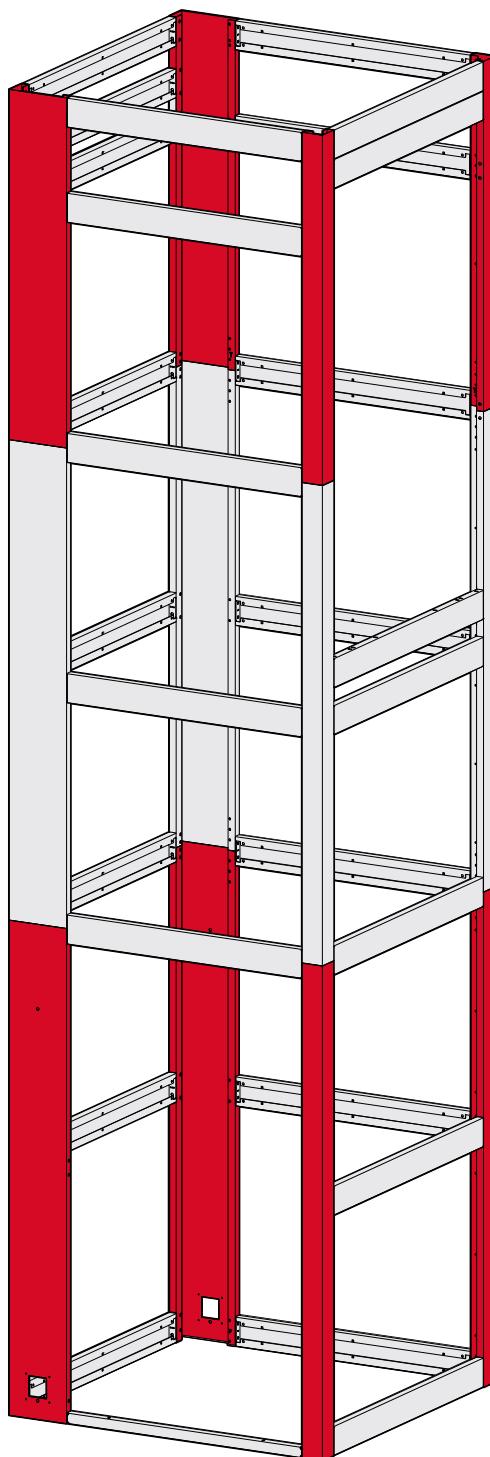
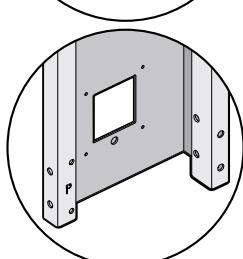
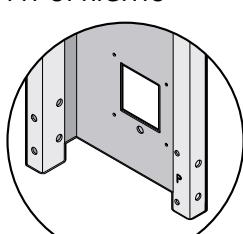
HEADER UPRIGHTS



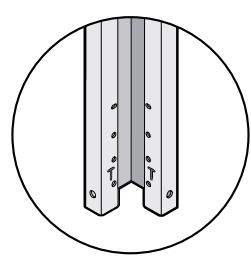
MIDDLE UPRIGHTS



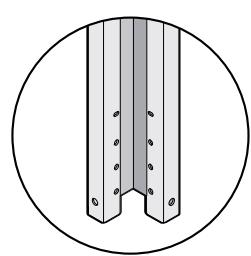
PIT UPRIGHTS



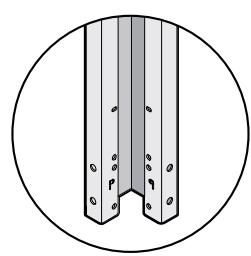
HEADER UPRIGHTS



MIDDLE UPRIGHTS



PIT UPRIGHTS

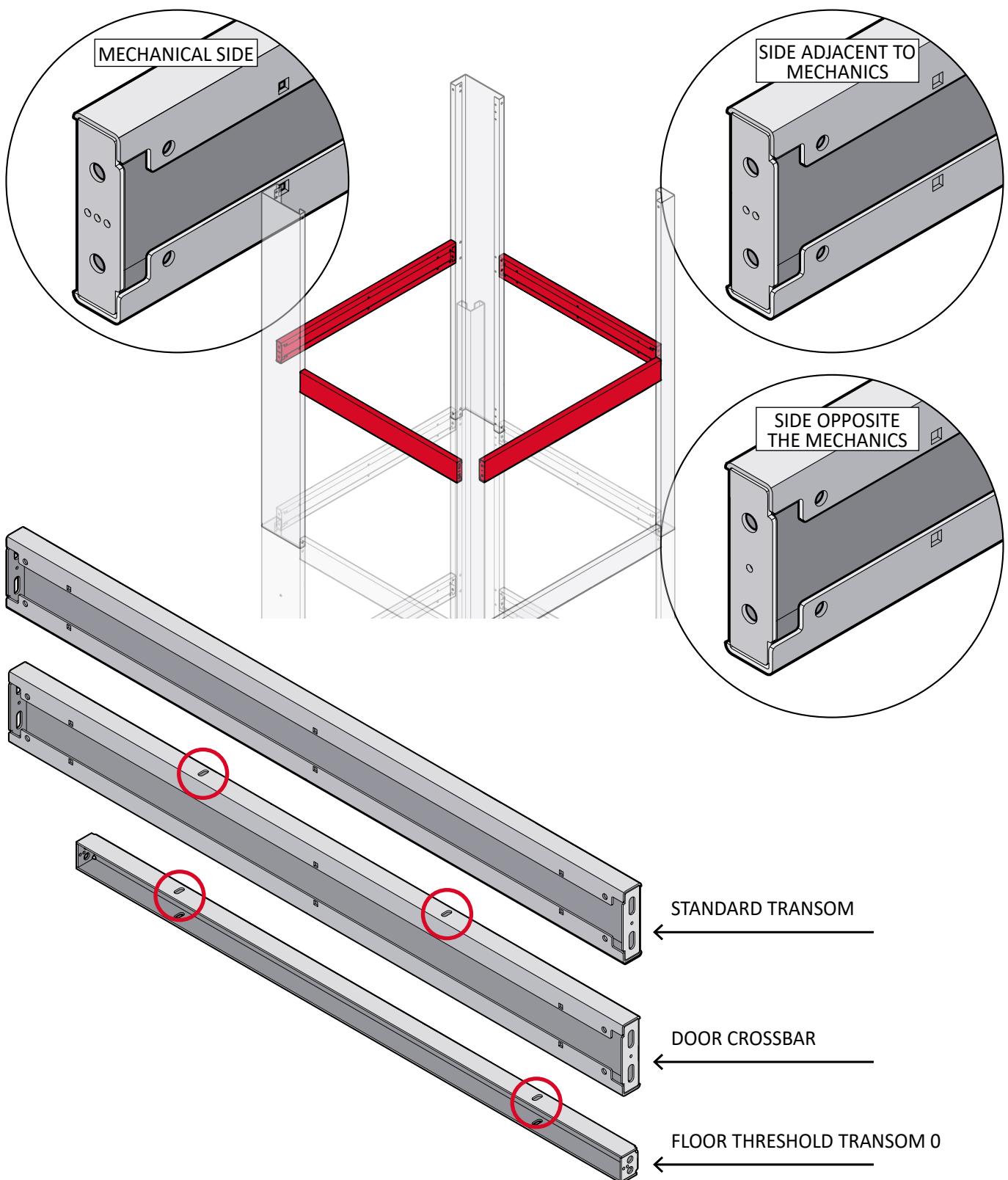


10.02. Transom - recognition and positioning

IMPORTANT!



THE TRANSOMS are marked in the attachment side by 1 (•), 2 (••) o 3 (•••) perforations indicating the position of the transom (mechanical side, side, opposite).
Follow the indications on the design drawing for proper positioning.



10.03. Structure - assembly

10.03.01 STRUCTURE - PARTS IDENTIFICATION

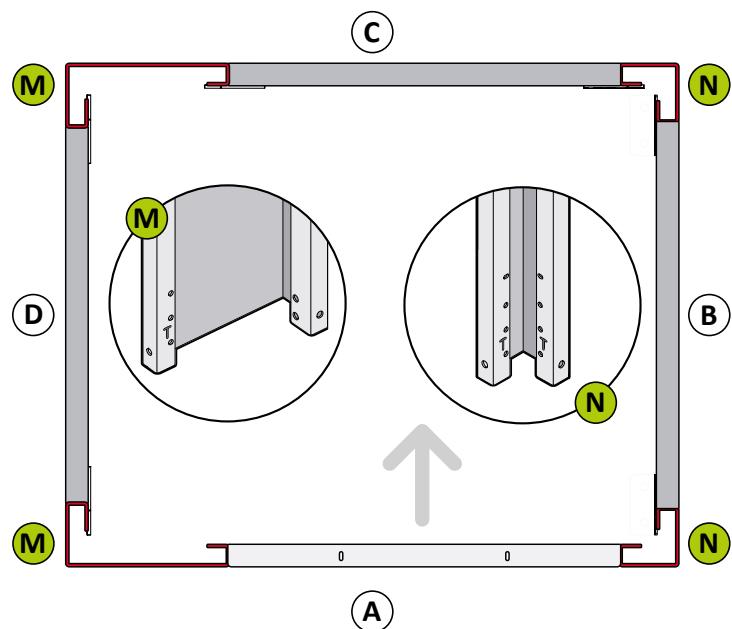
CONFIGURATION EXAMPLE:

- (A) FLOOR 0 ACCESS SIDE
- (B) SIDE OPPOSITE TO THE MECHANICS
- (C) SIDE ADJACENT TO MECHANICS
- (D) MECHANICAL SIDE

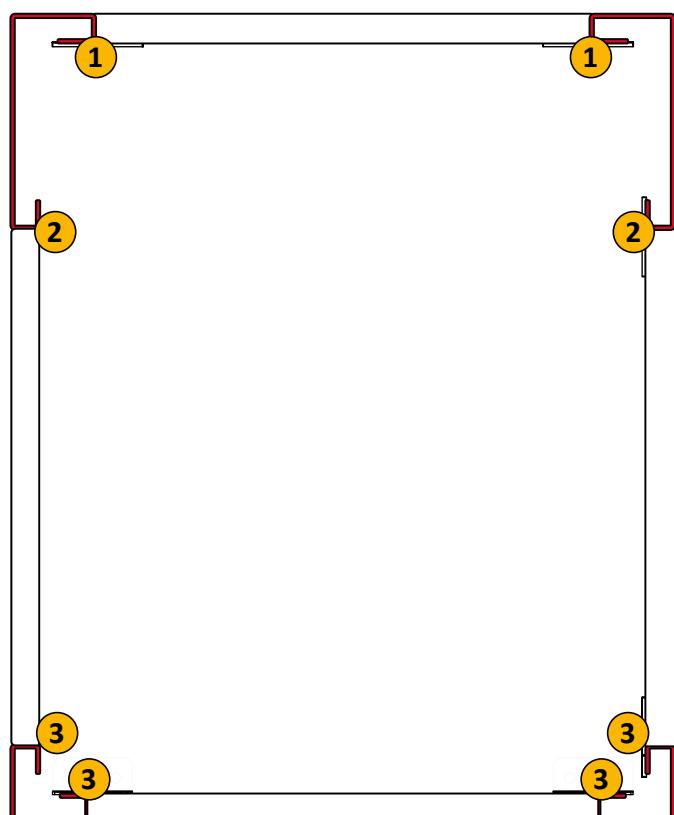
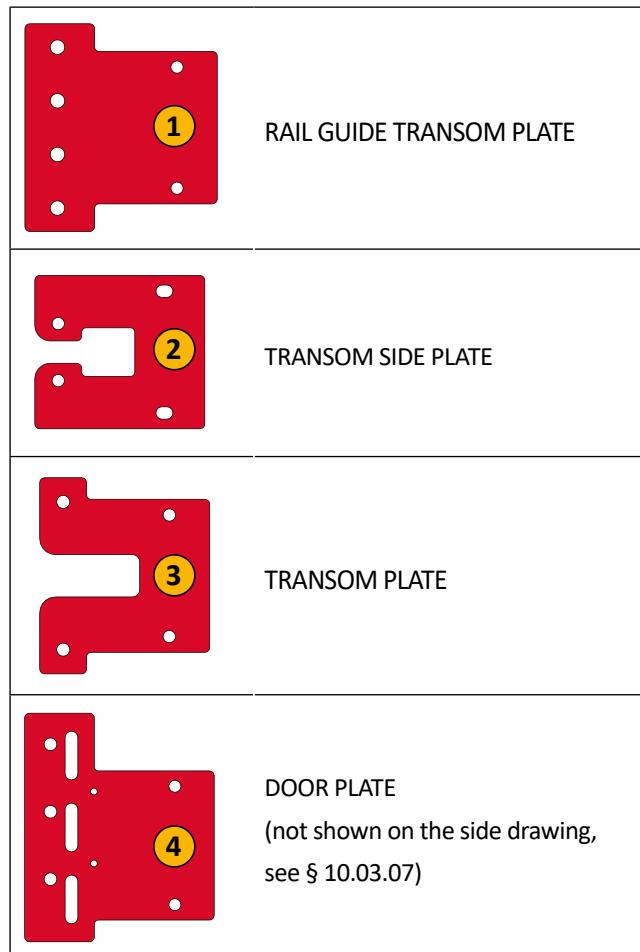


NOTE: The mechanics can be placed on sides (B), (C), (D).

- (M) UPRIGHTS - MECHANICAL SIDE
- (N) UPRIGHTS - SIDE OPPOSITE TO THE MECHANICS



10.03.02 STRUCTURE - RECOGNITION OF FIXING ELEMENTS



10.03.03 FIRST TURN IN PIT - RAIL SIDE - ASSEMBLY

NOTICE



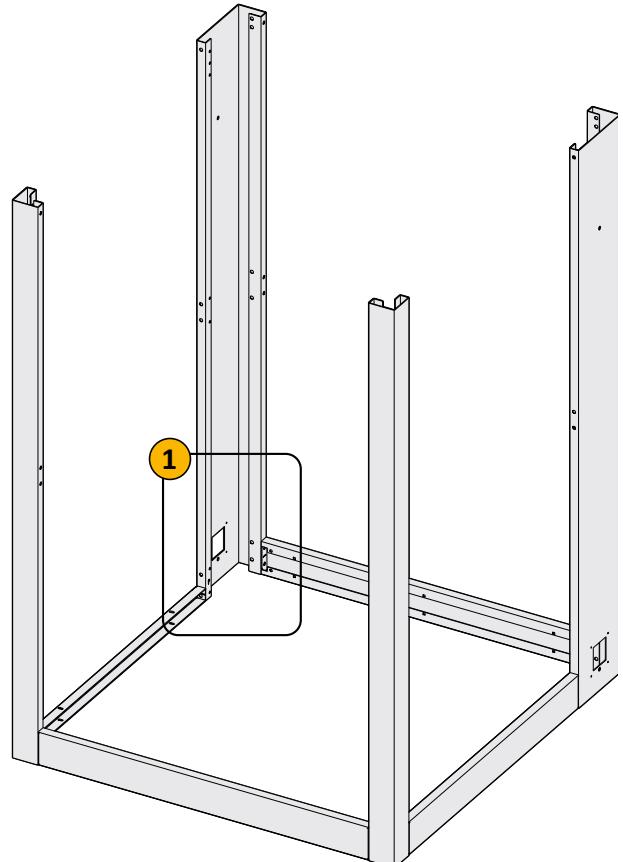
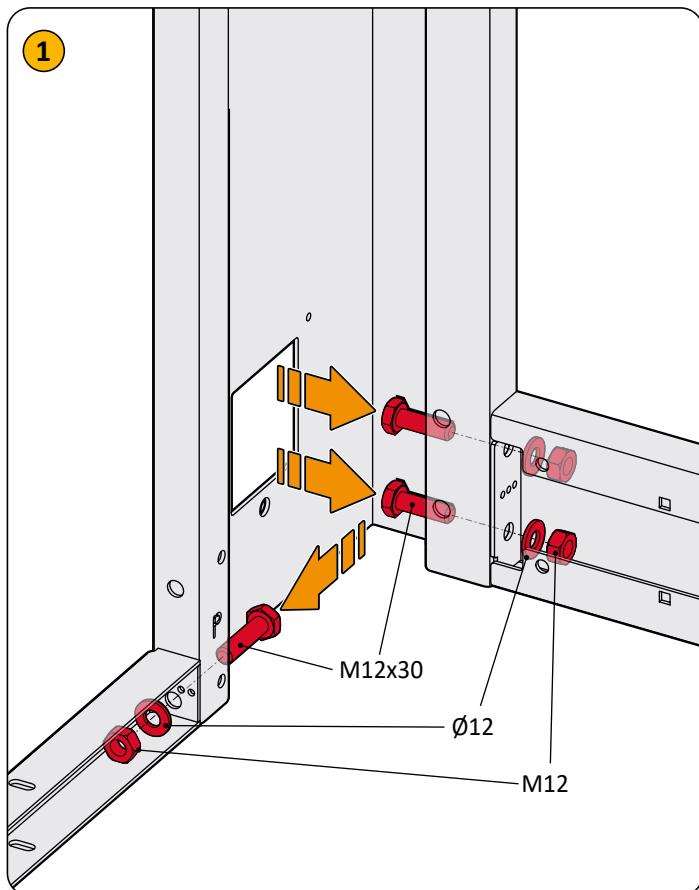
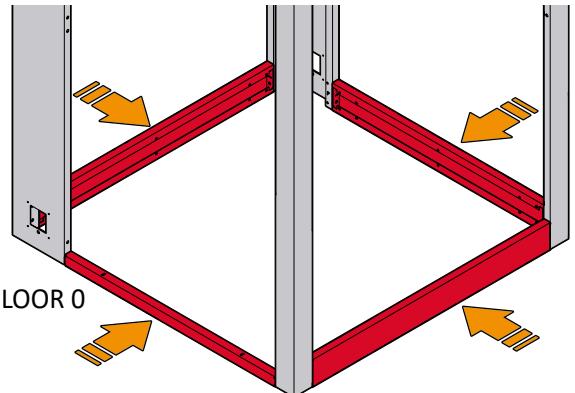
ALWAYS FOLLOW INSTALLATION DIAGRAM INDICATIONS AS SHOWN ON PROJECT DRAWING.

NOTE: Pit and header uprights have a fixed position, while intermediates are symmetrical.

- Place the first lap in the pit bottom as shown in the GAD .
- Attach the transoms to the uprights using the appropriate kits.

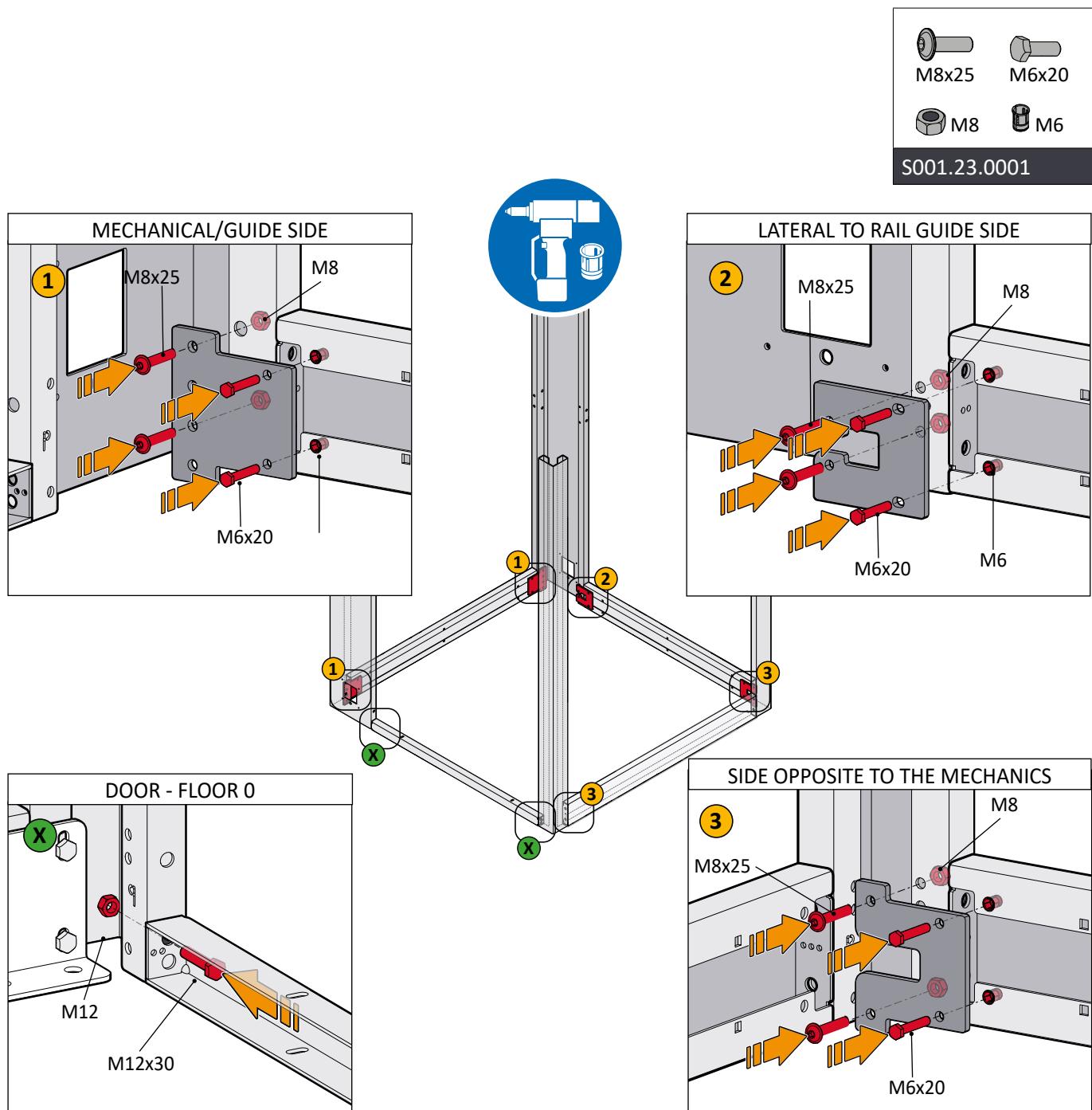
M12x30
M12 Ø12
S001.23.0001

THRESHOLD TRANSOM - FLOOR 0



10.03.04 FIRST TURN IN PIT - RAIL-GUIDES SIDE - MOUNTING PLATES

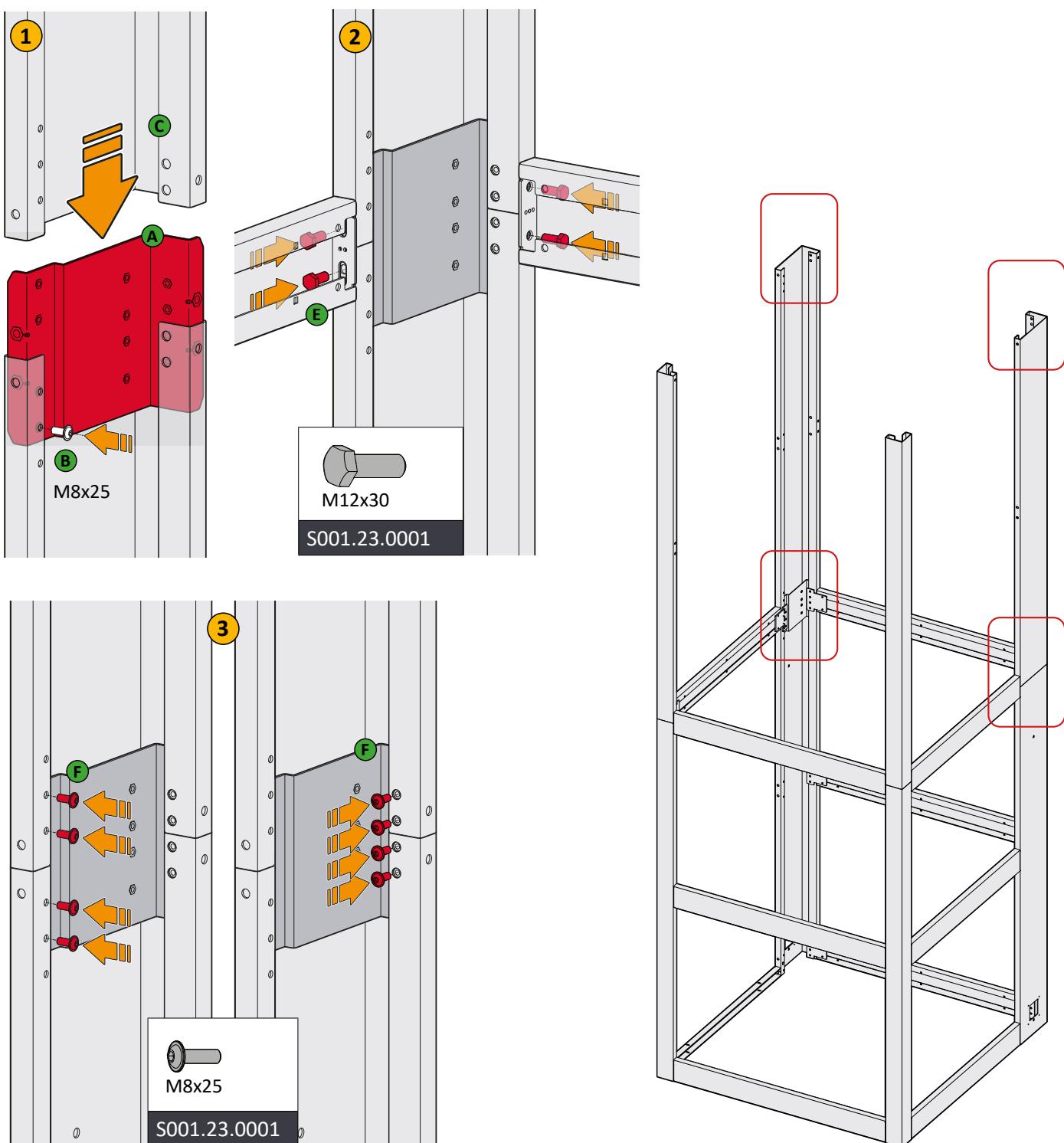
- Mount the reinforcement plates as shown..



10.03.05 UPRIGHTS - RAIL-GUIDES SIDE CONNECTION

- 1 Insert the upright junction plate **A**, into the upright, temporarily fix it with a screw from the kit **B**, insert the next upright section **C**.
- 2 Fasten the transoms to the uprights with the screws provided, inserting them into the rivet nuts in the upright junction plate **E**.
- 3 If the mullion junction does not correspond to the presence of cross-pieces (presence of a landing door), fasten the mullion junction plate with the TBEI 8x25 flanged screws present in the KIT **F**.

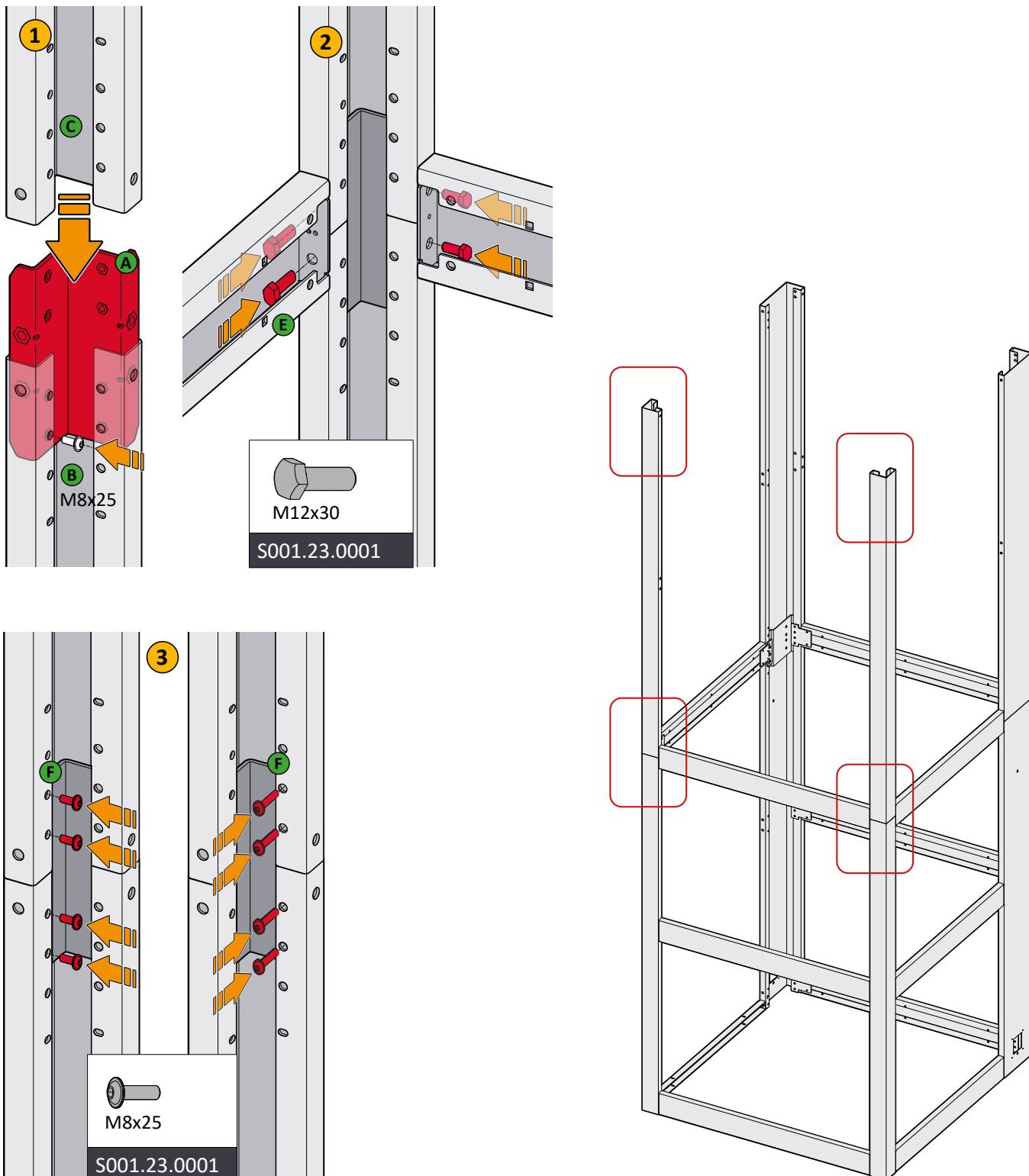
For the assembly of the door transoms, refer to § 10.03.09.



10.03.06 UPRIGHTS - OPPOSITE SIDE GUIDE RAIL JUNCTION (NARROW UPRIGHT)

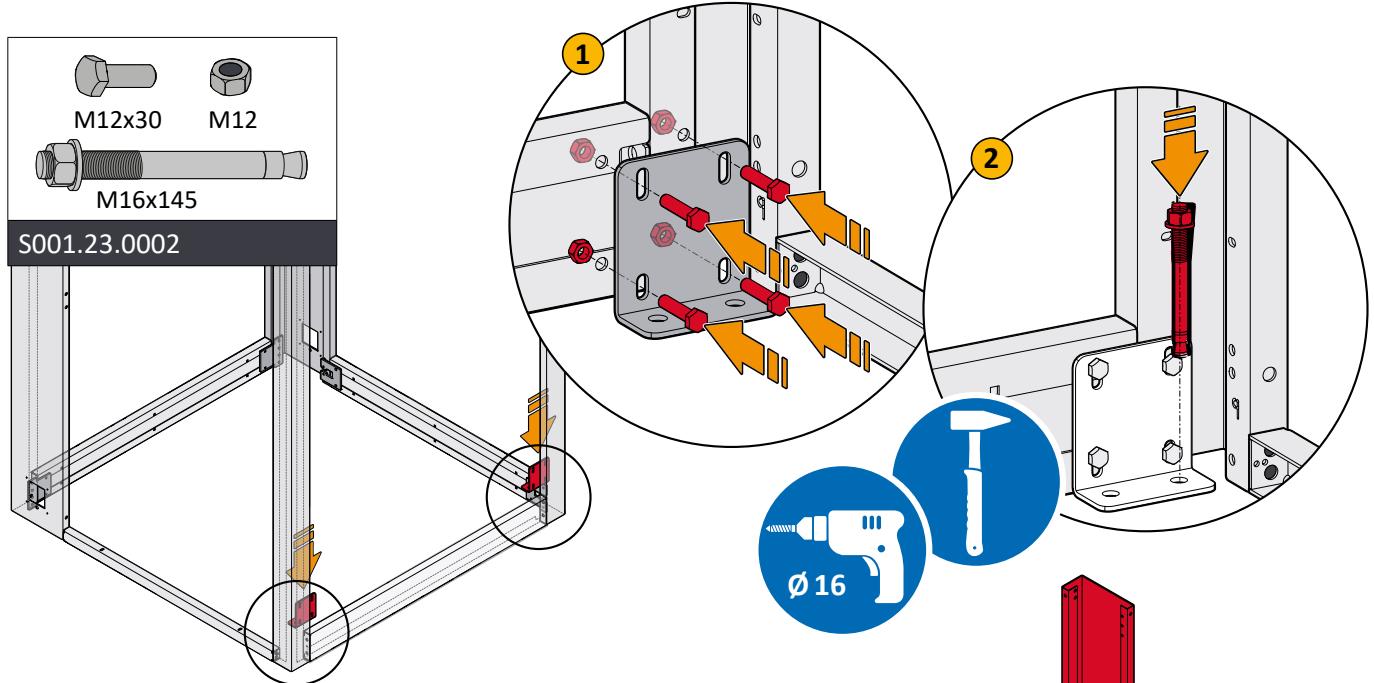
- 1 Insert the upright junction plate **A**, into the upright, temporarily fasten it with a screw from the kit **B**, insert the next upright section **C**.
- 2 Fasten the cross-pieces to the uprights with the screws provided, inserting them into the reveals in the upright junction plate **E**.
- 3 In the event that the uprights are not joined with the cross-pieces (presence of a landing door), fasten the uprights joining plate with the TBEI 8x25 flanged screws provided in the KIT **F**.

For the assembly of the door transoms, refer to § 10.03.09.



10.03.07 FIRST TURN IN PIT - OPPOSITE SIDE GUIDES - MOUNTING AND ANCHORING

- Attach the "L" transoms to the transom in the pit opposite the mechanics 1.
- Anchor to the ground using the dowels provided 2.

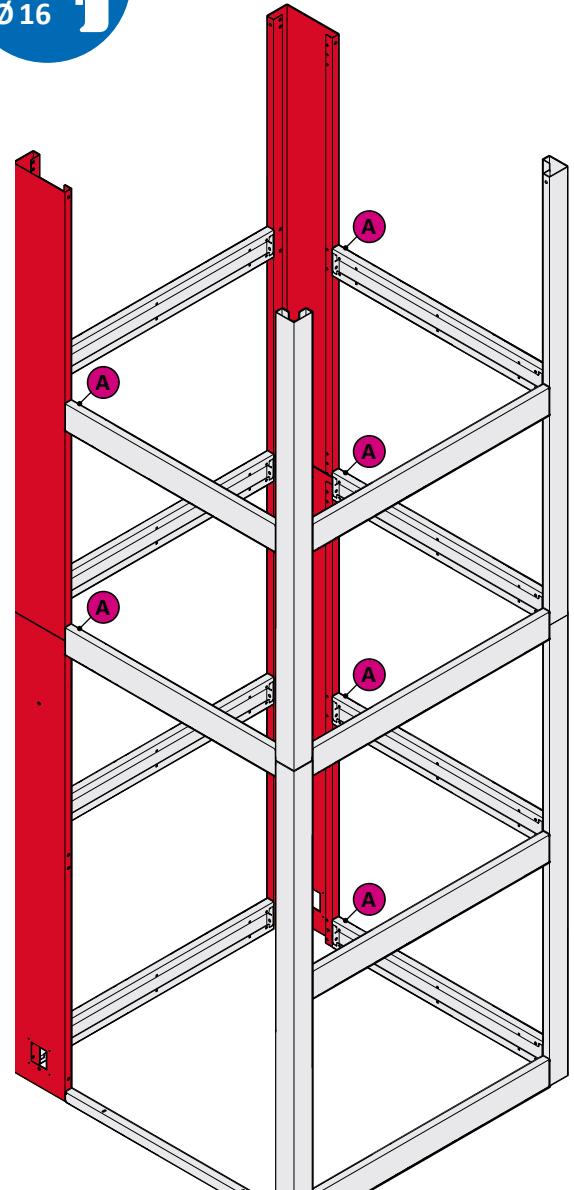
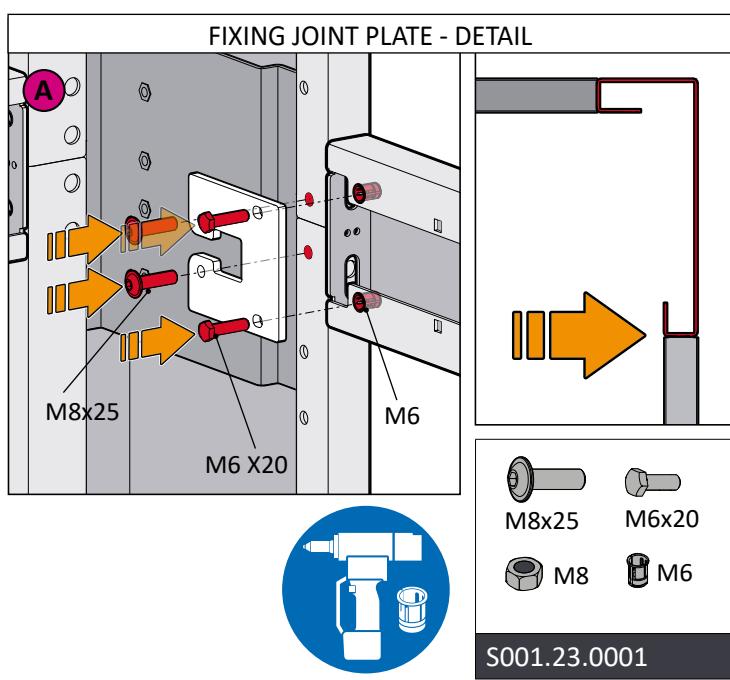


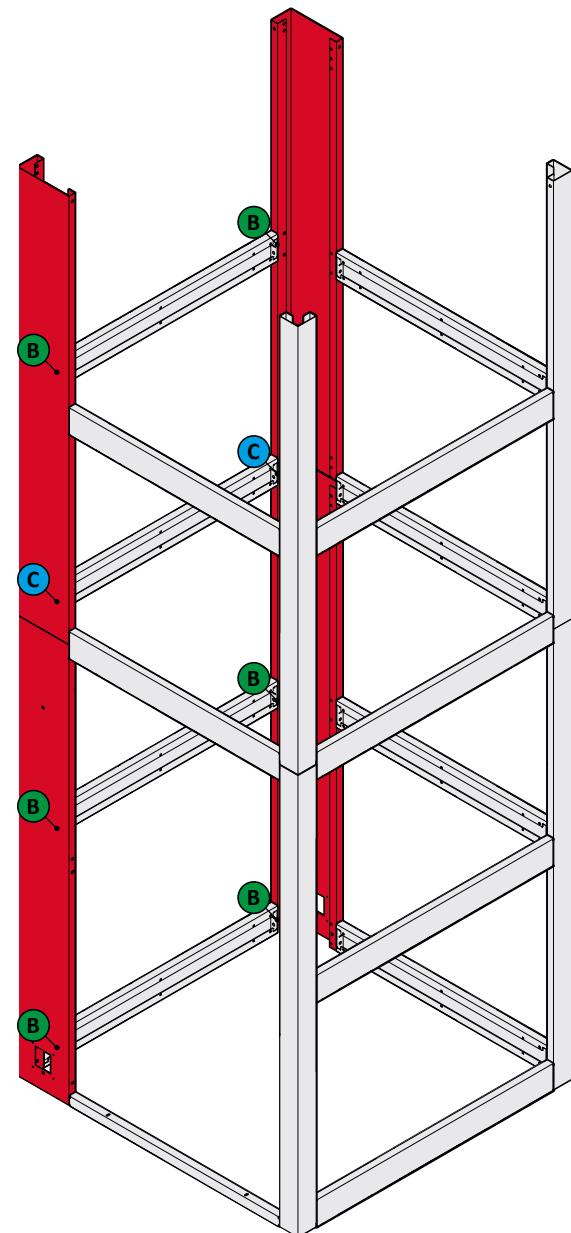
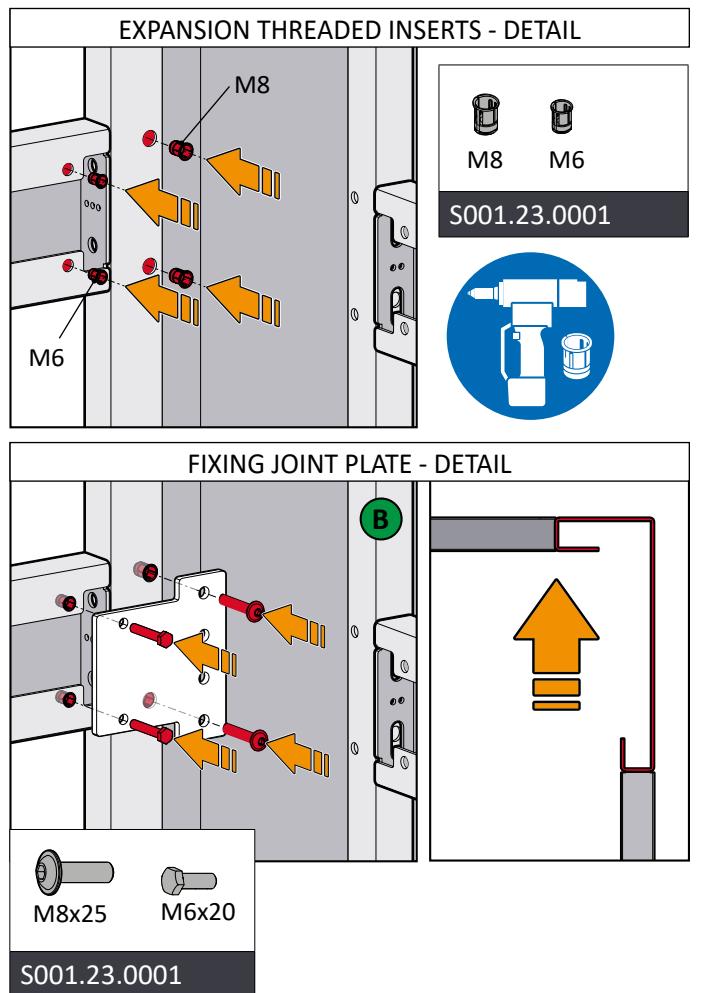
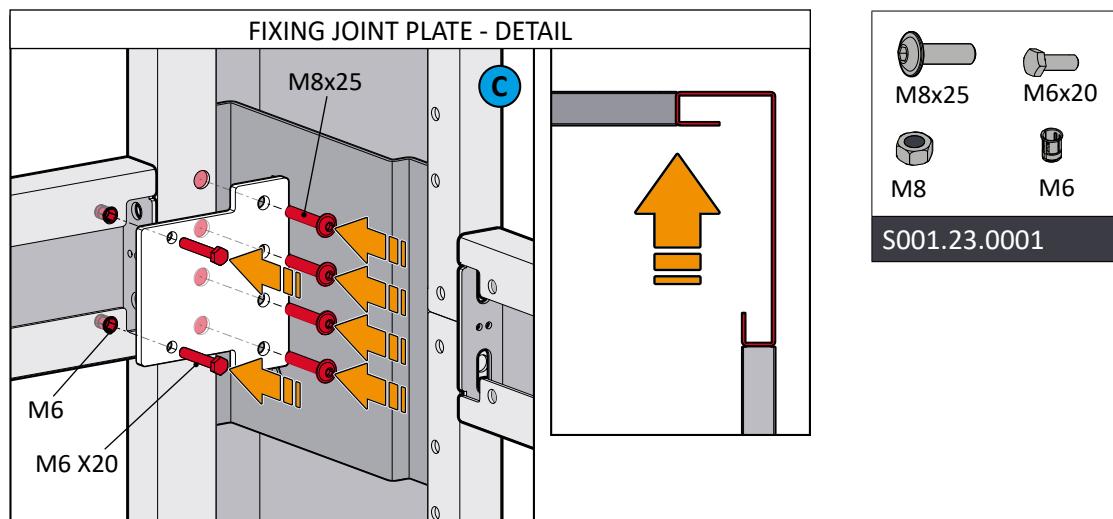
10.03.08 STRUCTURE ASSEMBLY - GUIDES SIDE



To join uprights and beams, use the supplied jointing brackets following the instructions below

SIDE ADJACENT TO MECHANICS



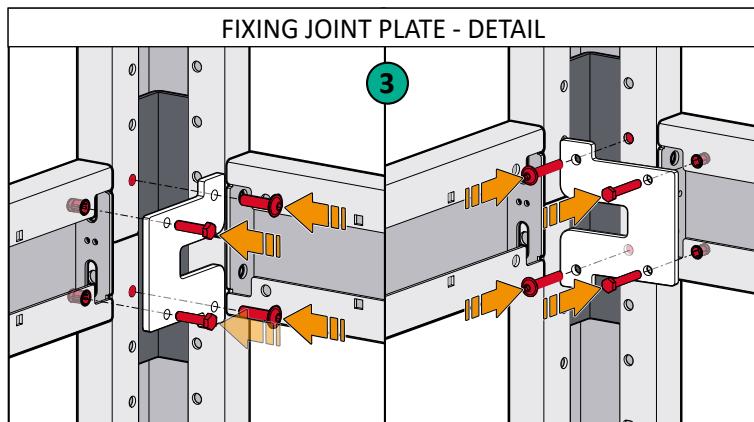
MECHANICAL SIDE - STANDARD UPRIGHTS

MECHANICAL SIDE - UPRIGHT JOINT


10.03.09 STRUCTURE ASSEMBLY - OPPOSITE RAILS SIDE



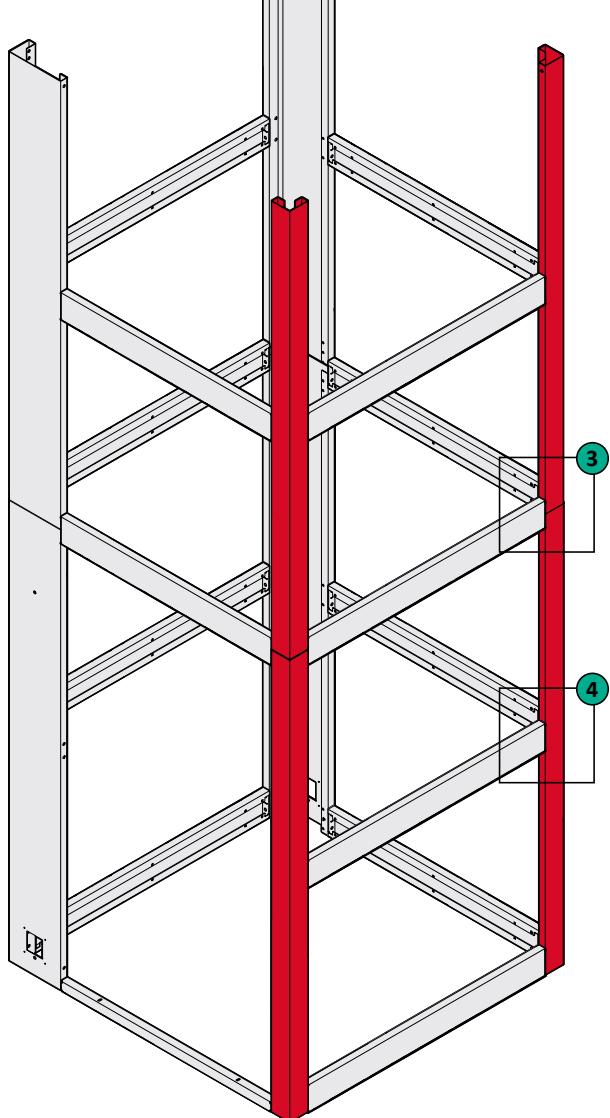
To join uprights and beams, use the supplied jointing brackets following the instructions below

JAMB JOINT

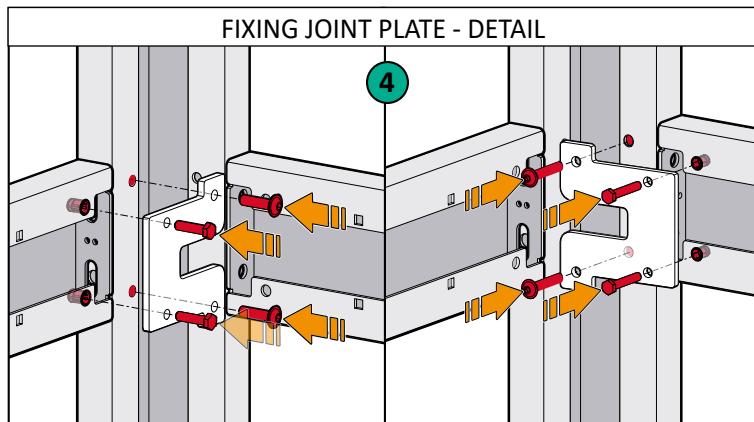


	M8x25		M6x20
	M8		M6

S001.23.0001



STANDARD JAMBS

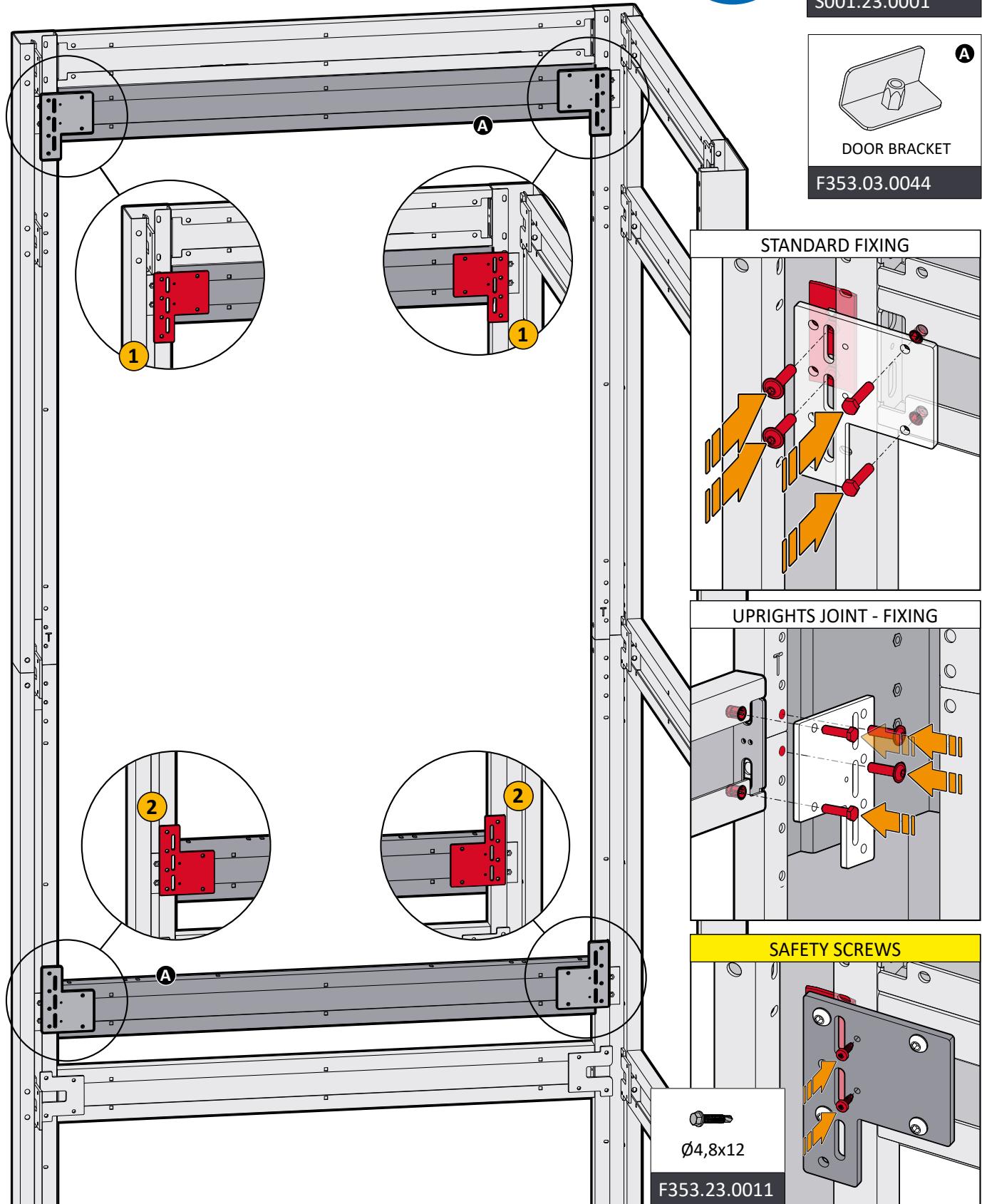


10.03.10 DOOR TRANSOMS - ASSEMBLY

- In the upper transom, the slots should be positioned downward **1**.
- In the lower transom, the slots should be positioned upward **2**.

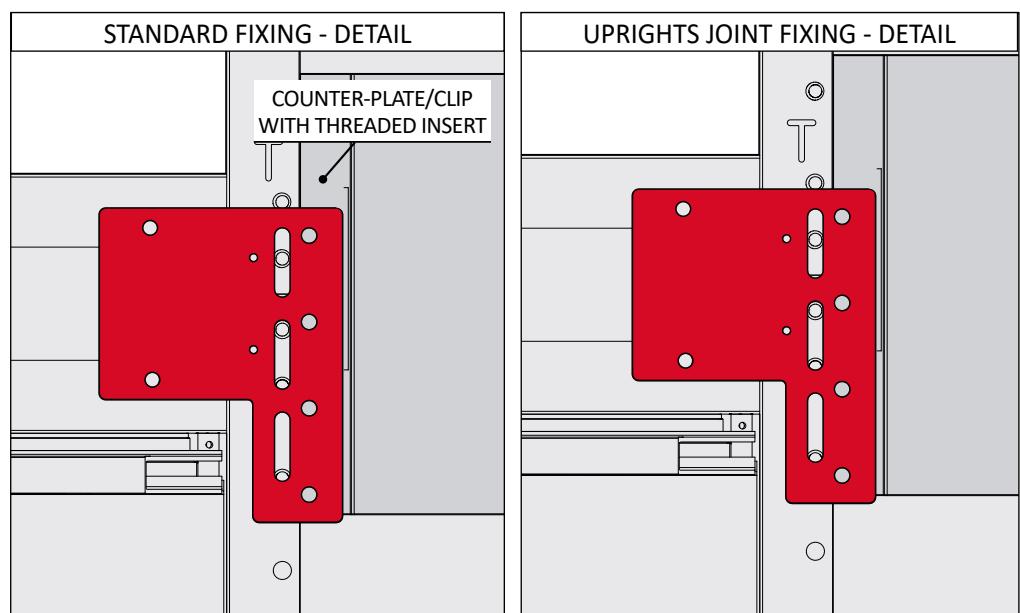
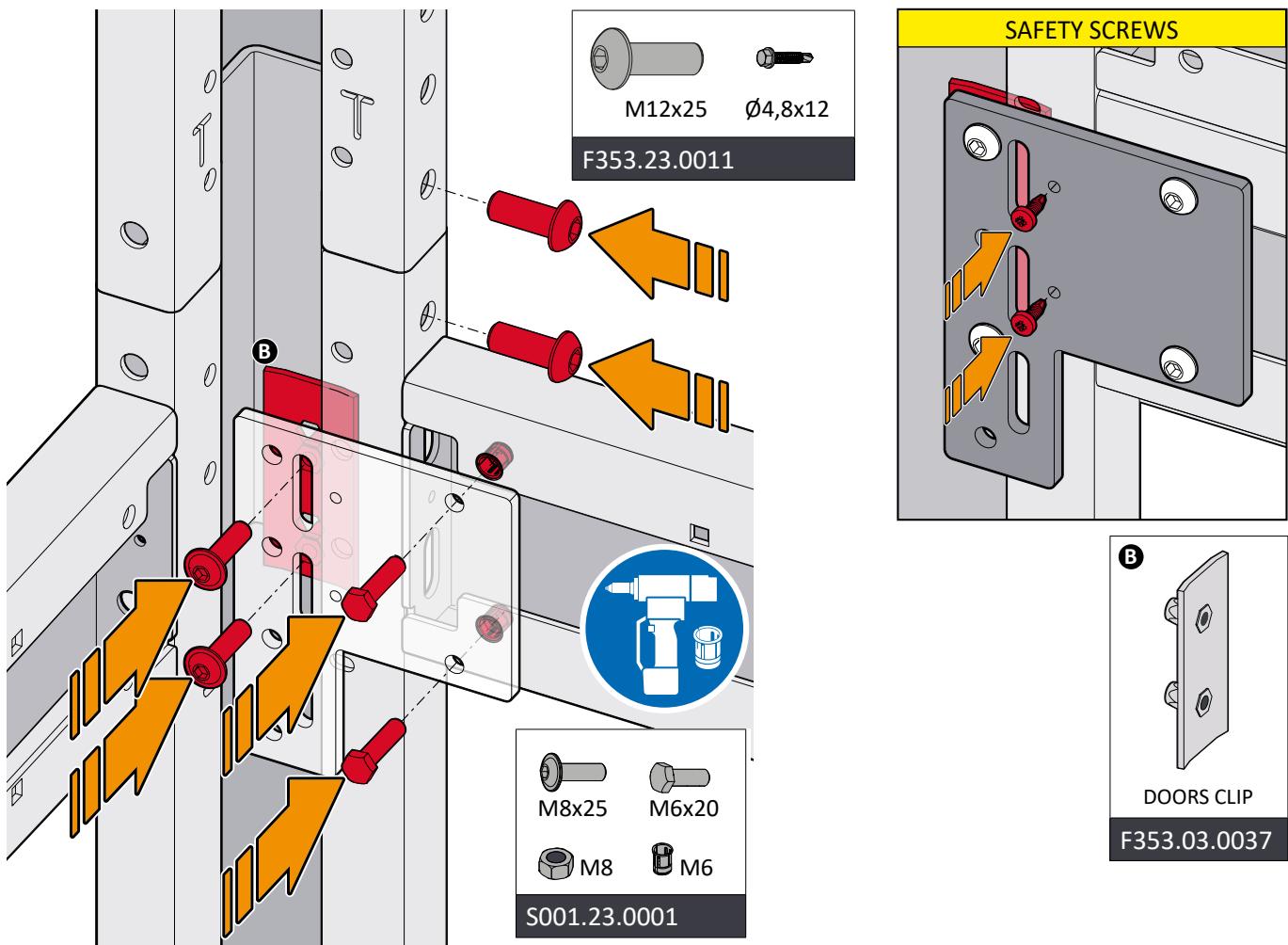


	M8x25		M6x20
	M8		M6
S001.23.0001			



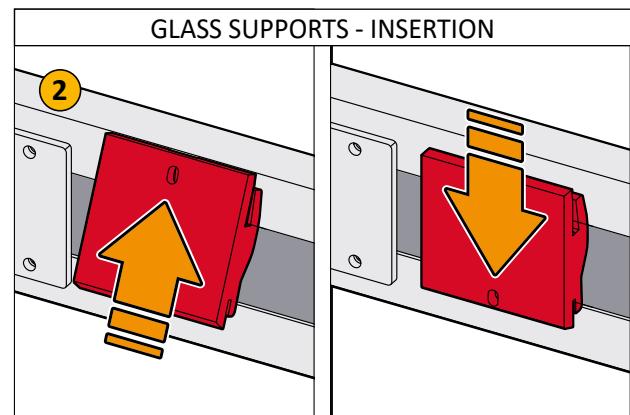
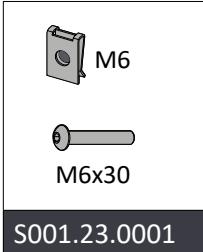
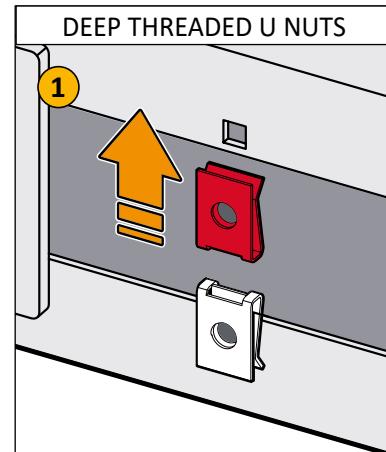
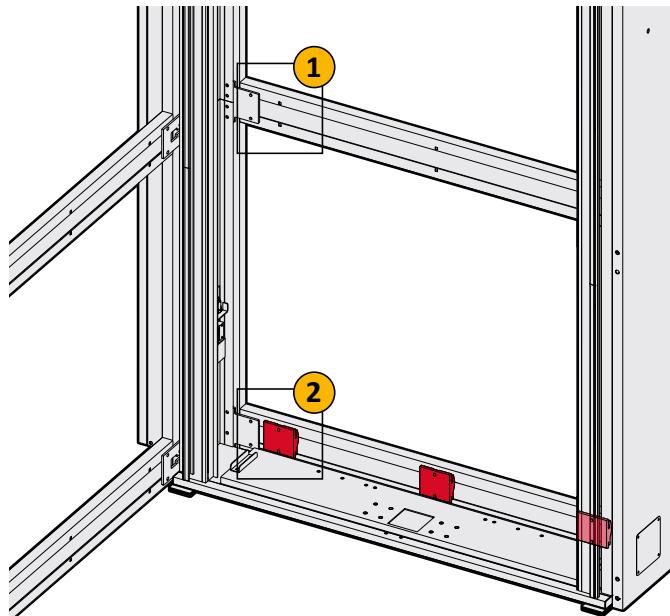
10.03.11 DOOR TRANSOM SUPERIMPOSED ON UPRIGHTS JUNCTION - ASSEMBLY

- In the upper transom, the slots should be positioned downward.
- In the lower transom, the slots should be positioned upward.

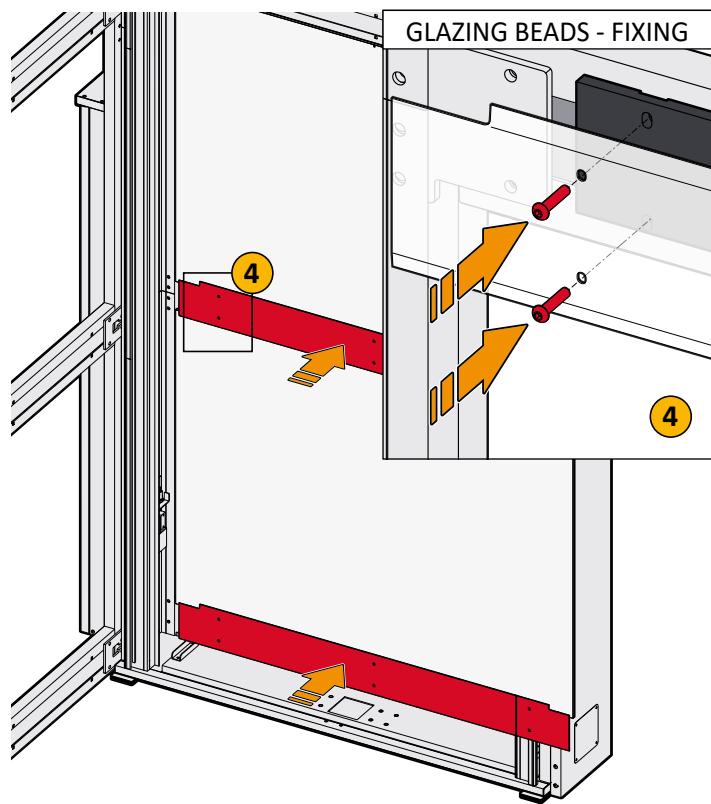
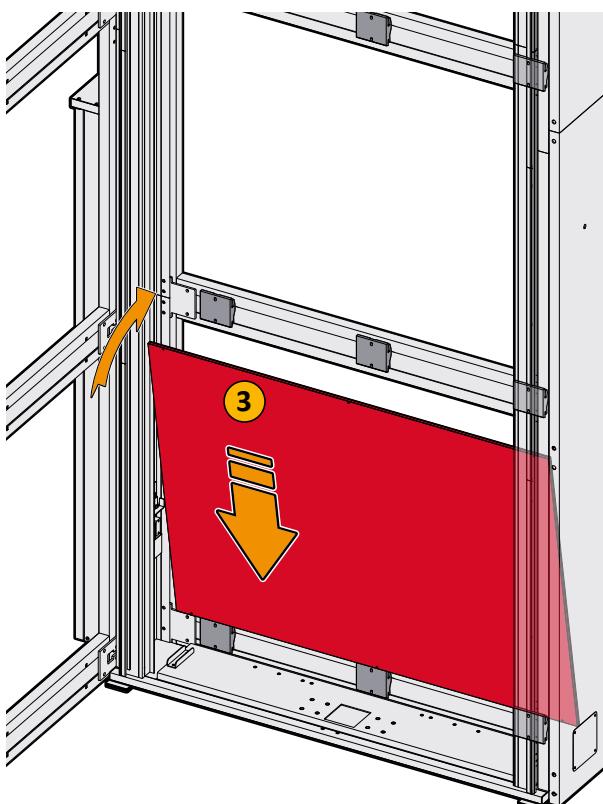


10.04. Rear mechanical infill panels - assembly

- Insert the clips with collar into the transoms in correspondence with the appropriate holes **1**.
- Insert the glass supports in correspondence with the clamps with collar **2**.

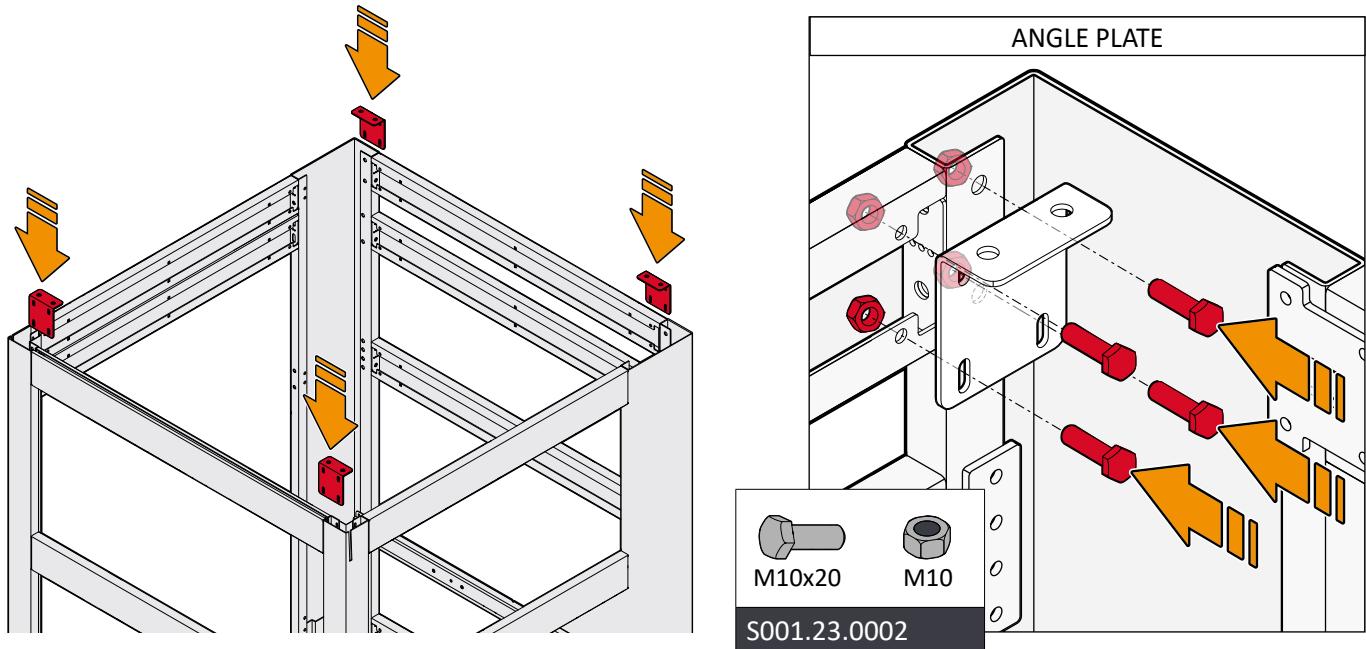


- Insert rear infill panels **3**.
- Secure the glazing beads with the screws provided **4**.



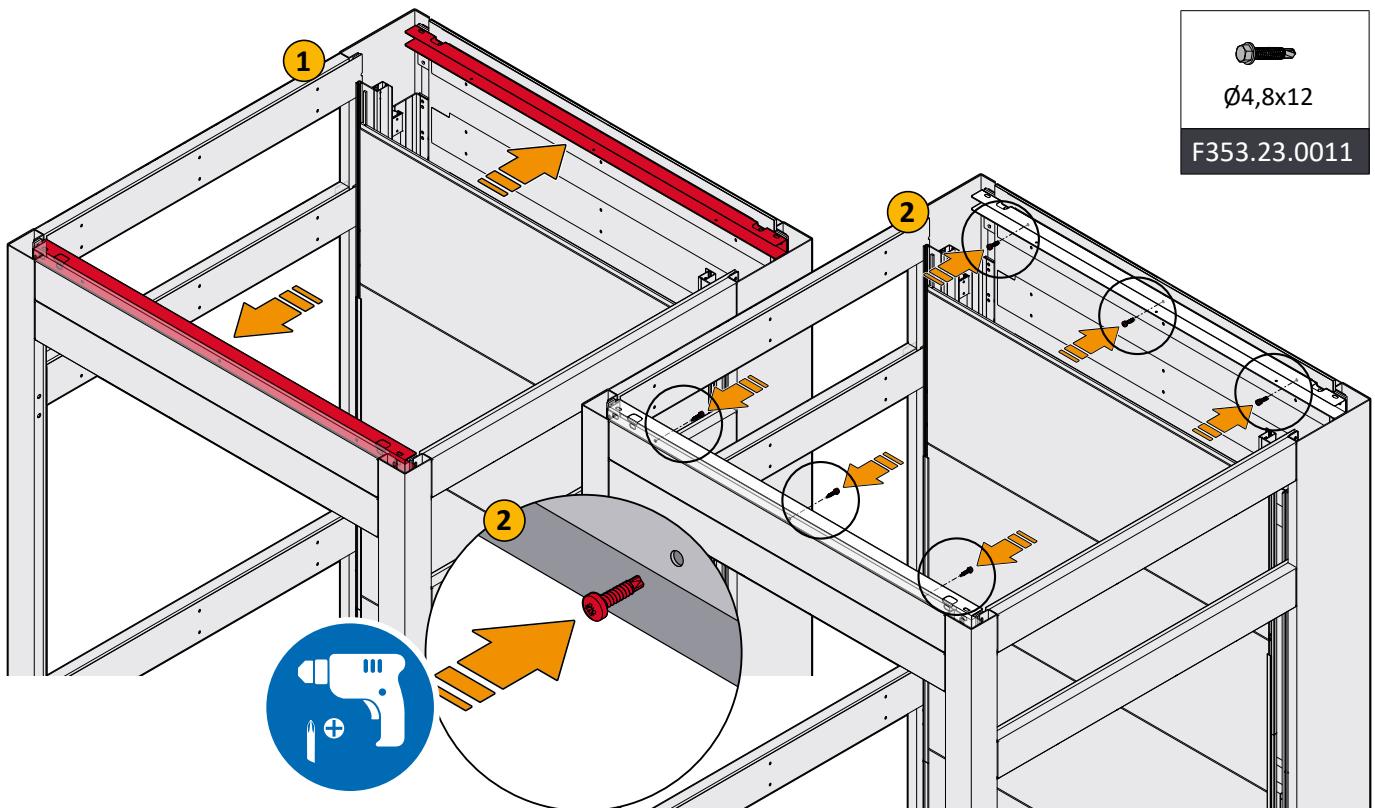
10.05. Structure roof - assembly

10.05.01 ANGLE PLATES (FOR TIE RODS) - PRE-ASSEMBLY

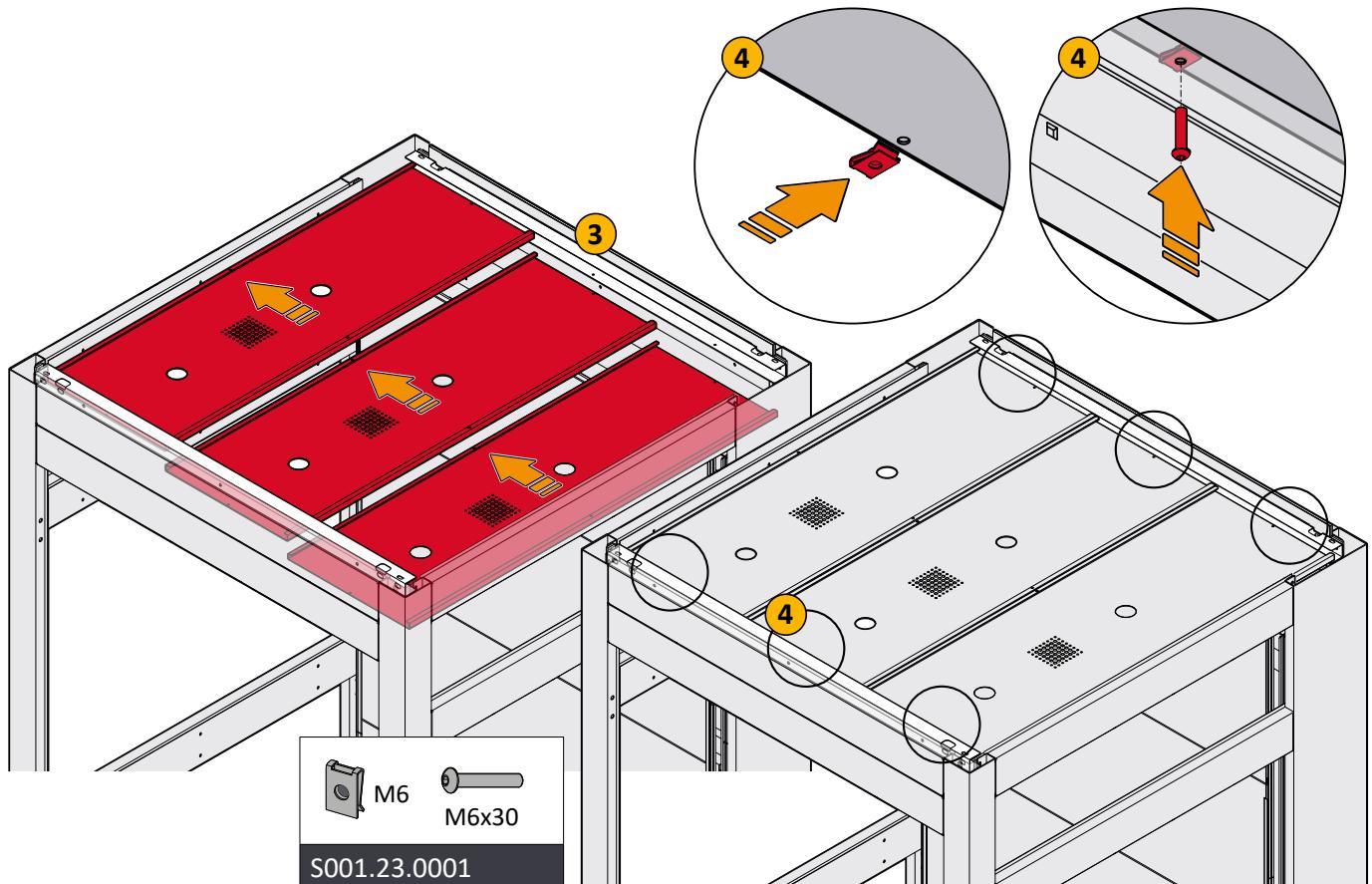


10.05.02 INNER ROOF - ASSEMBLY

- Insert the support profiles at the top ①, securing them to the transoms (rail and opposite side) by means of the self-drilling screws provided ②.



- Insert panels from inside **3**.
- Fasten panels to profiles by inserting the deep threaded U nuts and screw provided **4**.

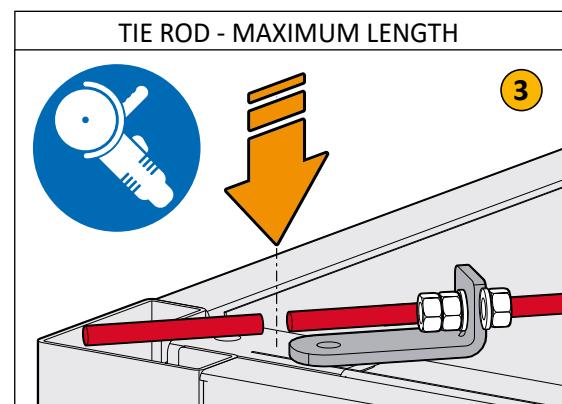
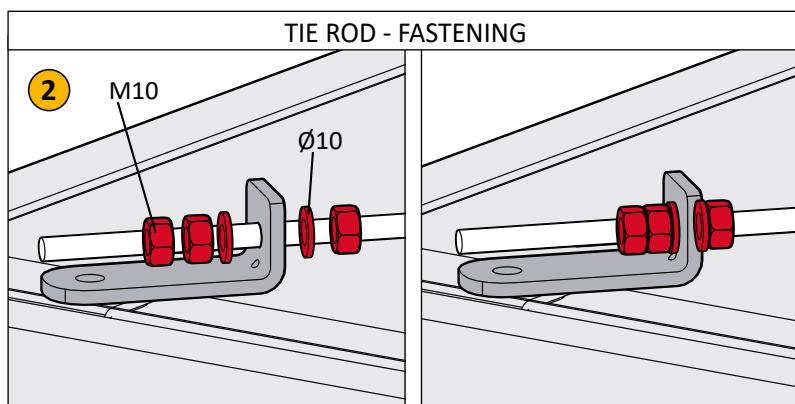
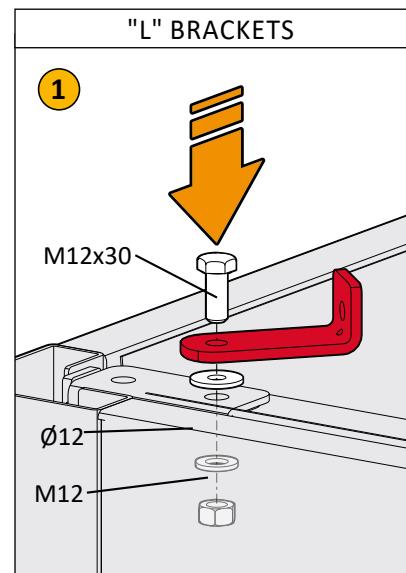
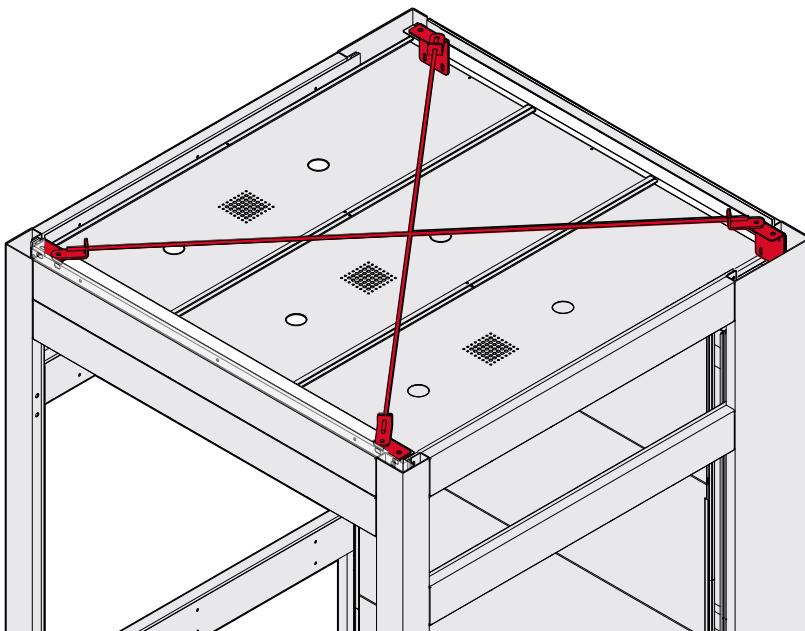
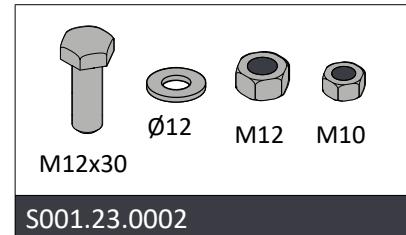


10.05.03 UPPER BRACES (CROSS BRACES) - ASSEMBLY



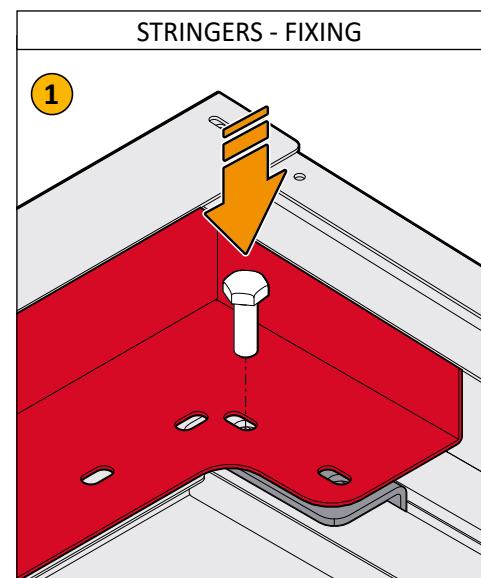
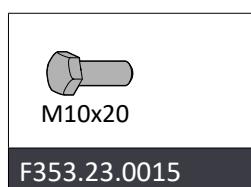
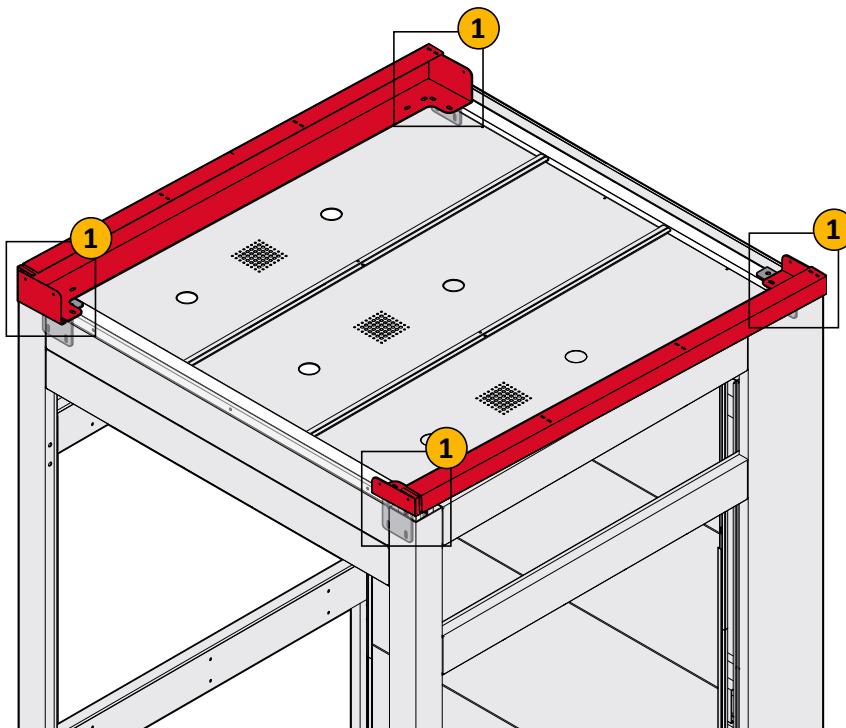
In the case of an outdoor roof, pre-assemble the roof header (§ 8.04.04 OUTER ROOF - ASSEMBLY).

- Fasten the "L" cross brackets with the screws provided, at the corner plates **1**.
- Insert the tie rod (threaded bar) and secure it with the bolts so that it remains in tension **2**.
- If the rod protrudes from the length of the bracket, cut off the excess **3**.

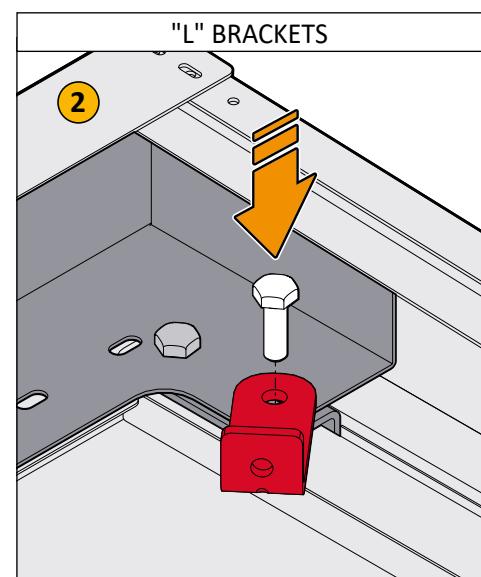
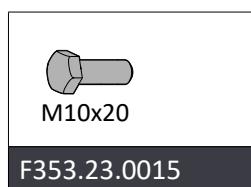
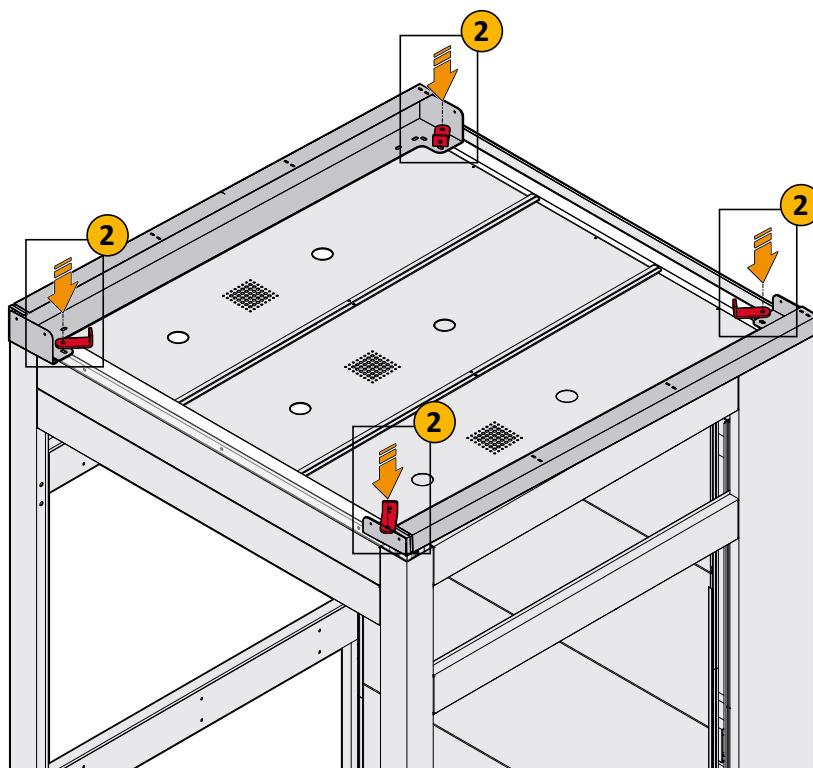


10.05.04 OUTER ROOF - ASSEMBLY

- Position and secure the support stringers (1) with the screws provided.



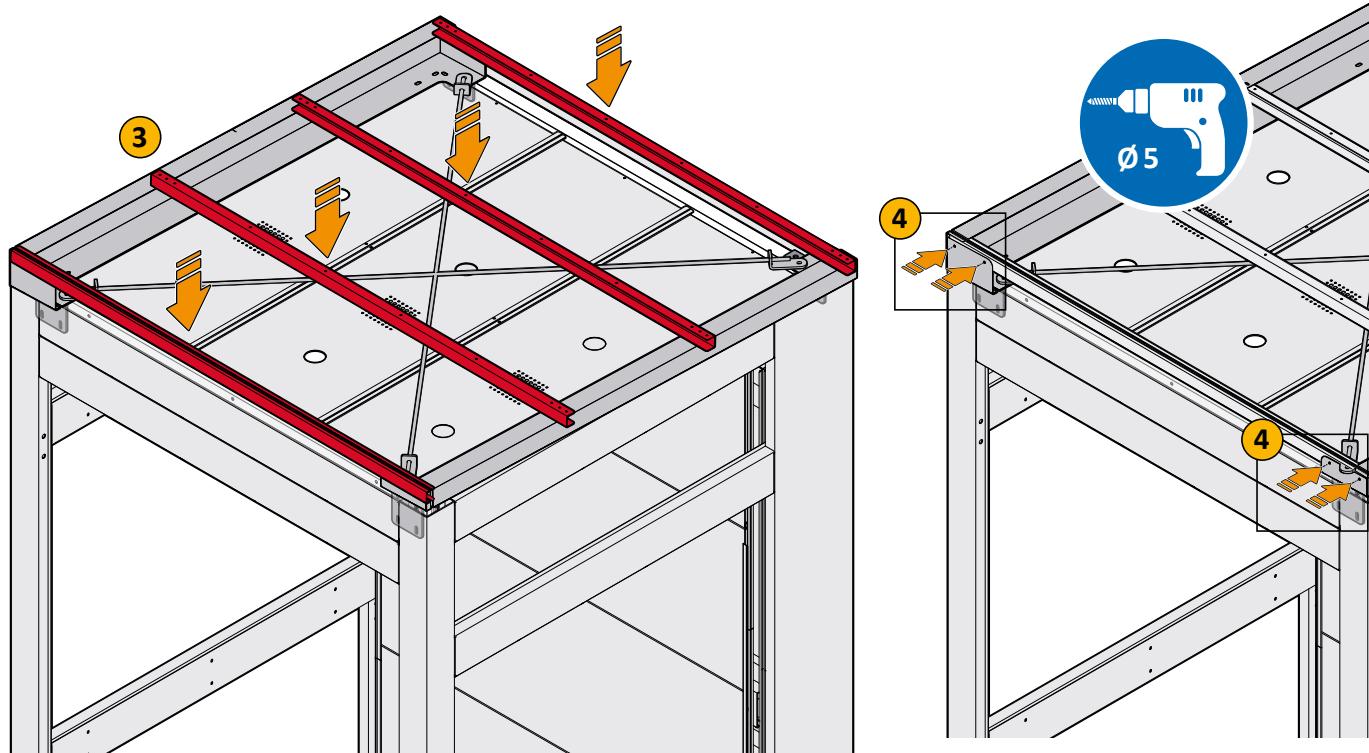
- Position and fasten the "L" brackets supporting the header tie rods (2) with the screws supplied, as specified in the previous paragraph (§ 8.04.03).



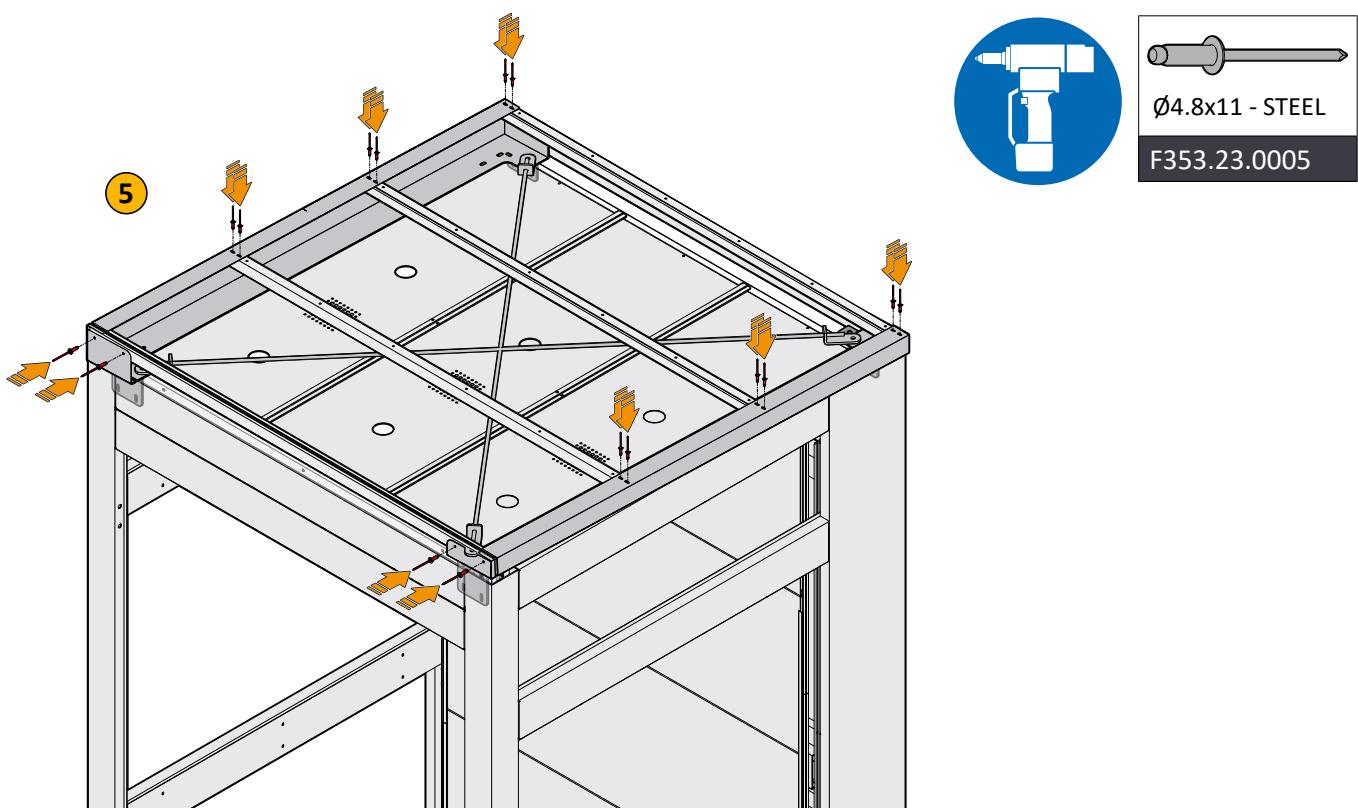
DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

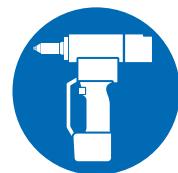
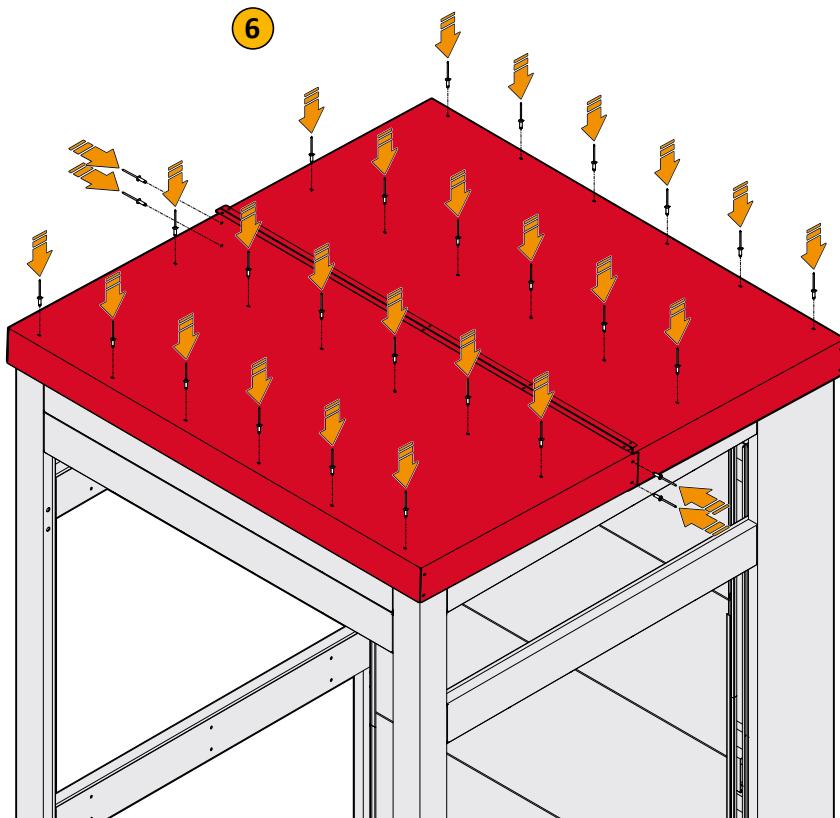
- Insert the reinforcement bars **3** into the stringers and drill the bar using the side holes of the side members as a template **4**.

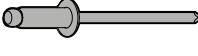


- Rivet all reinforcement bars **5**.

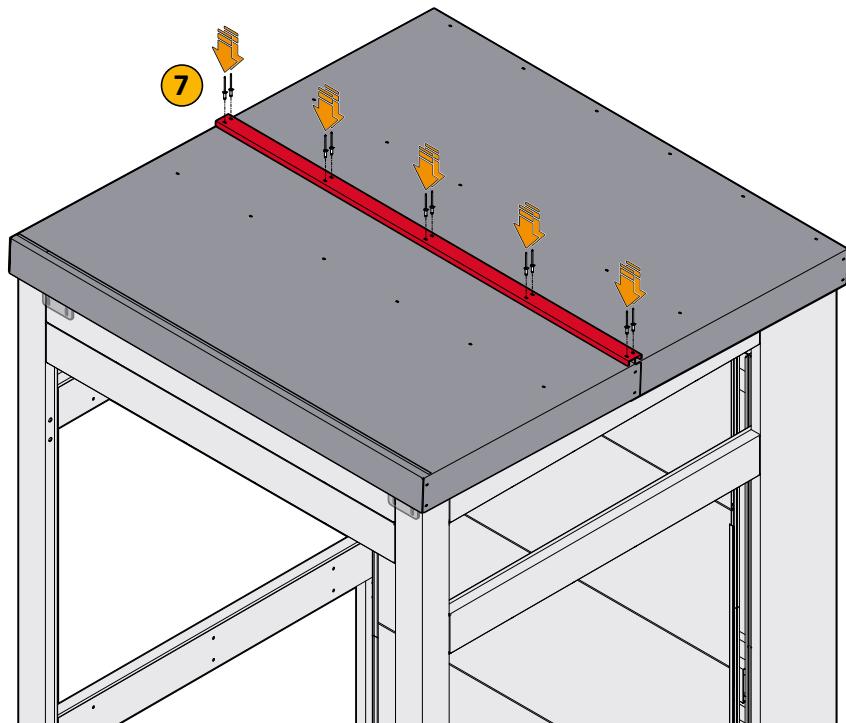


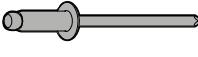
- Position the outer covers and rivet them to the reinforcements and stringers 6.




Ø4.8x11 - STEEL
F353.23.0005

- Position and rivet the cover joint profile 7.

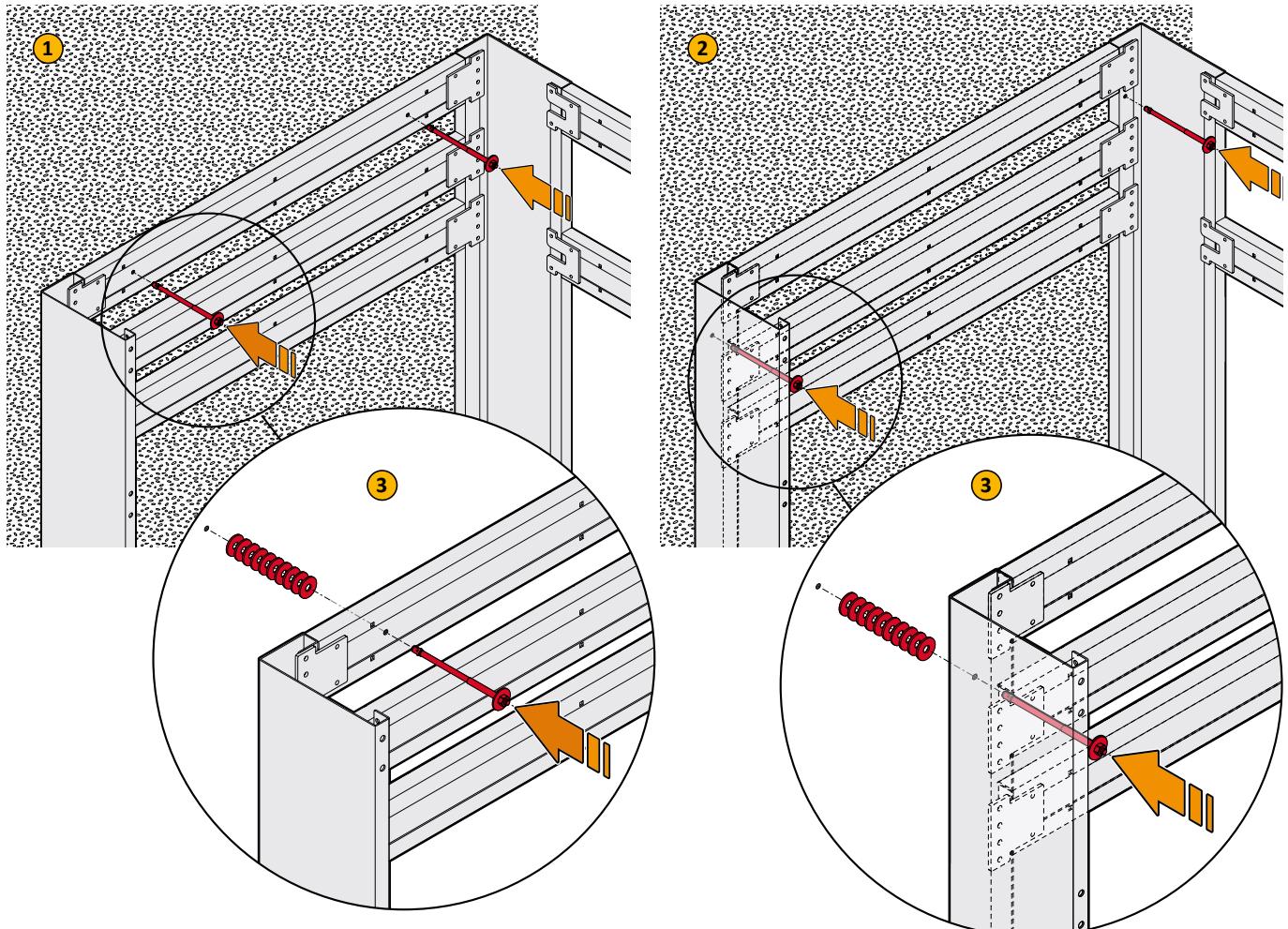



Ø4.8x11 - STEEL
F353.23.0005

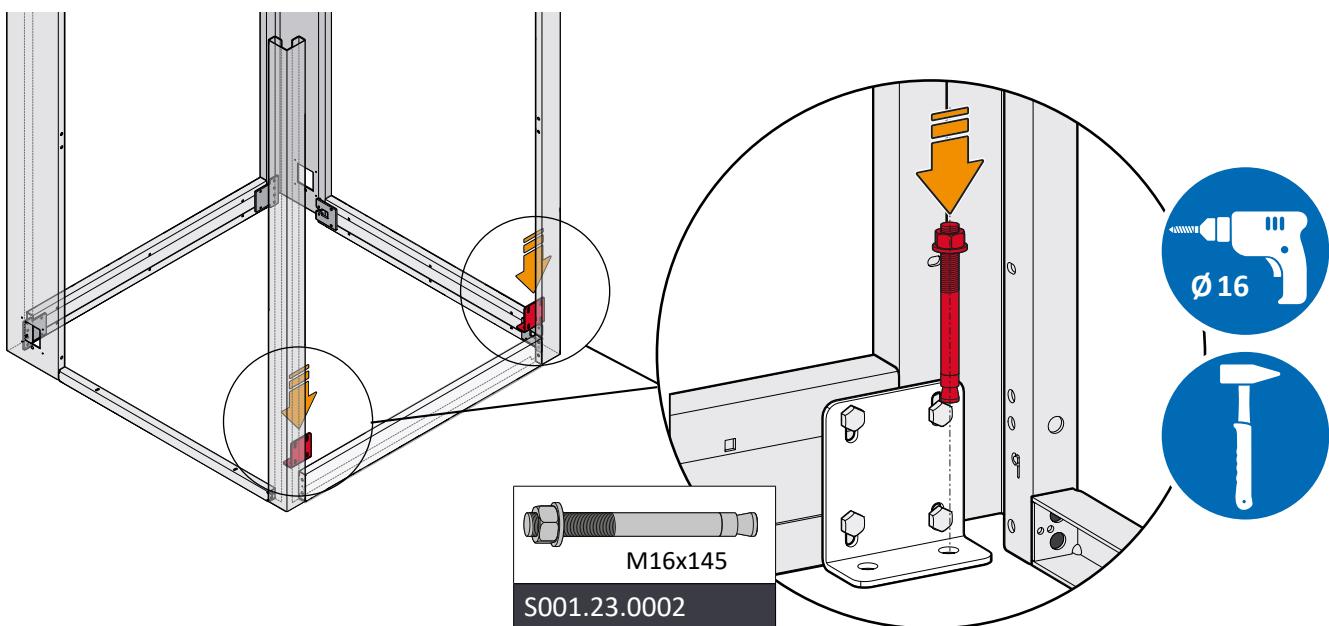
10.06. Structure - anchoring

10.07. WALL ANCHORAGE

- Carry out anchorages in transom 1 or in the upright 2 as indicated on project drawing.
- If the masonry is not perfectly plumb, use spacers 3.



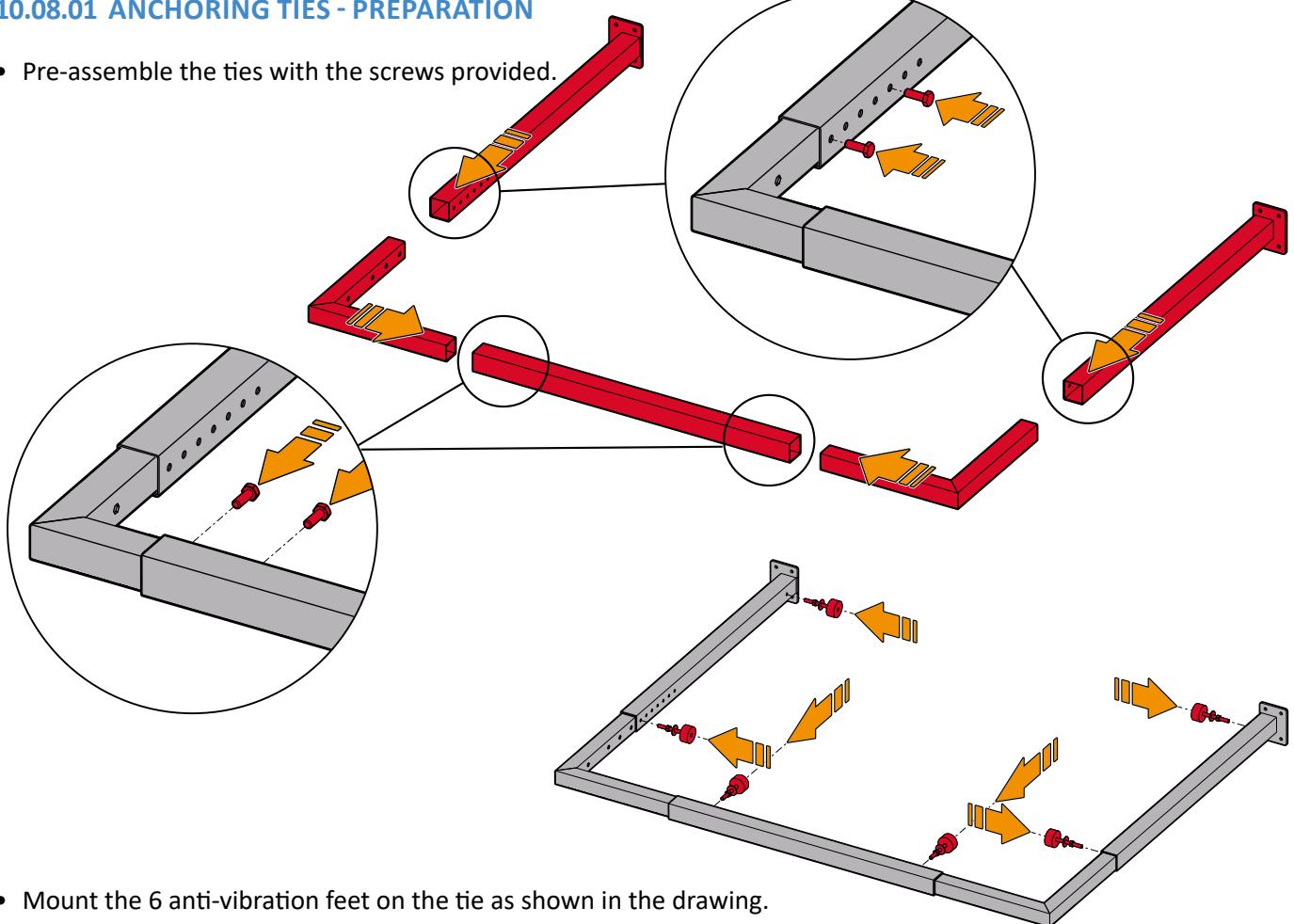
10.07.01 ANCHORAGE IN THE PIT



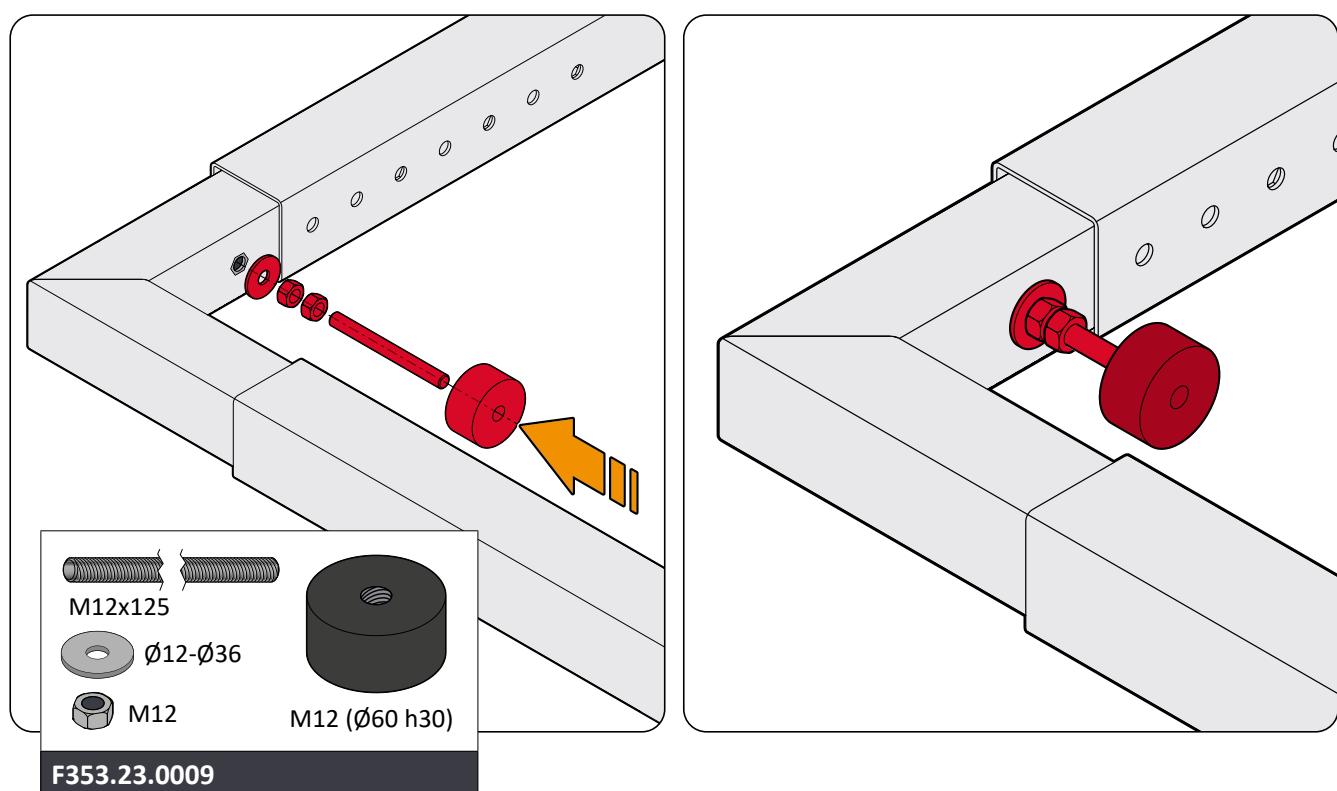
10.08. Structure - anchoring by ties (optional)

10.08.01 ANCHORING TIES - PREPARATION

- Pre-assemble the ties with the screws provided.



- Mount the 6 anti-vibration feet on the tie as shown in the drawing.



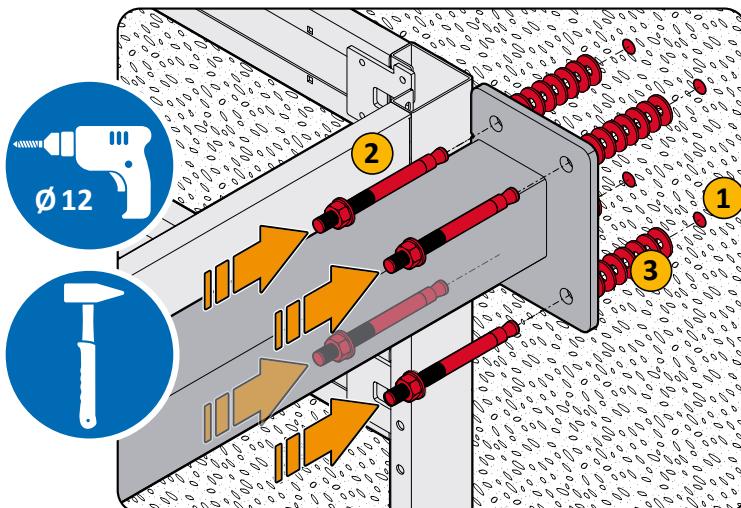
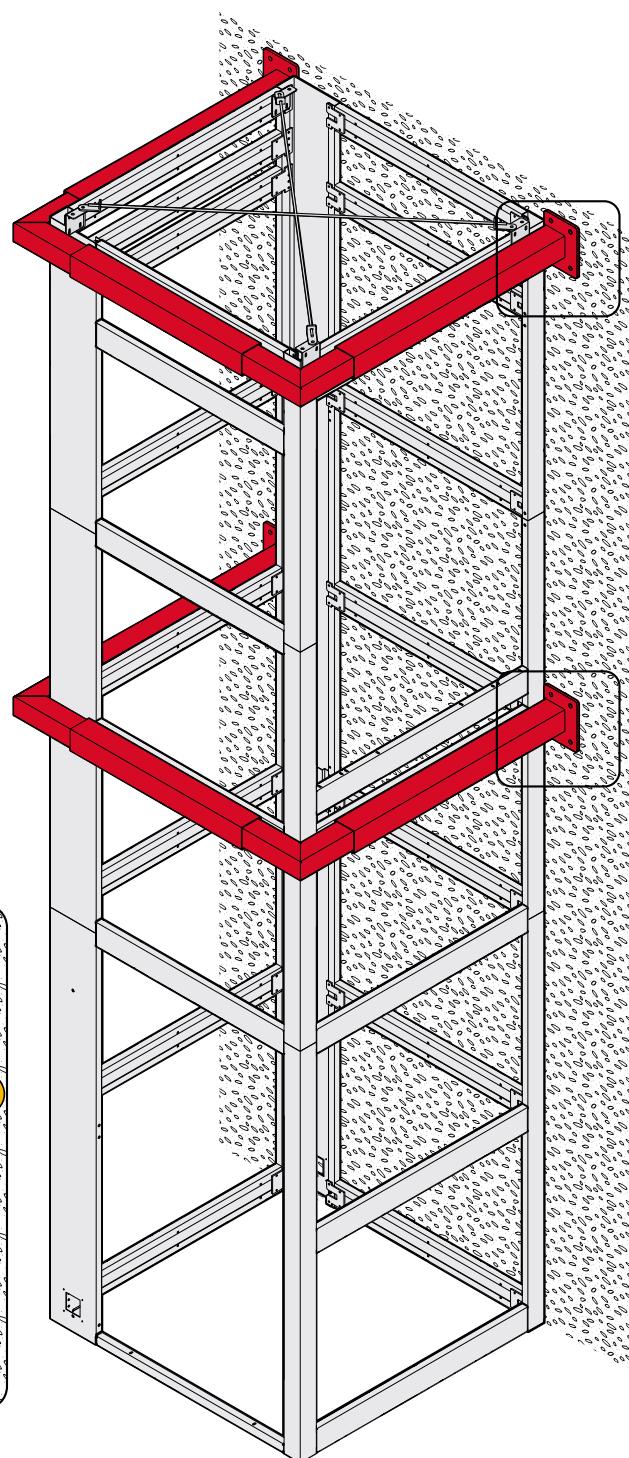
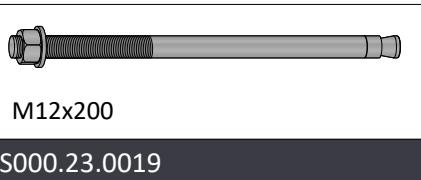
10.08.02 ANCHORING TIES - WALL ANCHORING

IMPORTANT!



Consult the DESIGN DRAWING to check the correct assembly and positioning of clamping fixtures (ties).

- Position the ties against the structure so that the brackets rest against the wall/ceiling.
- Drill the wall at the holes in the brackets ①.
- Anchor the brackets using the anchor bolts provided ②.
- If necessary, shim at the rear to achieve correct vertical alignment ③.



WARNING



FAILURE TO OBSERVE THE INSTRUCTIONS MAY COMPROMISE STRUCTURE SAFETY.

The anchoring shown here refers exclusively to the installation on a wall/slab of compact, non-cracked concrete (see "ANNEX 1- Anchoring to the shaft by means of plugs (mechanical or chemical)").

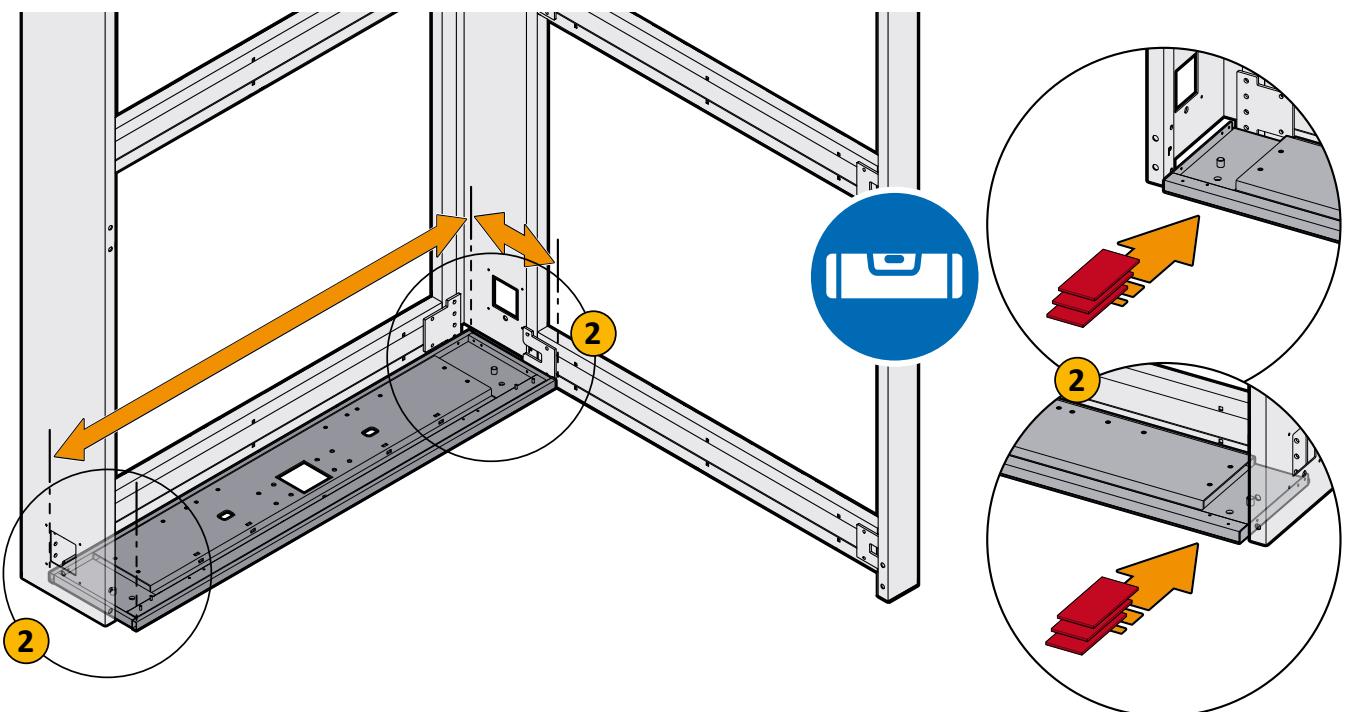
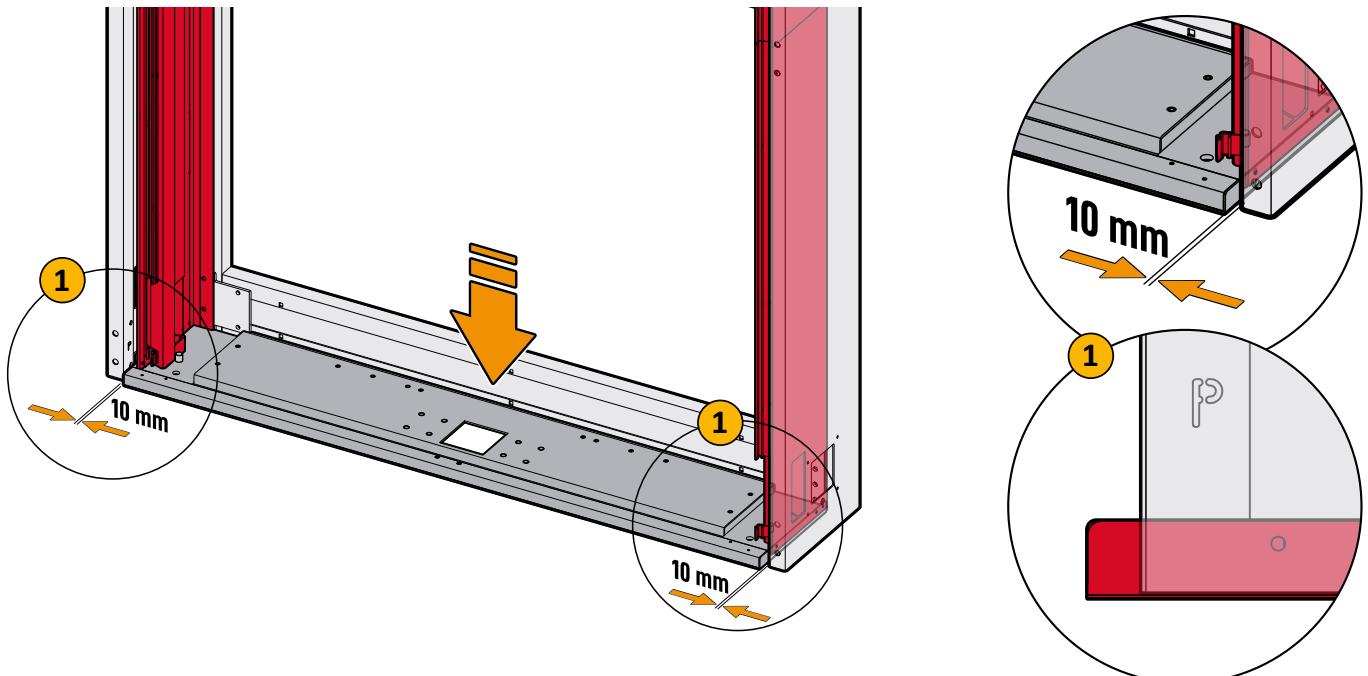
11. Mechanics - arrangement

11.01. Pit bottom template - assembly



The use of a laser level is recommended to facilitate correct template levelling.

- Position the template in the centre of the structure, by checking the position with the plumb line in relation to compartment vertical ①. Ensure correct positioning as shown in the drawings below.

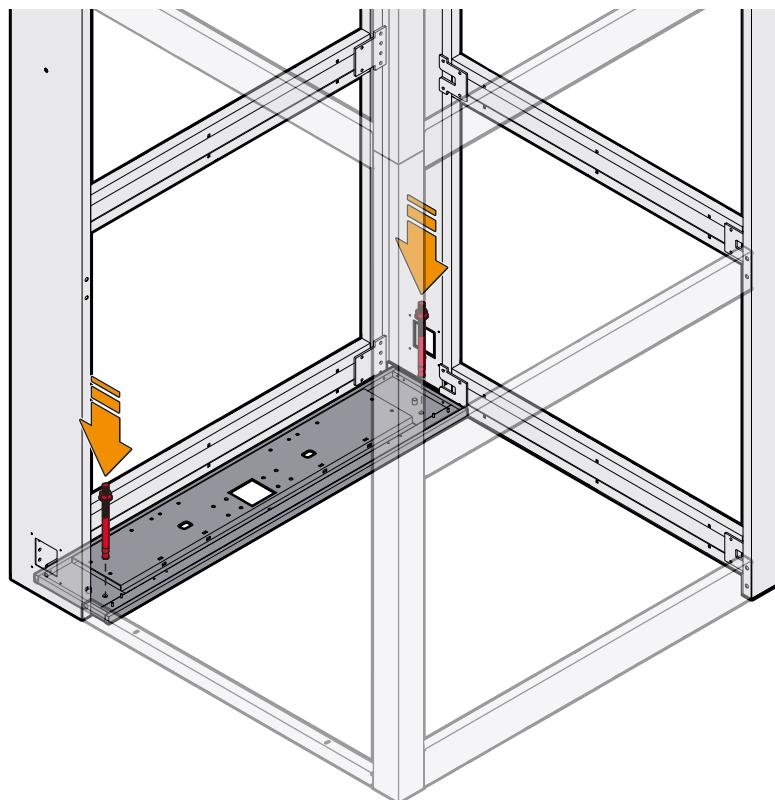


- Place perfectly level using the shims supplied (+/- 2 mm) ②.

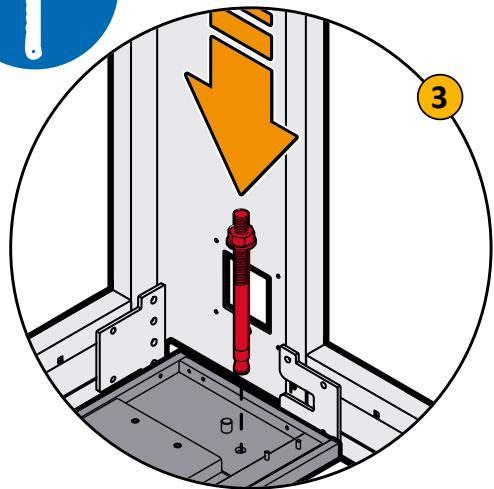
DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

- Anchor the template to the floor, through the pre-drilled holes, by using the anchor bolts provided 3.

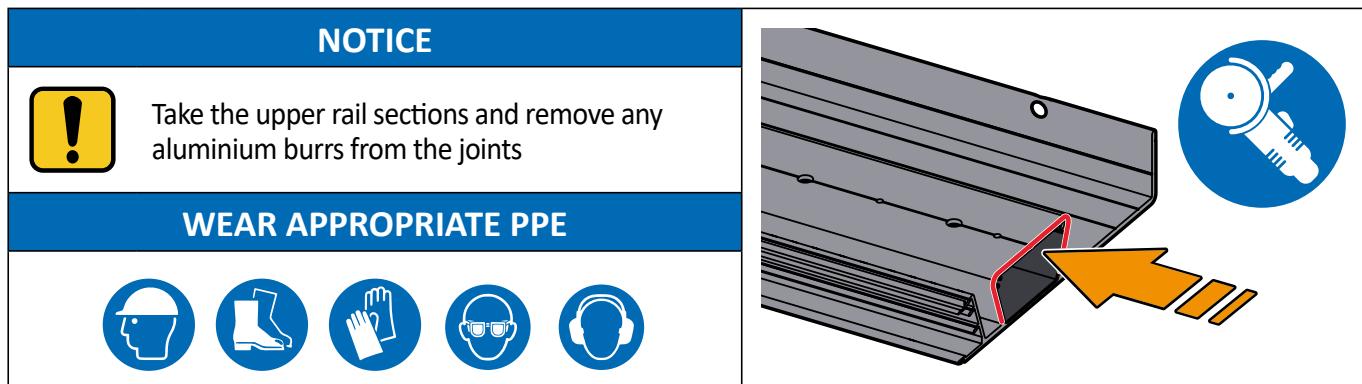


M12x125
F353.23.0001

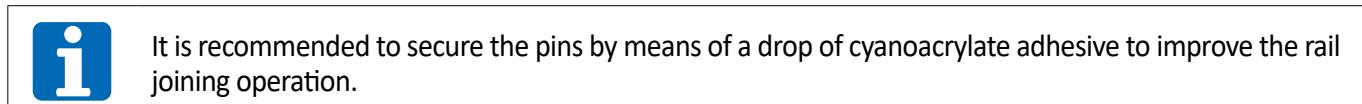
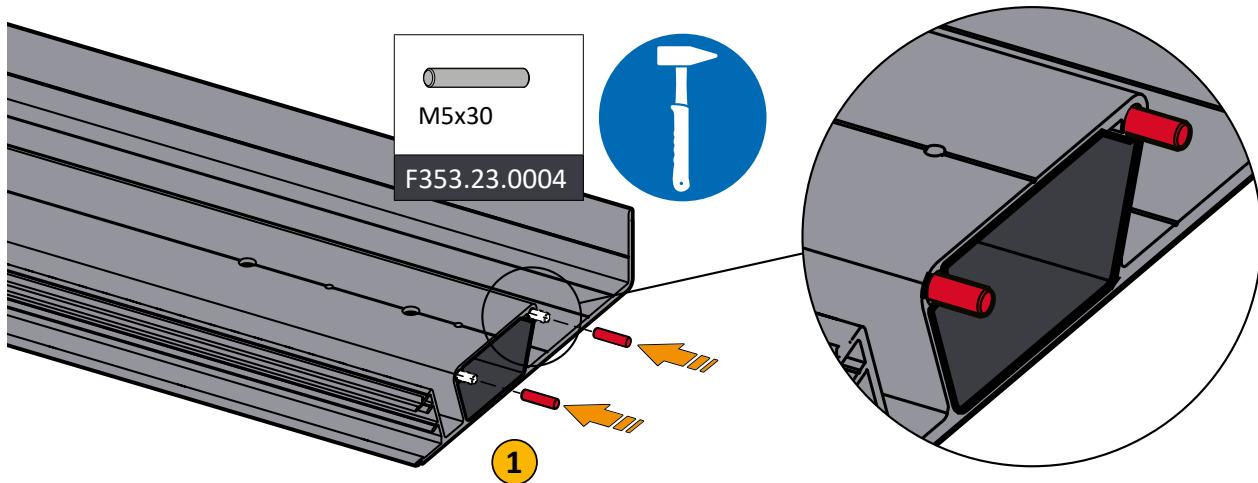


11.02. Rail guides

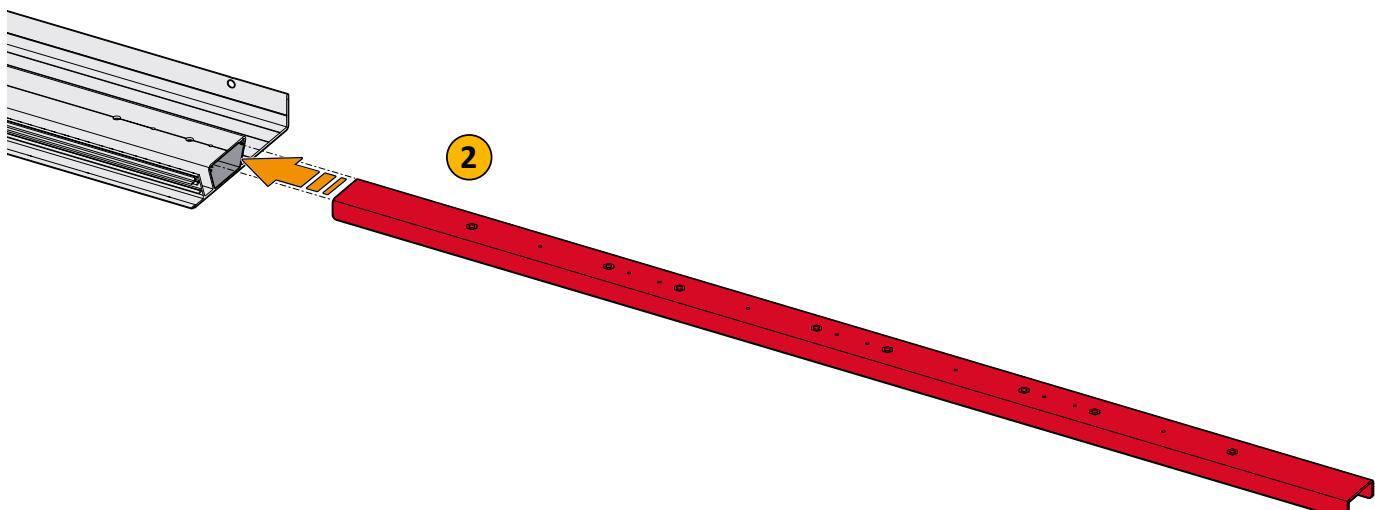
11.02.01 RAIL GUIDES - PREPARATION



- Insert the cylindrical pins into the upper rail sections **①** ONLY HALF OF THEIR LENGTH, allowing them to protrude halfway out of the profile.



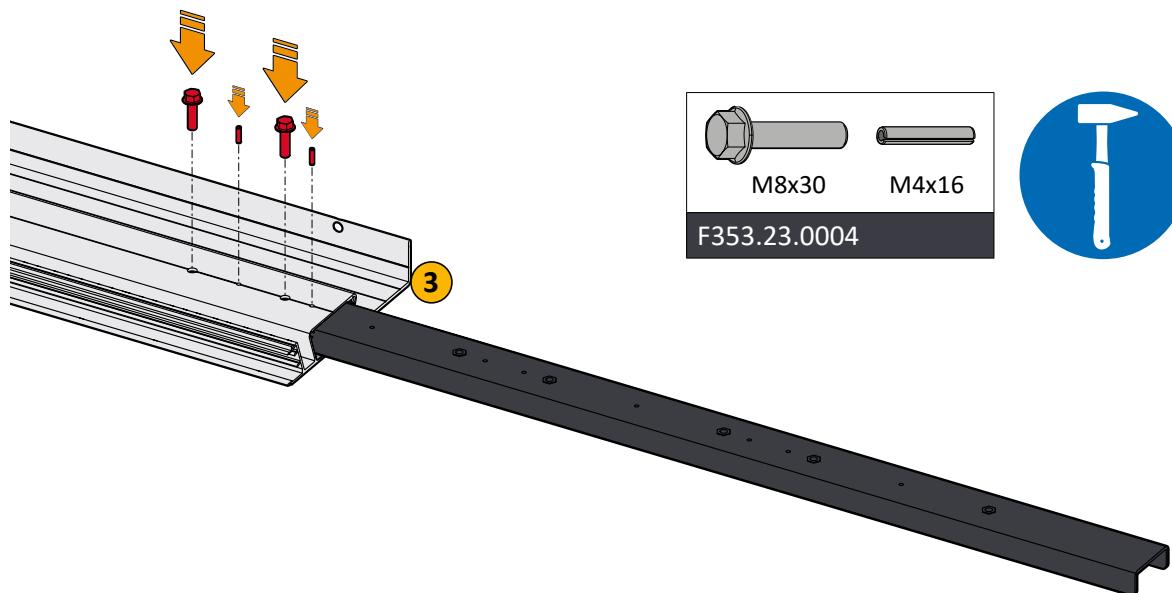
- Insert the rail connectors into the slots in the uprights **②**.



DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

- Secure with the supplied pins and screws **3**.



IMPORTANT!

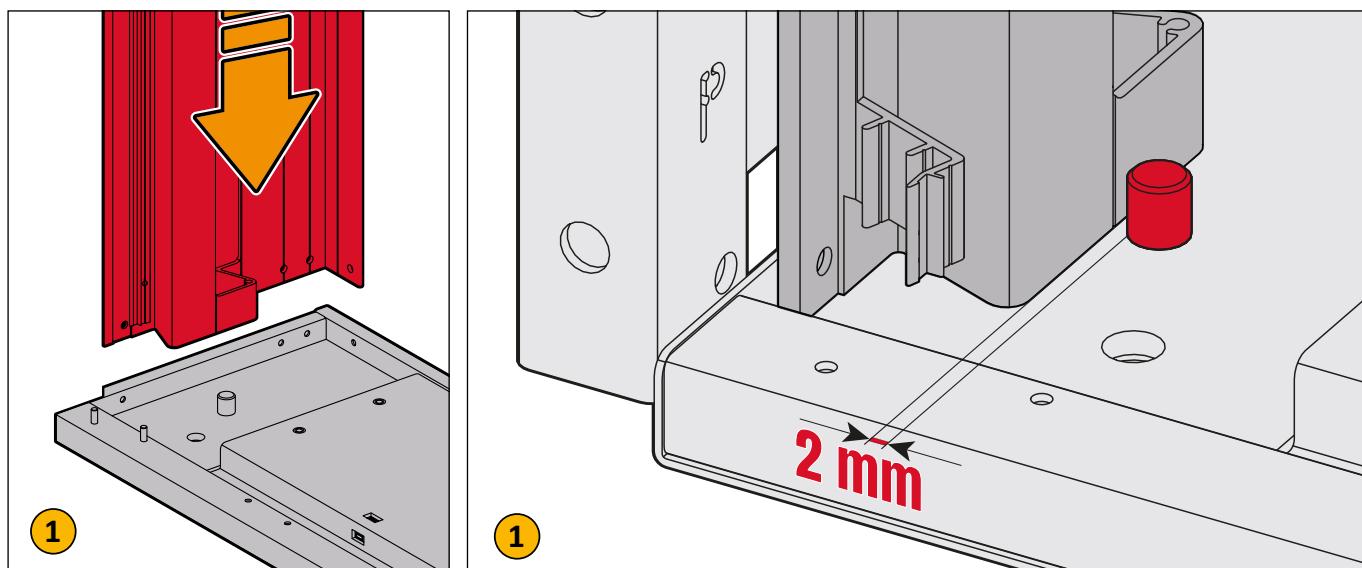


FOR PROPER INSTALLATION:

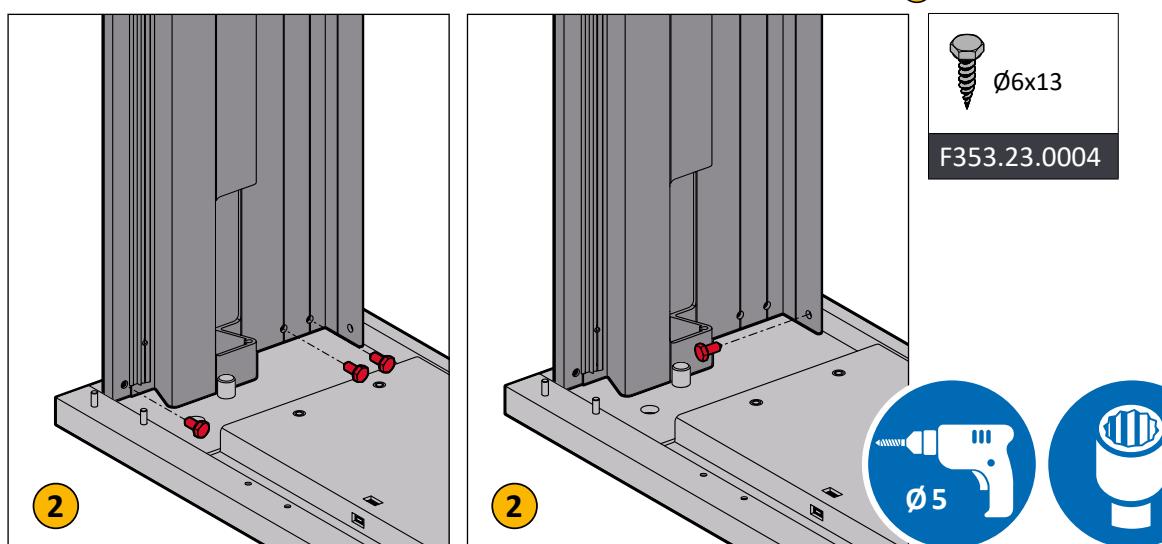
- Perform rail-guides, screw and platform assembly with utmost accuracy to avoid future malfunctions.
- Make adjustments and alignments during installation (can only be made on the platform at the installation site). *Accuracy in these adjustments results in a smooth, quiet and vibration-free stroke.*
- The longer the travel, the more care must be taken in adjustment operations.
- Follow all the directions included in this manual in order to achieve an optimal result.
- **CAREFULLY VERIFY the alignment of rail-guides, screws, pins and platform shoes, as well as the proper lubrication of screws and rail-guides. These checks are of particular importance for the proper operation of the platform.**

11.02.02 RAIL GUIDES - POSITIONING AND FIXING

- Position the rail-guides in template housings so that the holes are aligned with those on the template itself ①.

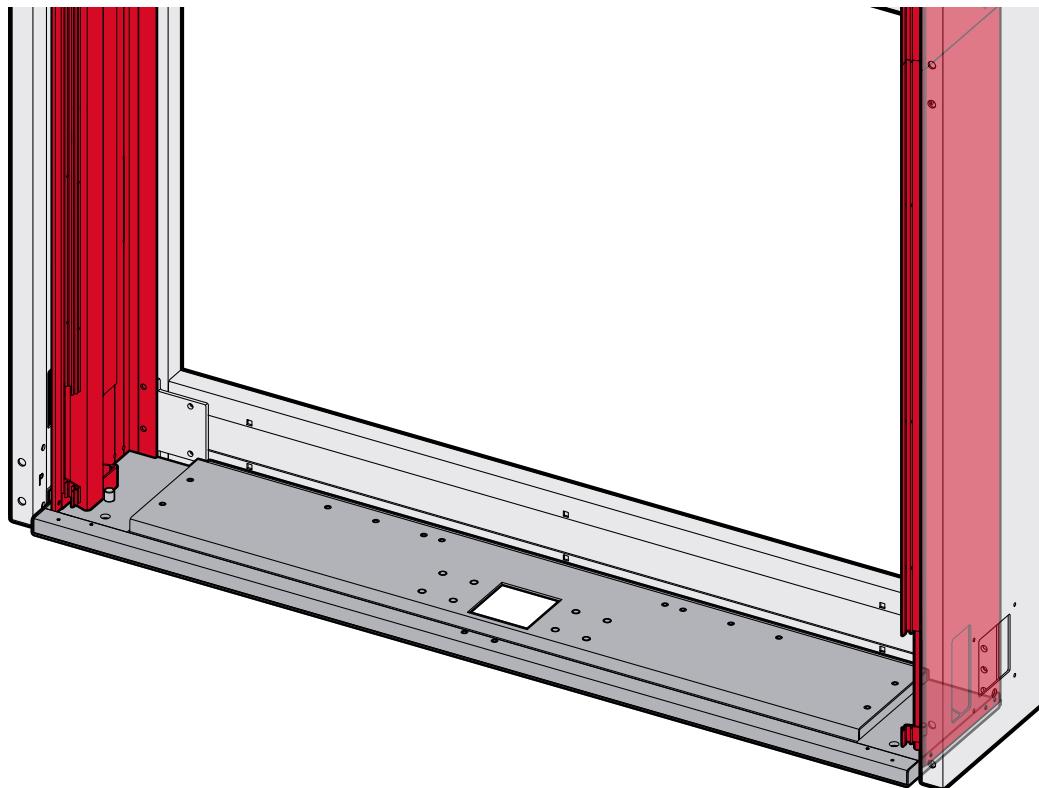


- Secure the guides to the template with the self-tapping screws provided ②.

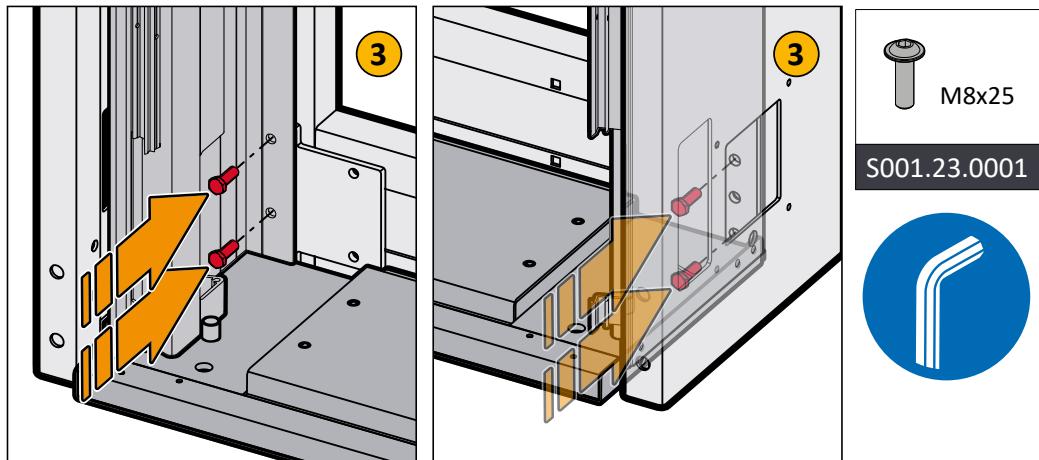


DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

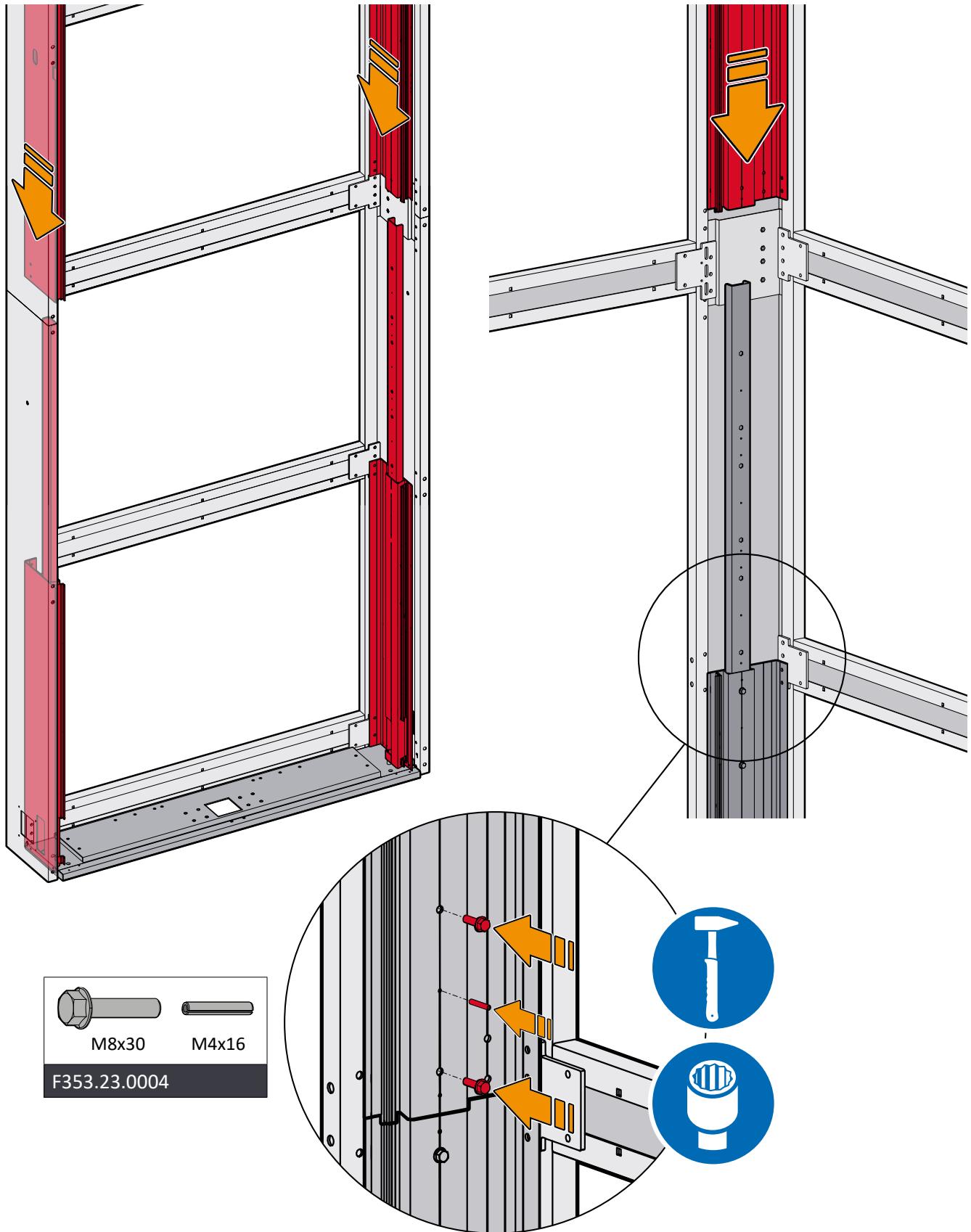


- Anchor the rail-guides to the structure using the provided screws 3.



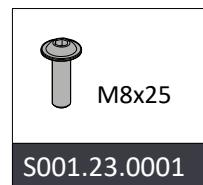
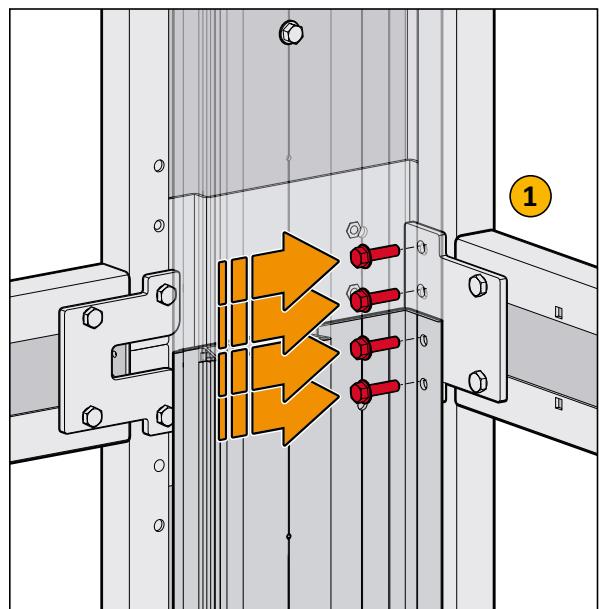
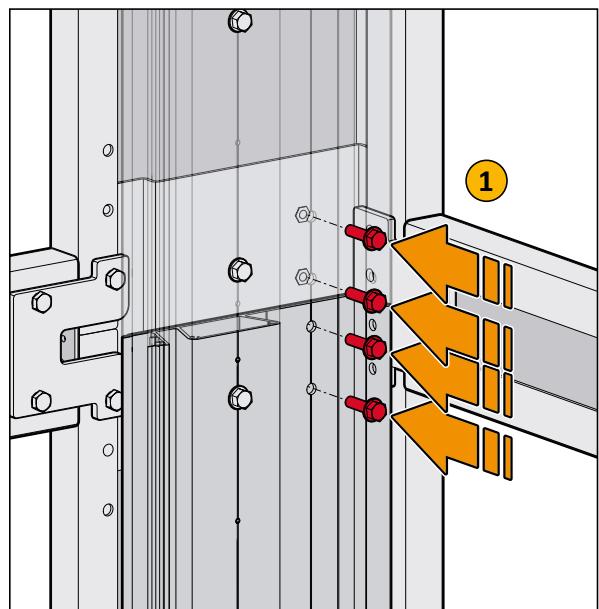
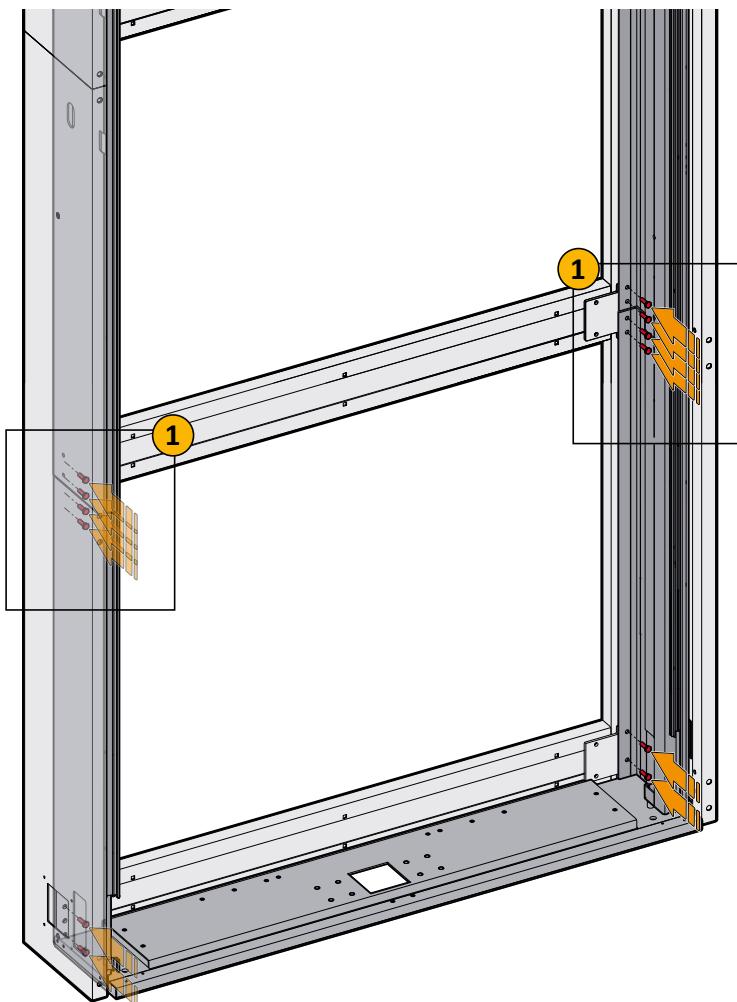
11.02.03 RAIL-GUIDES - JUNCTION

- Insert the pre-assembled segments (§ 9.02.01 RAIL GUIDES - PREPARATION) as shown, and secure them by using provided screws and spring pins.



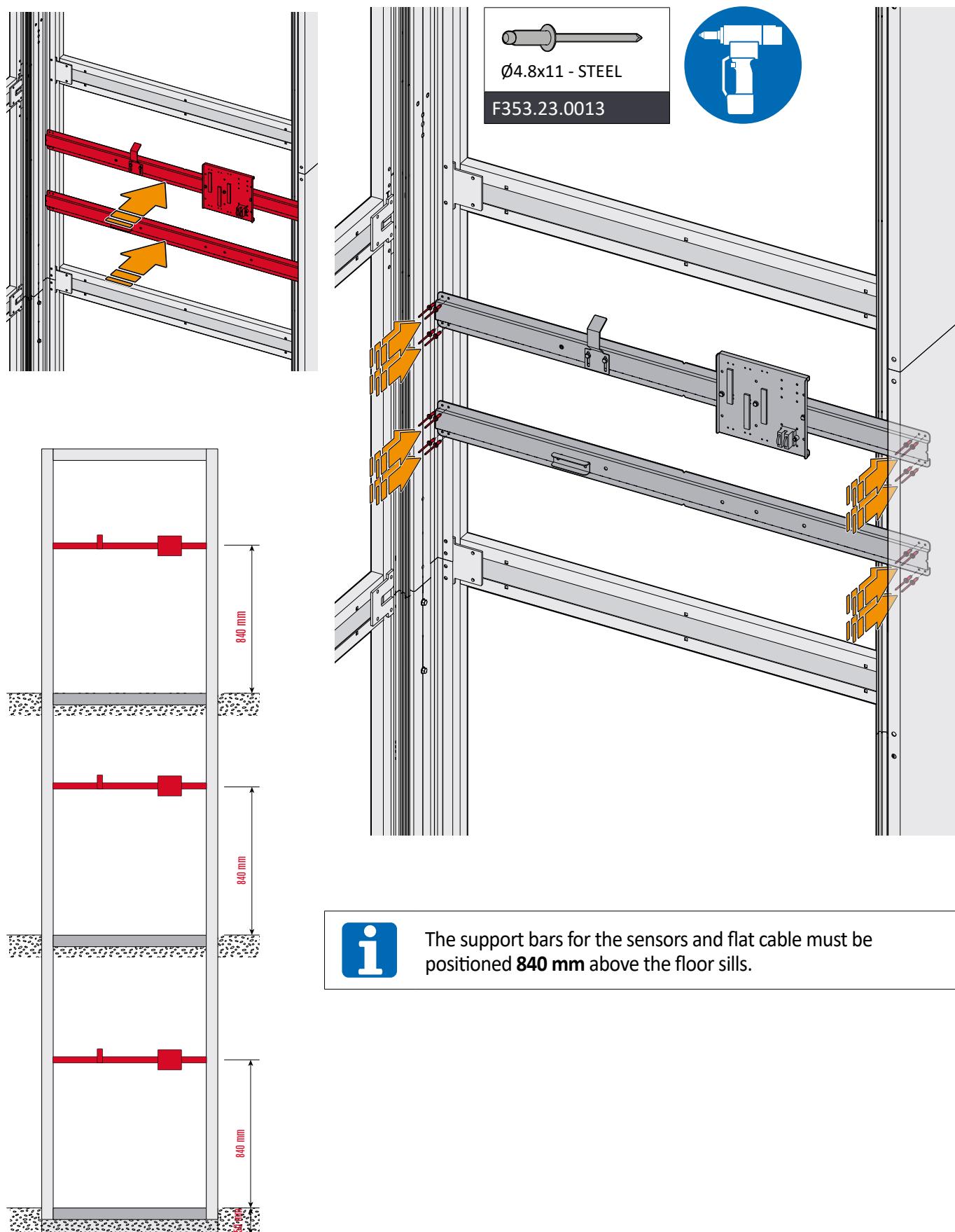
11.02.04 RAIL-GUIDES - ANCHORING TO THE STRUCTURE

- Anchor the guide rails to the structure as indicated, by using the screws provided 1.



11.03. Support bars for sensors and flat cable - assembly

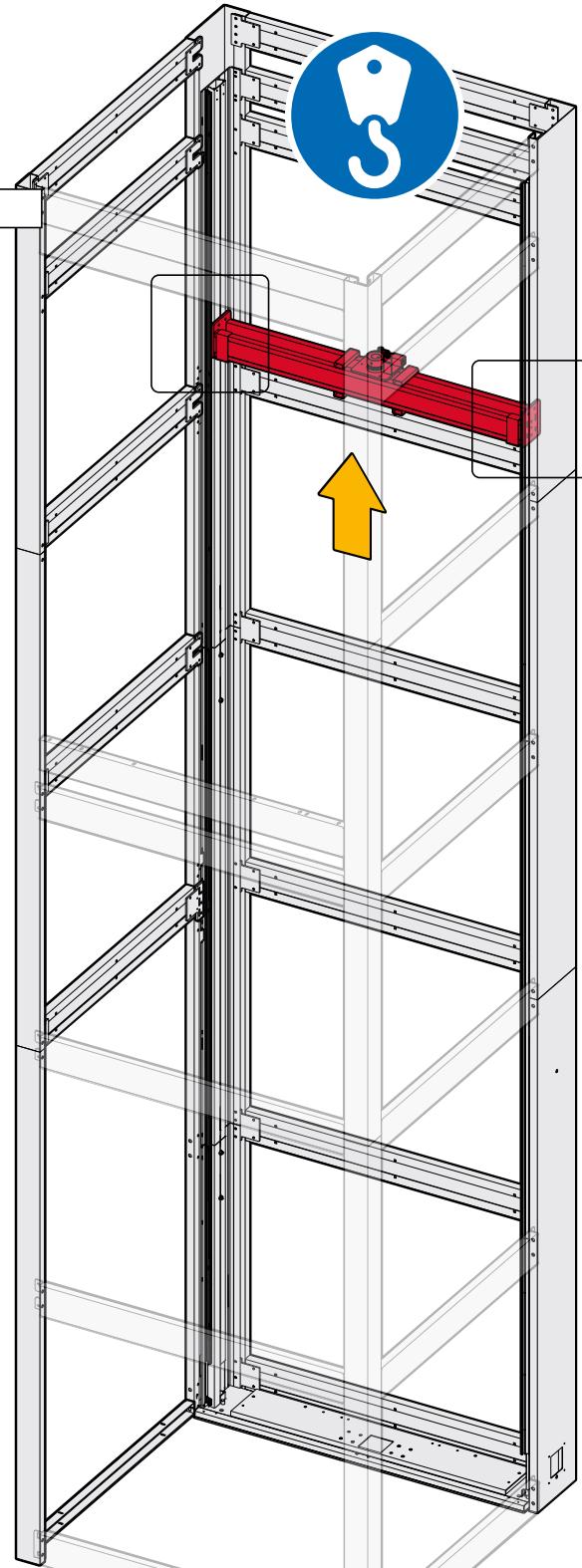
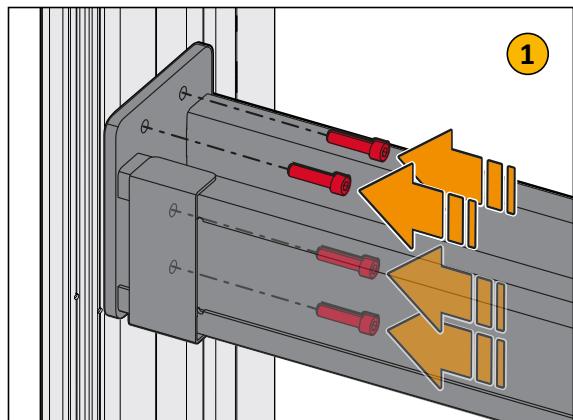
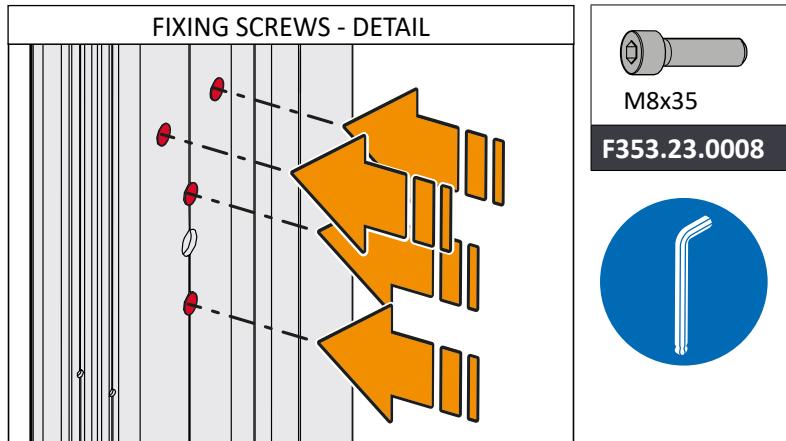
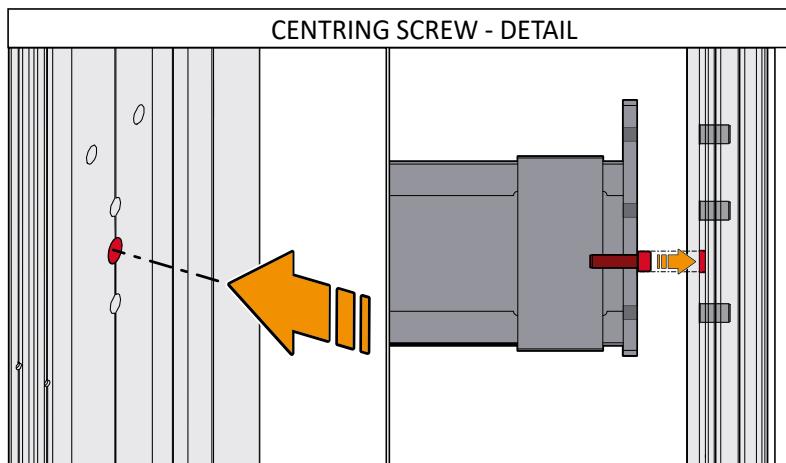
- Position the bars and fasten them using the steel rivets.



11.04. Overhead beam and transoms - assembly

CAUTION		WEAR APPROPRIATE PPE
 DANGER OF CRUSHING Move/lift the components using suitable lifting gear (see Chapter 9).		   

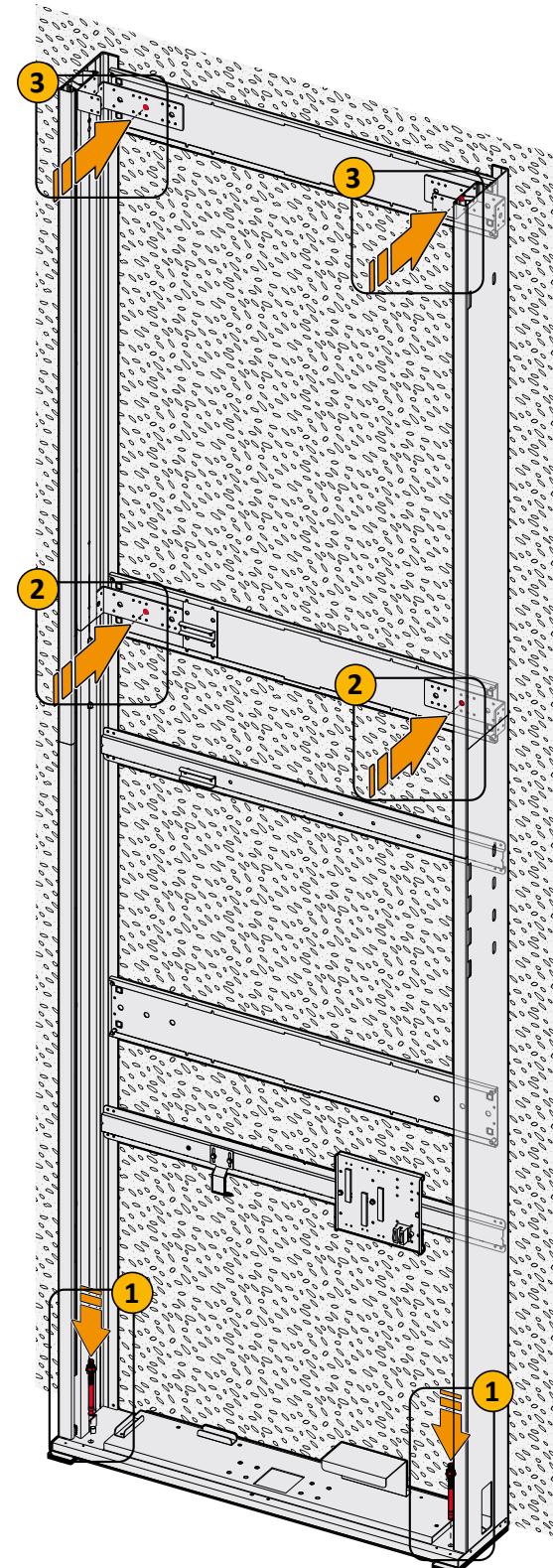
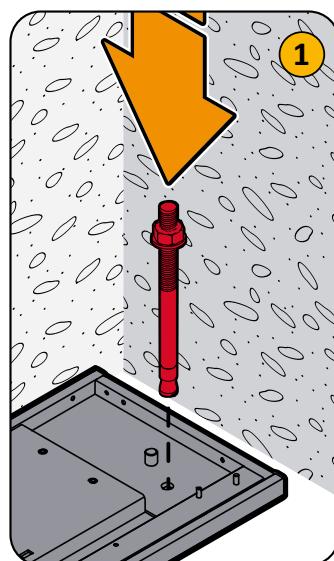
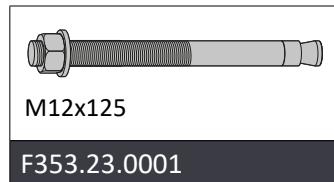
- Position the overhead beam in the position indicated by the holes, with the aid of a hoist, and secure it to the rails using the screws supplied in the KIT ①.



11.05. Platform installation in masonry shaft

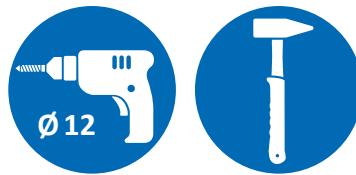
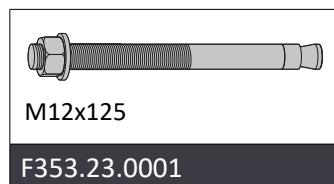
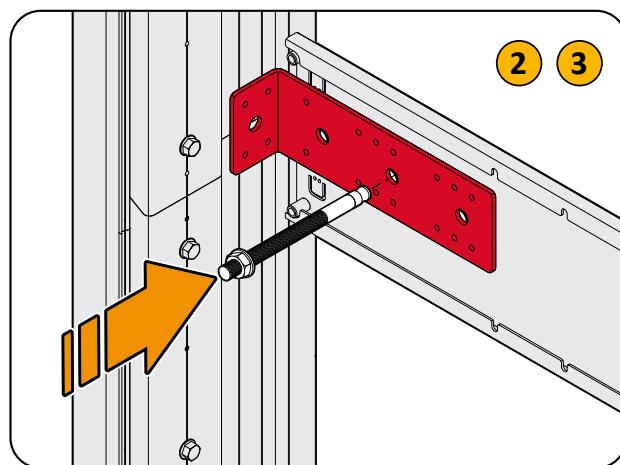
11.05.01 PIT BOTTOM TEMPLATE - FLOOR ANCHORING

- Anchor the template to the floor, through the prepared holes, using the anchor bolts provided ①.



11.05.02 RAIL-GUIDES - WALL MOUNTING

- Position the brackets and anchor them to the wall through the holes provided, by using the anchor bolts supplied ② + ③ (optional).

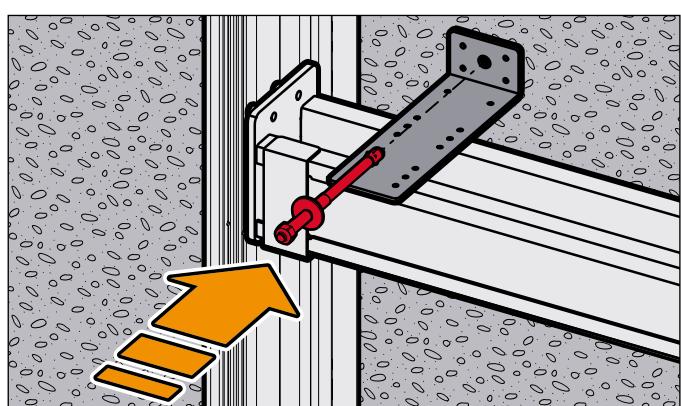
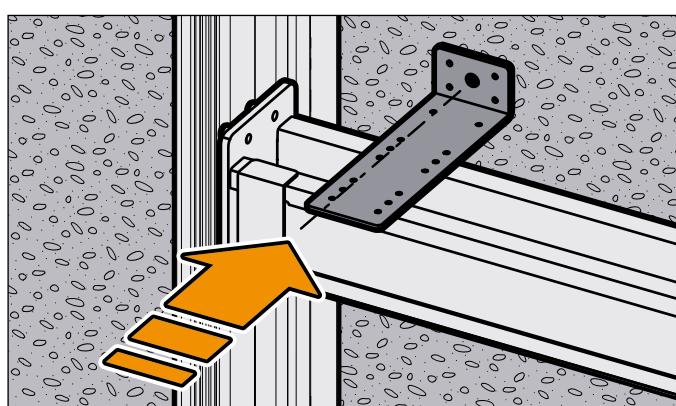
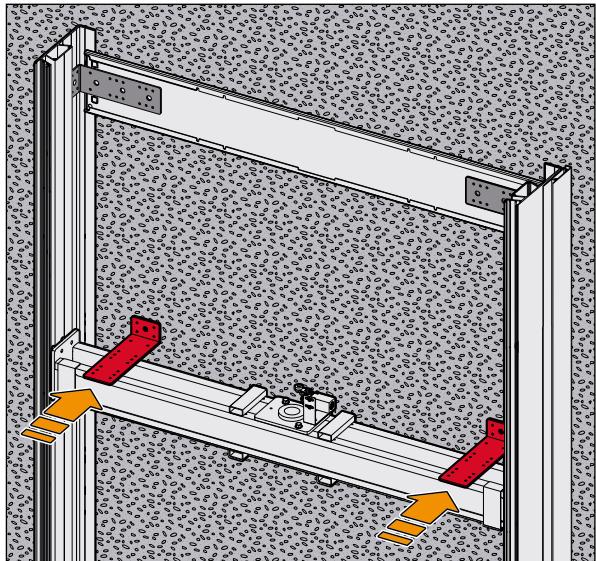


11.05.03 OVERHEAD TRANSOM - WALL FASTENING (ONLY FOR MASONRY SHAFT).

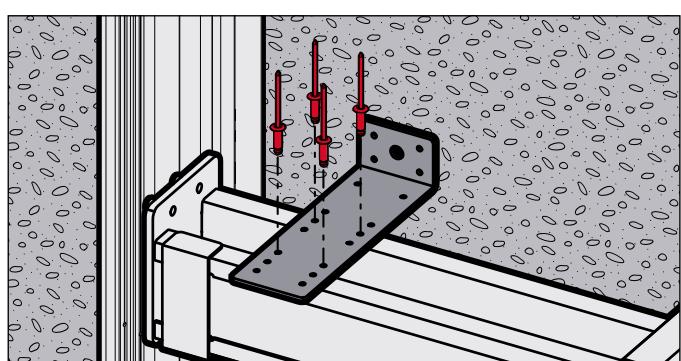
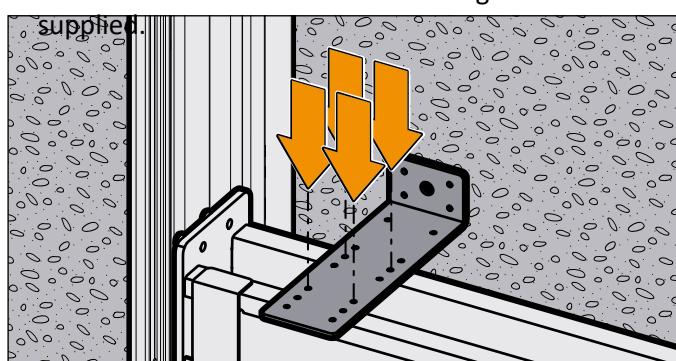
- Position the wall anchoring brackets above the overhead beam.



- Drill the wall at a position corresponding to bracket holes.
- Anchor the brackets using the anchor bolts provided.



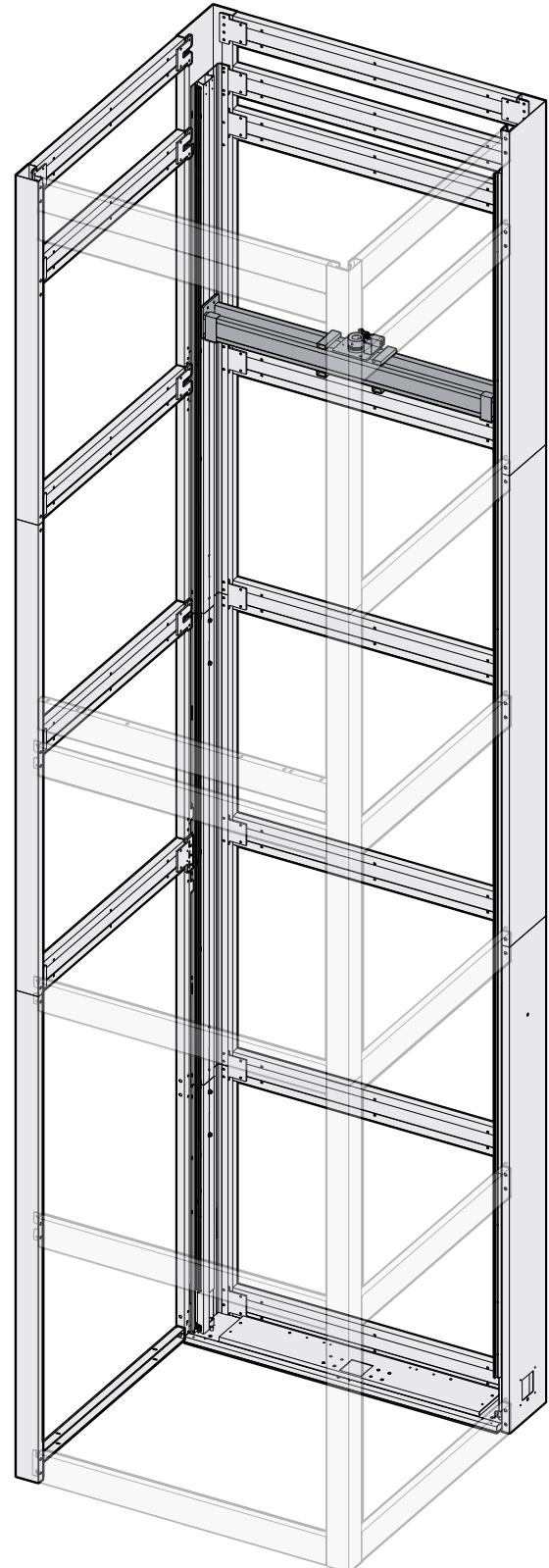
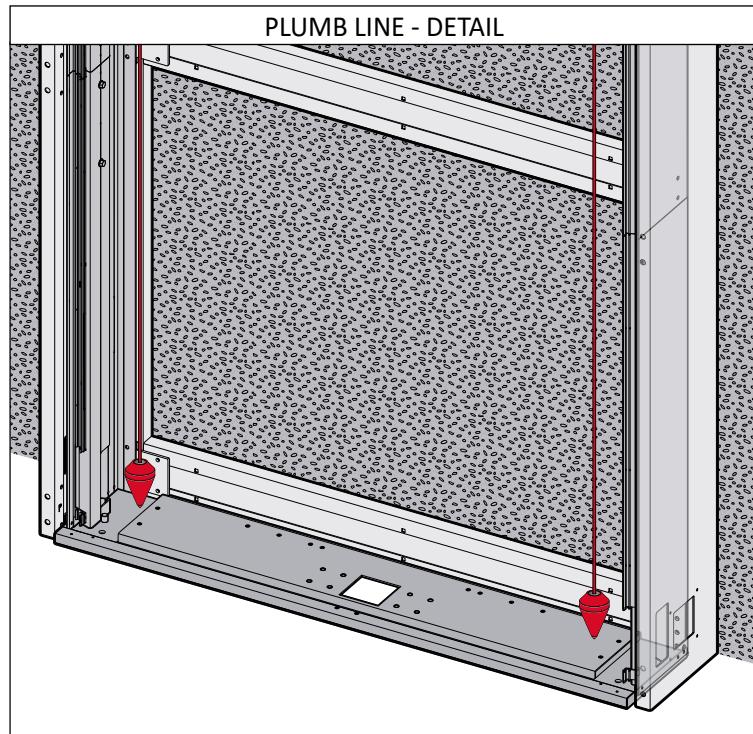
- Drill the headroom beam at a position corresponding to bracket holes.
- Fasten the brackets to the beam using the rivets supplied.



- Proceed with the installation of the last end transom as seen above.

11.06. Structure - plumb / wall anchoring

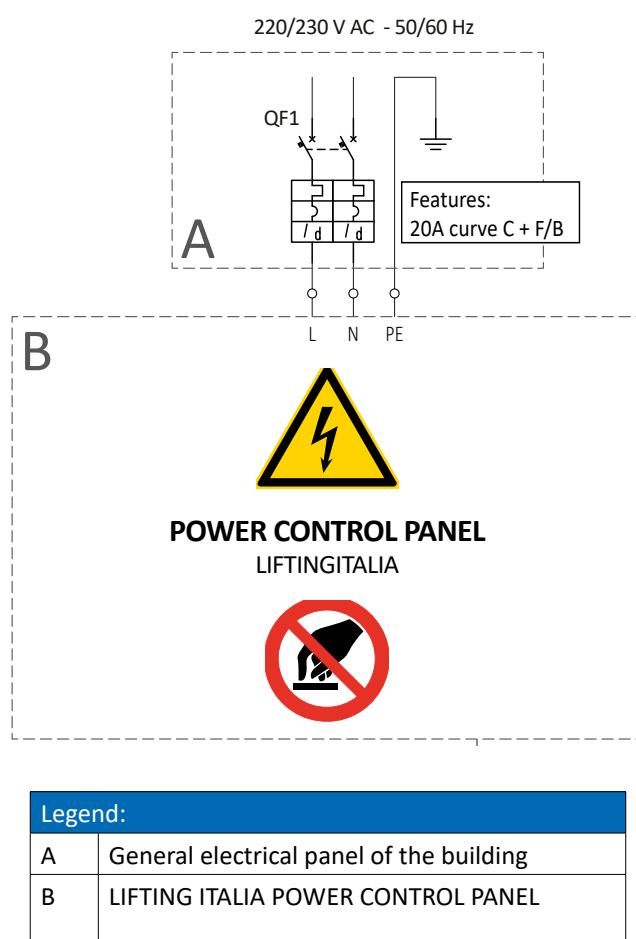
- Check the horizontal and vertical position of the installed rail-guides so that they are plumb (in both directions), with a maximum deviation of +/- 2 mm at each point.



12. Electrical system preliminary checks

12.01. Electrical system before the platform - Preparation

- The client must guarantee suitable protections for the Power Supply Panel based on the electrical power distribution system and the relevant short-circuit current, according to standard CEI 64-8 et seq. (thermal-magnetic circuit breaker of an adequate size and a 30mA earth leakage protection).
- The main disconnecting switch for the motor power, also supplied by Lifting Italia, is installed inside platform control panel.
- After installing the power supply panel, please make a record that it has been checked in accordance with point 4.01.01 of the manual "IM.TEC.127 - DOMOFLEX-2 - Final Checks".



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

13. Mechanics - installation

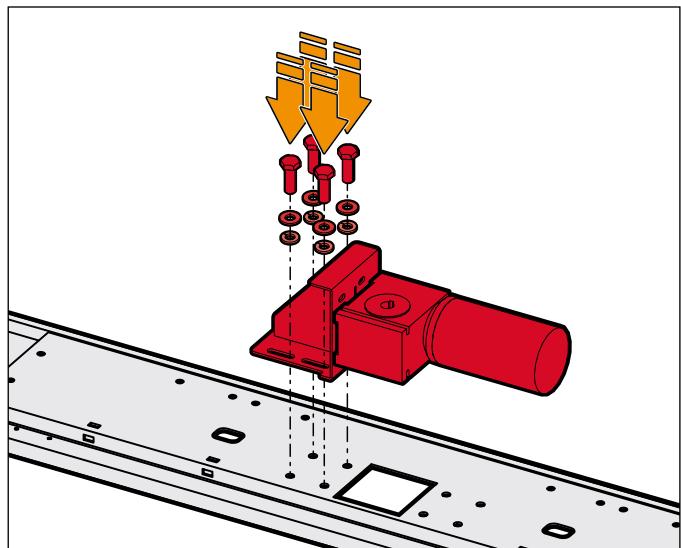
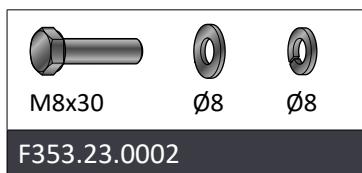
13.01. Geared motor - installation



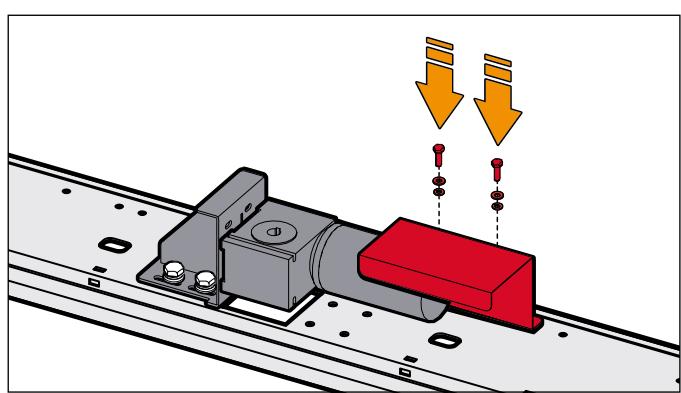
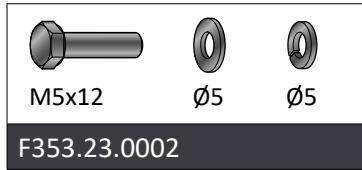
TO ACHIEVE OPTIMUM CENTRING AND AVOID VIBRATIONS:

Complete the assembly of the footplate before fully tightening the screws. Once assembly is complete, with the footplate at the lowest level, fully tighten the screws according to indicated tightening torques (page 15).

- Position and secure the geared motor with its support on the template using the screws provided.

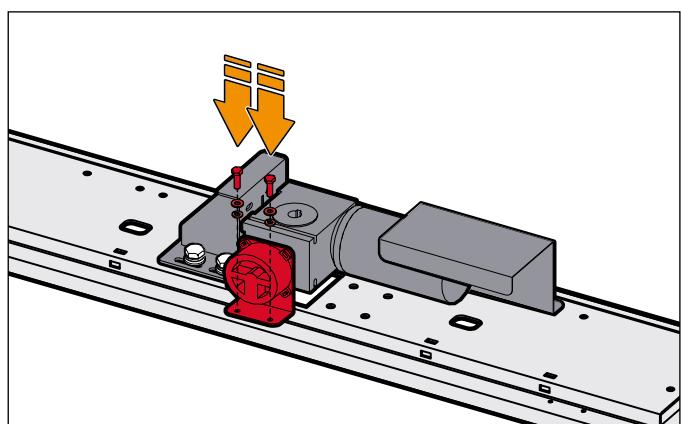
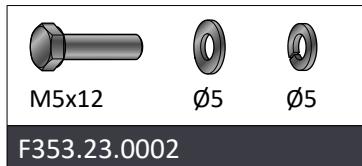


- Position the geared motor protection plate and secure it to the template, by using the screws provided.



13.02. Pit stop - installation

- Position the pit stop and secure it to the template with the screws pre-mounted on the component.



13.03. Safe Pit - installation

CAUTION

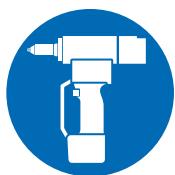


BEFORE ACCESSING THE PIT:

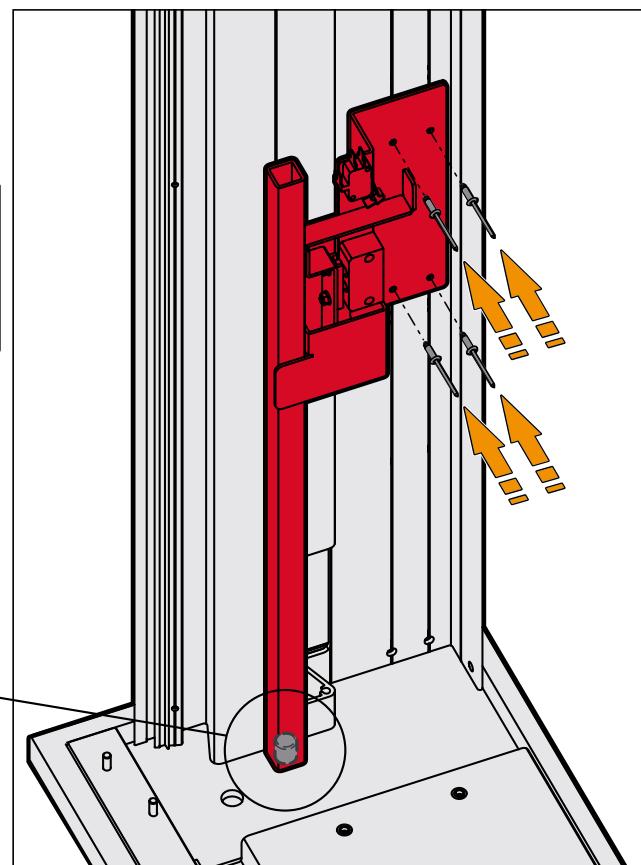
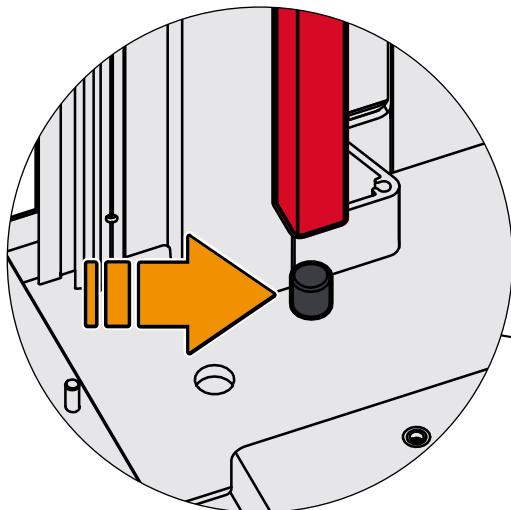
Install the Safe Pit safety device to ensure safe operation in the pit.



- Place the Safe Pit on the template at the bottom of the pit: the prop must rest on the template and fit into the prearranged pin.
- Secure the Safe Pit using the rivets provided.



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WARNING

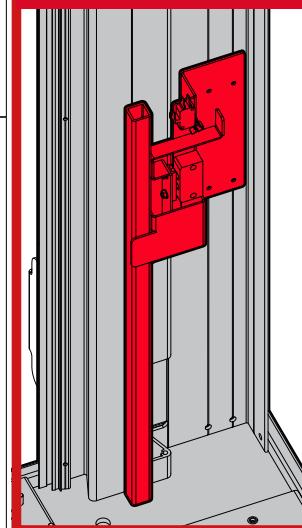


DANGER OF CRUSHING



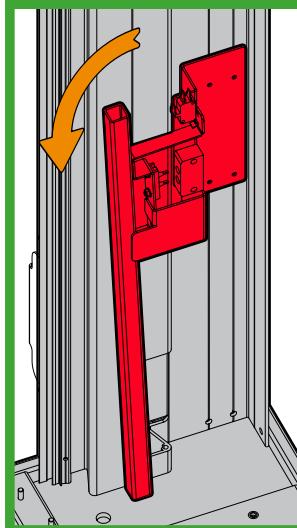
The prop must be opened/closed manually until the door, containing the control lever, is installed.

DANGER



CLOSED (OFF) SAFE PIT

SAFETY

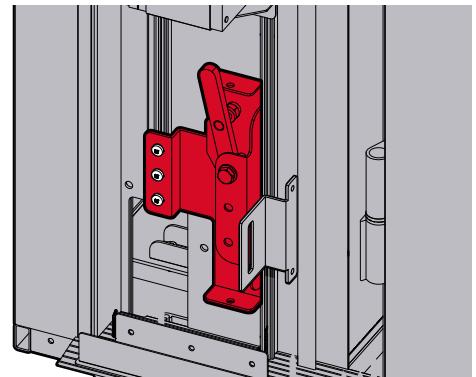


OPEN (ON) SAFE PIT



The control lever for Safe Pit remote activation/deactivation is pre-mounted in the cabinet of the electrical panel located in the door jamb.

To connect it to the device, see Paragraph **11.13.04 SAFE-PIT - EXTERNAL CONTROL LEVER CONNECTION**.



13.04. Maneuvering screw - checks and precautions

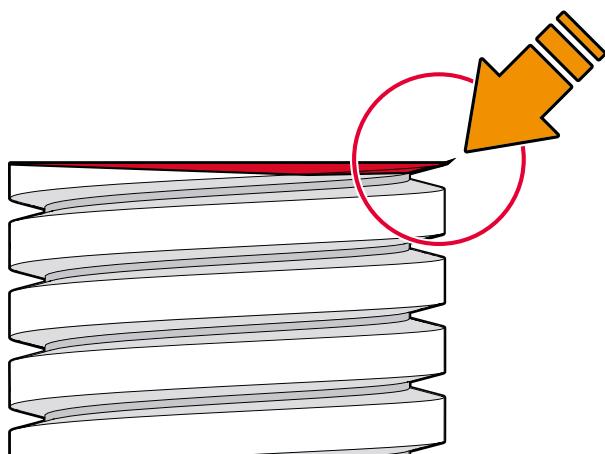
NOTICE



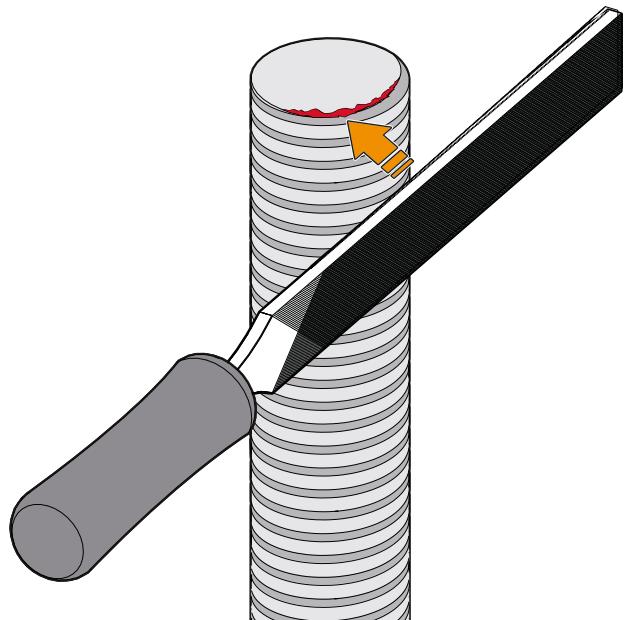
ALWAYS CHECK THE INTEGRITY OF THE MANEUVERING SCREW.

Before and after assembling the screw sections, make sure there is no damage, metal burrs or protruding parts of any kind.

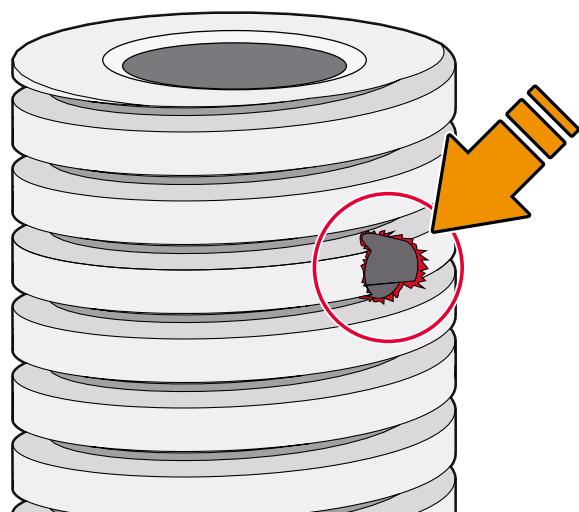
MANEUVERING SCREW - BURRS DETAIL



MANEUVERING SCREW - BURRS REMOVAL



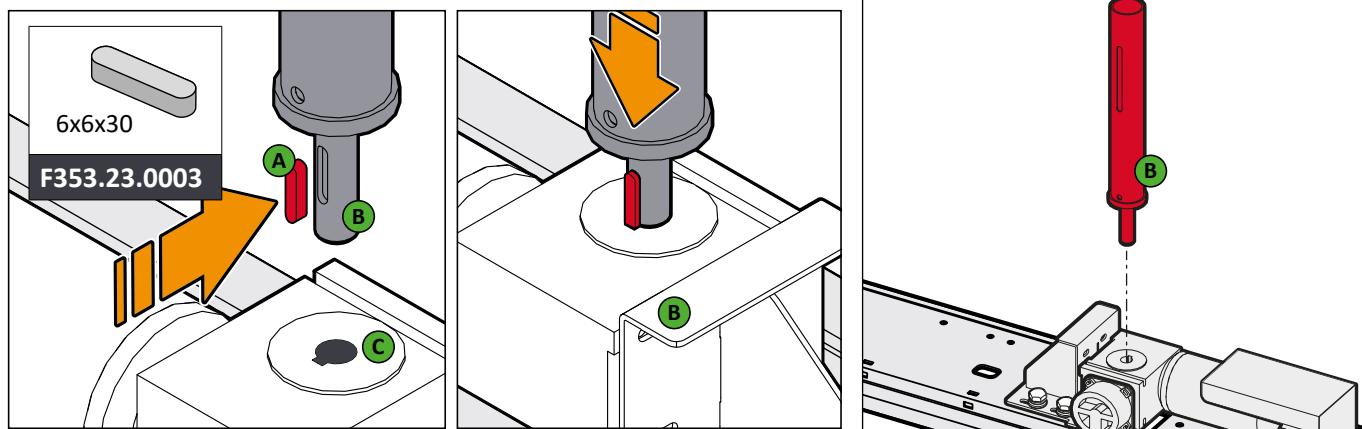
MANEUVERING SCREW - BURRS DETAIL



13.05. Screw column - pre-assembly and installation

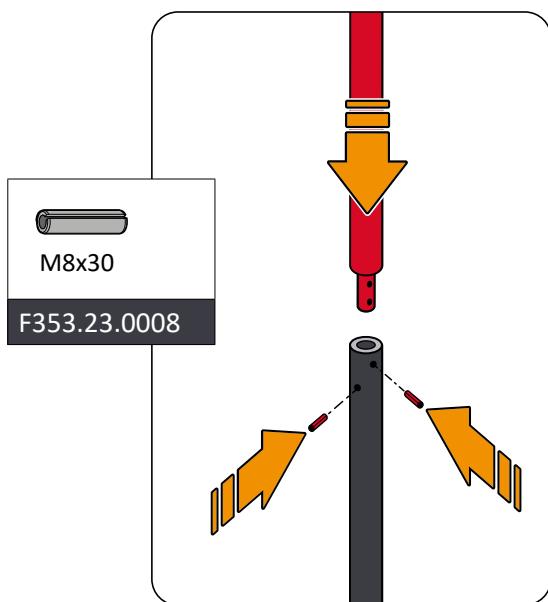
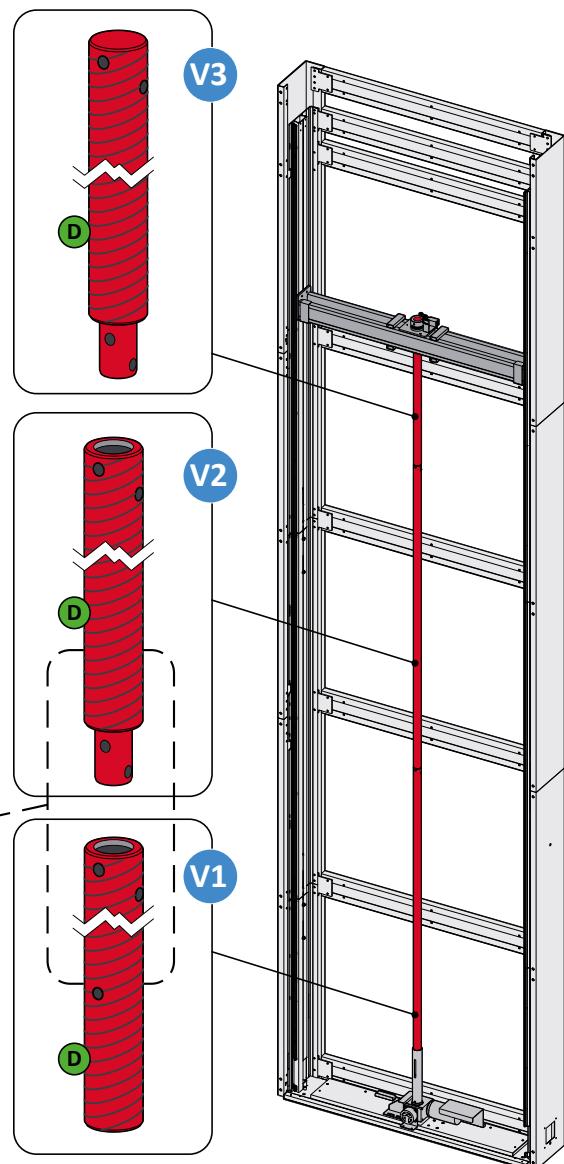
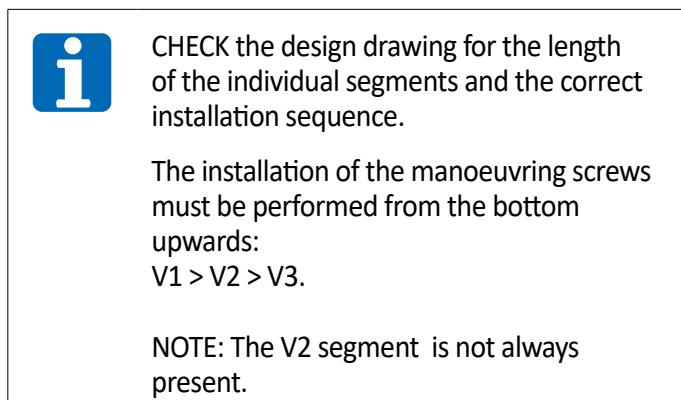
IN THE PIT:

- 1 Insert the metal key **A** in the keyway of the sleeve **B**.
- 2 Insert the sleeve **B** in the hub of the worm gearmotor **C**.



- 3 Assemble the screw segments **D**.

Use a suitable lifting device to lift the segments.

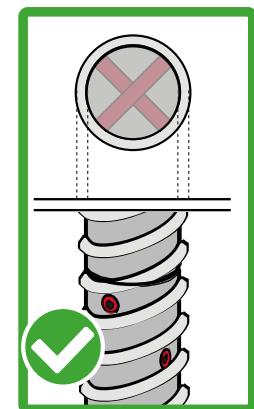
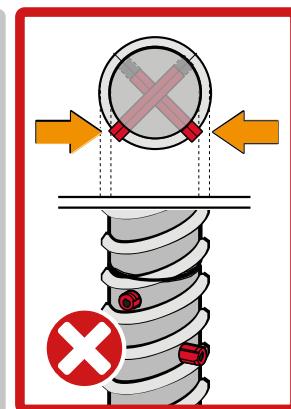
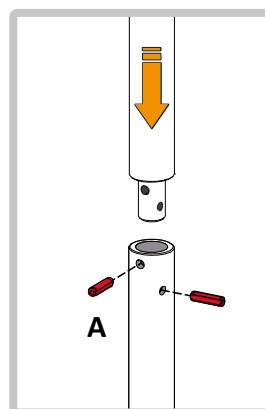


WARNING

ANY PIN PROTRUSION CAN COMPROMISE MACHINE SAFETY



Ensure that **fixing pins** do **NOT** protrude from their seat on either side.



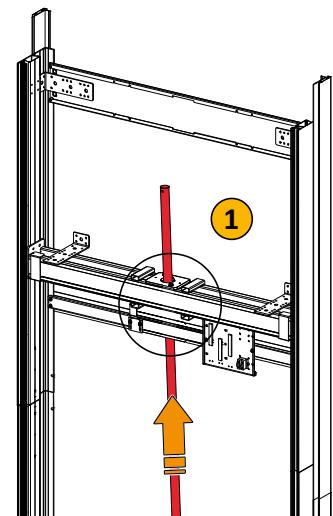
CAUTION



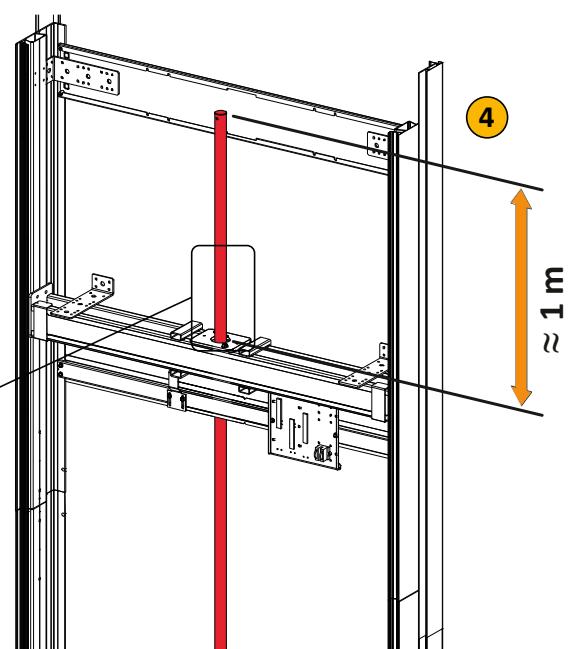
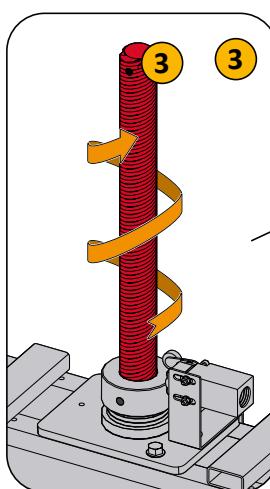
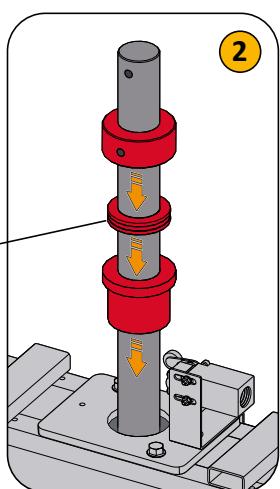
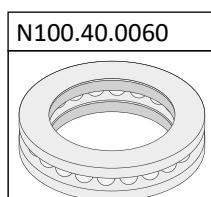
DANGER OF CRUSHING

Lift the screw segments using suitable lifting equipment.

WEAR APPROPRIATE PPE

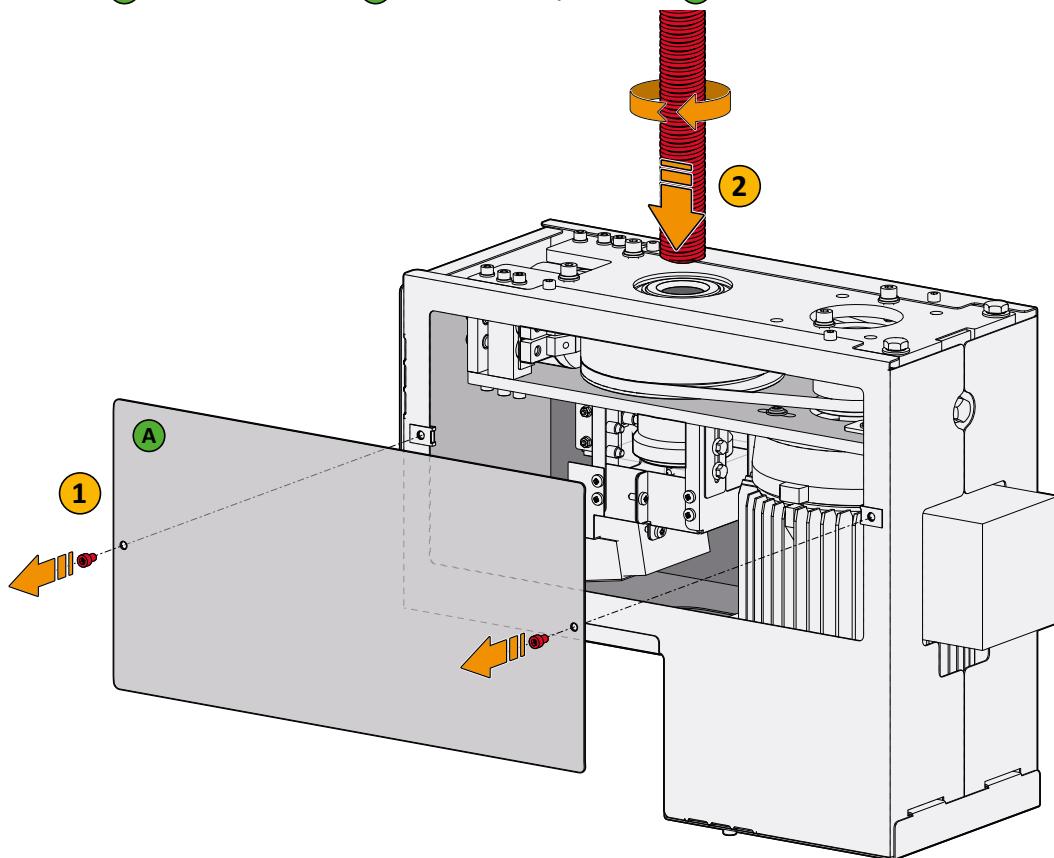


- Insert the assembled screw into the headroom beam **1**.
- ON THE HEADROOM BEAM: position bush, bearing, and nut screw **2** on the screw.
- Tighten the screw **3** so that it protrudes from the headroom beam by approximately 1m **4**.

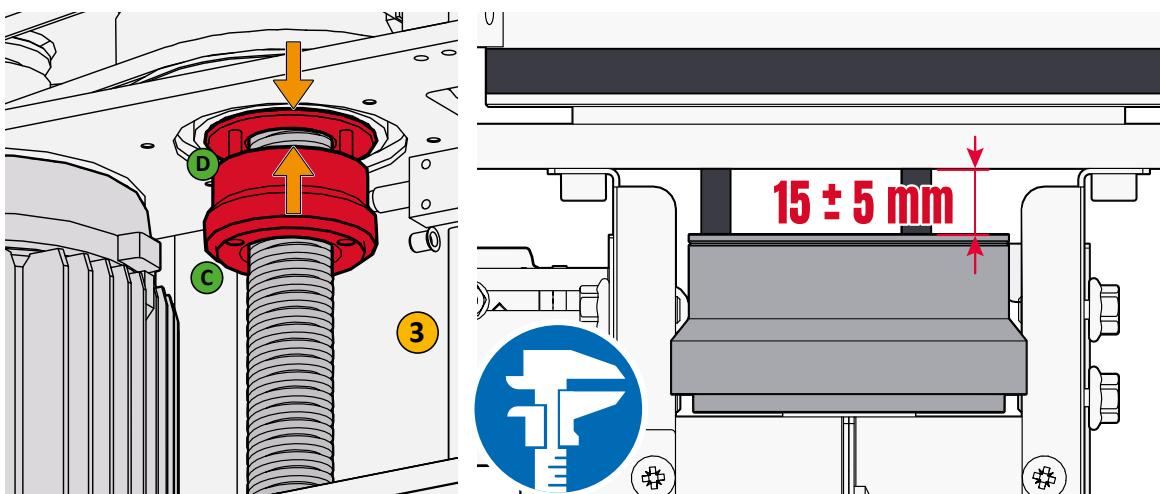


13.06. Safety nut - verification of correct spacing

- 1 Remove the 'silent box' cover **A** to access the engine compartment.
- 2 Insert the Lead Screws **B** into the lead nut **D** and the safety lead nut **C**.



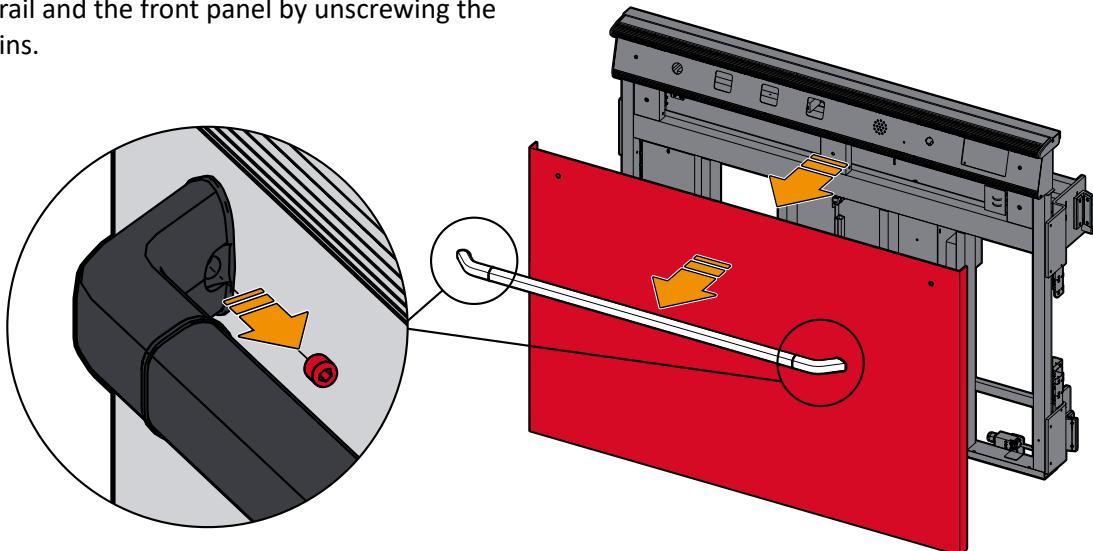
- 3 Ensure that the installation is carried out correctly (see below).

NOTICE	
	<p>Ensure that the nominal distance between the nutscrew A and the pulling device B is 15 mm (with a tolerance of +/- 5 mm).</p>  <p>The technical drawings show a cross-section of the installation. On the left, a red component labeled 'D' is being pulled by a red component labeled 'C' through a grey coil spring. An orange arrow points from the top of the red component towards the grey housing. A callout labeled '3' points to this assembly. On the right, a side view of the housing shows a grey rectangular component. A red dimension line indicates a height of '15 ± 5 mm' from the base of the component to the top of the grey housing. A blue circle with a hammer icon is positioned at the bottom of the dimension line.</p>

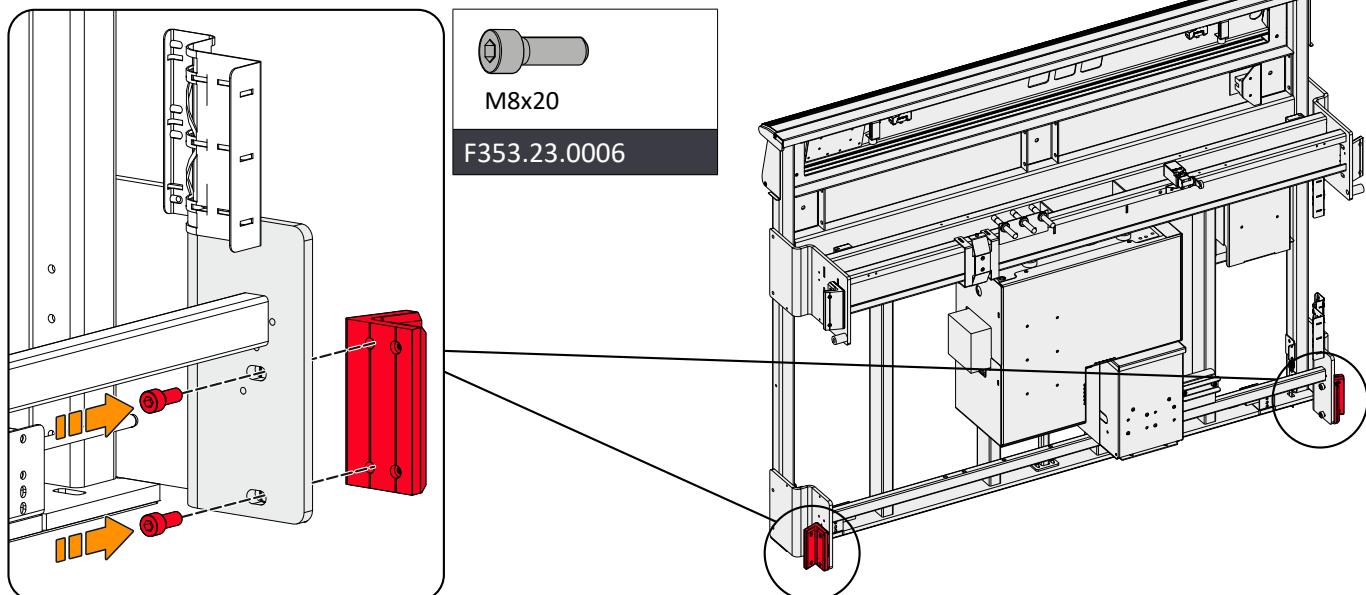
13.07. Platform car sling (with mechanics) - predisposition

CAUTION		WEAR APPROPRIATE PPE
	DANGER OF CRUSHING Move/lift the components using suitable lifting gear (see Chapter 8).	
NOTICE		
	Platform position and levelling adjustment is very important: an incorrect adjustment of the position and the shoes can cause noises and vibrations.	
	The car backboard is supplied pre-assembled.	

- Remove the handrail and the front panel by unscrewing the handrail locking pins.



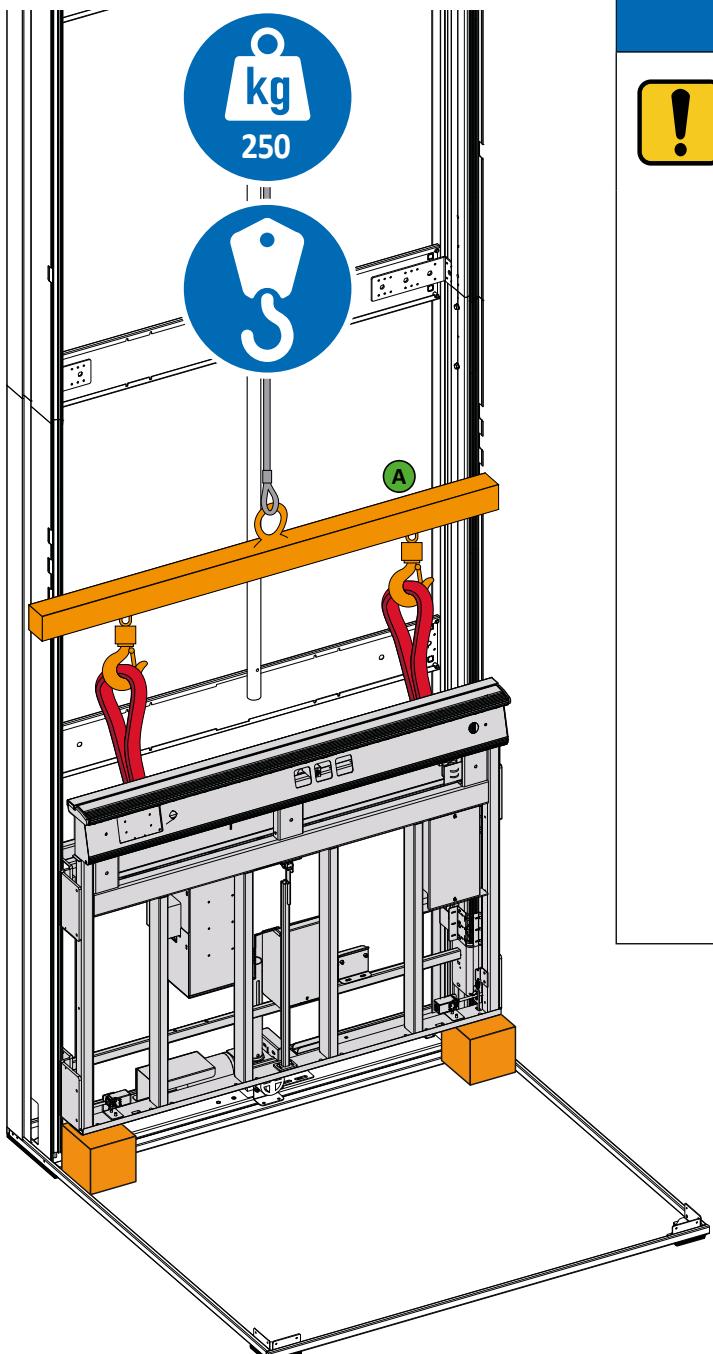
- Install the bottom shoes onto their specific brackets.



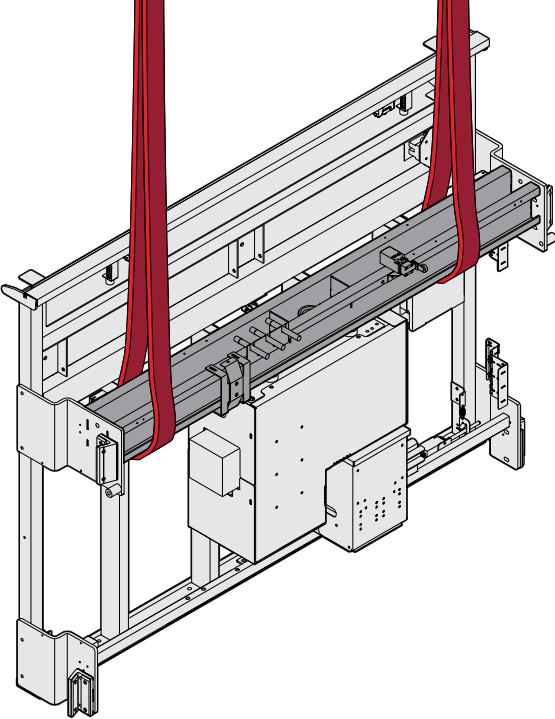
13.08. Platform wall (with mechanics) - handling

CAUTION		WEAR APPROPRIATE PPE
	DANGER OF CRUSHING Move/lift the components using suitable lifting gear (see Chapter 9).	  

For moving/lifting platform components we recommend the use of a winch/hoist anchored in the head (see Chapter 8) and a lifting sling bar **A**.

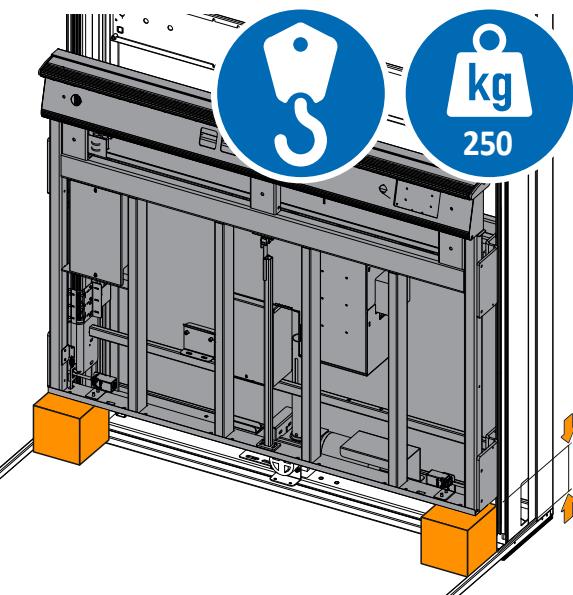
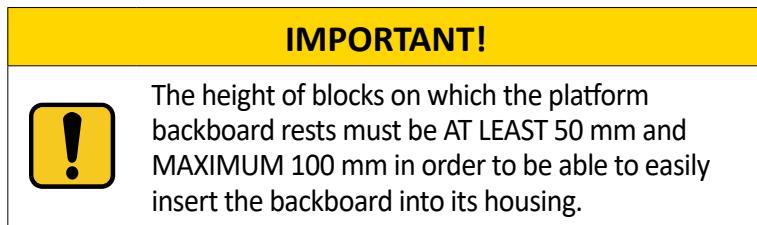


NOTICE	
	Attach the lifting slings to the motor beam and NOT to the hand control in order to avoid damage or deformation of the hand control.

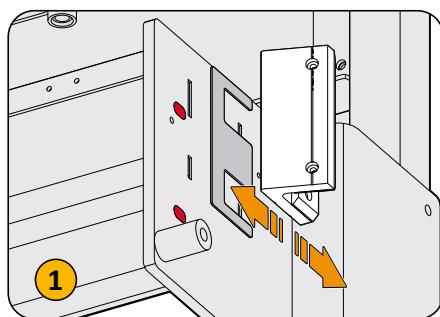
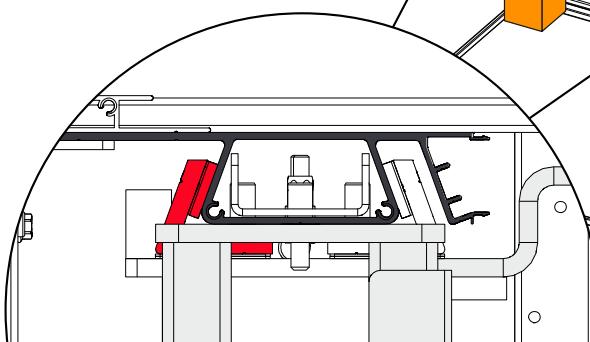
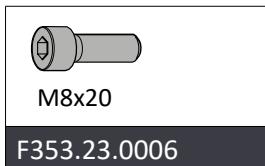
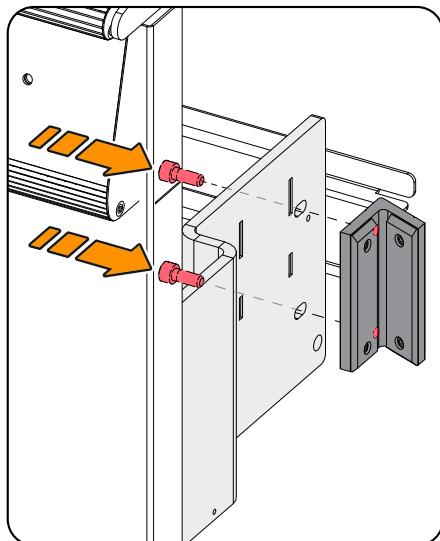


13.09. Platform car sling (with mechanics) - assembling

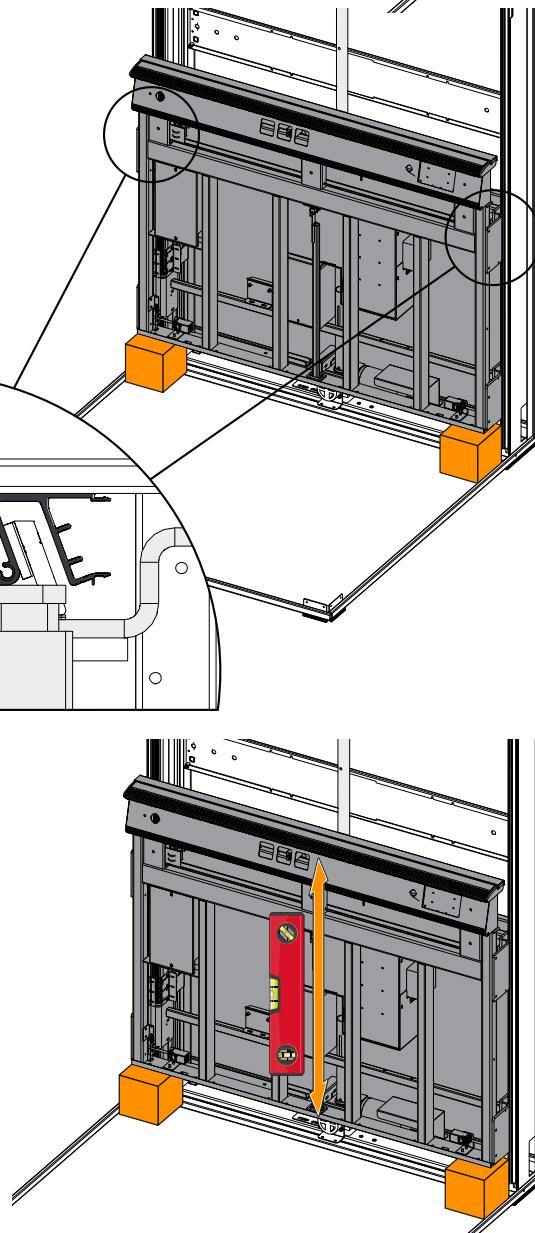
- Position the platform car sling in the pit, inserting it into the specific discharges provided on the guide rails, by keeping it raised by means of 2 risers (e.g. wooden blocks).



- Install the upper shoes onto the specific brackets.



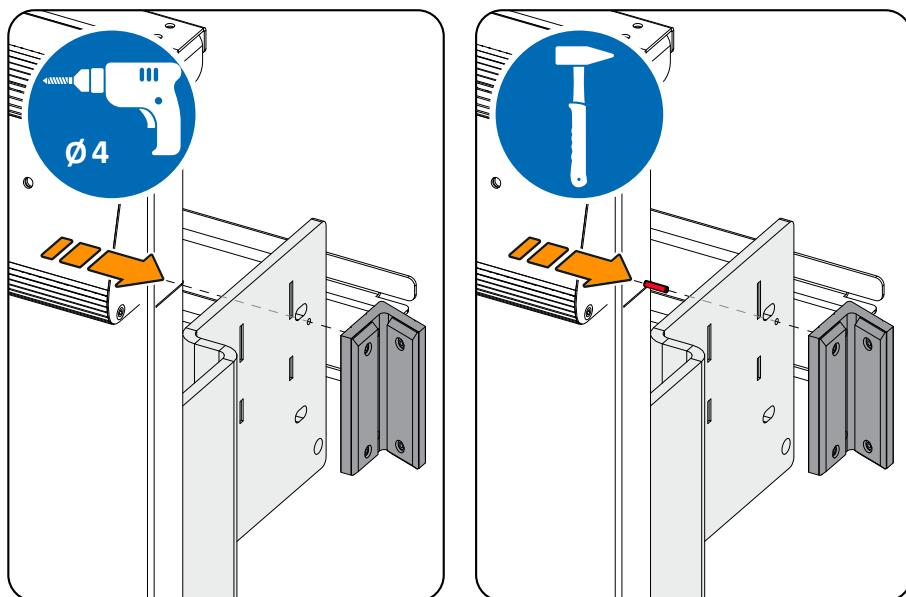
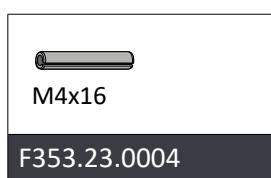
- Check the vertical levelling of the platform car sling. If necessary, adjust it using the slots in the top shoes **1**.



DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

TOP SHOES

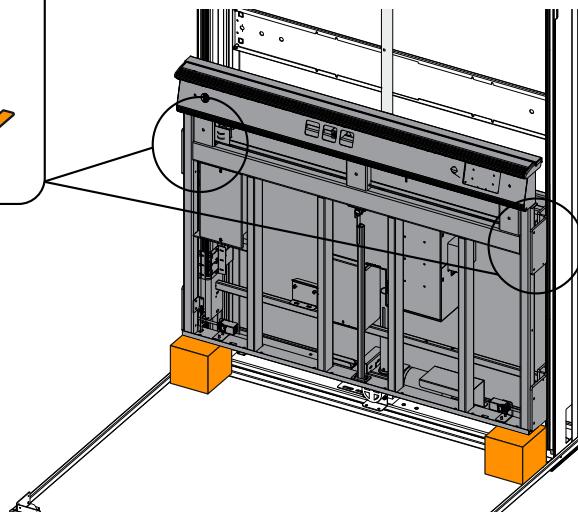
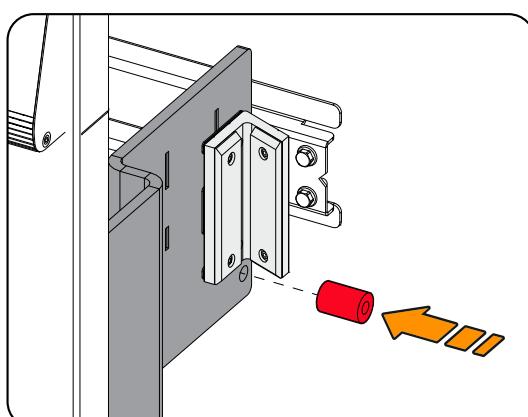
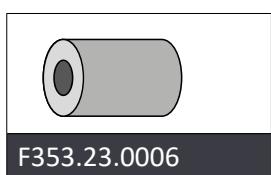
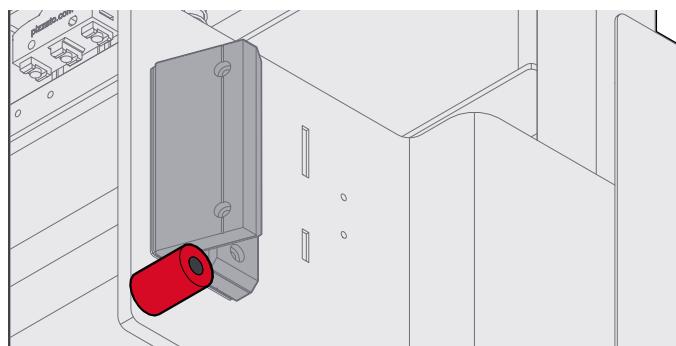


WARNING

MISSING SAFETY PINS CAN COMPROMISE MACHINE SAFETY.



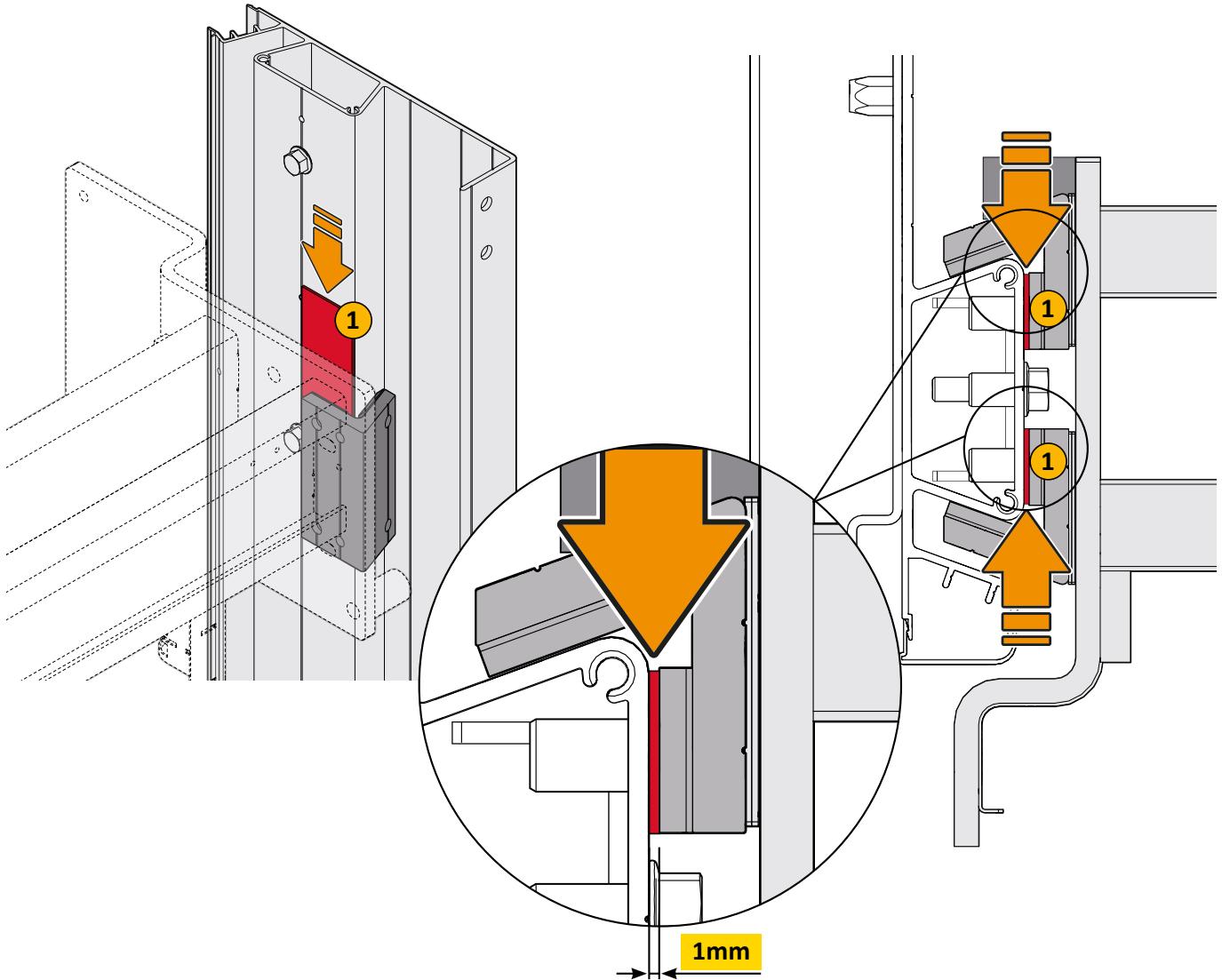
Ensure that **safety pins** are correctly installed.



- Secure the shoes by tightening the screws and install the safety pins of the top shoes, on both sides.

13.09.01 SHOES - CORRECT POSITIONING

Insert a shim of 1mm (1) between the shoes and the rail guides in order to achieve a 1mm clearance that will allow for optimum operation.

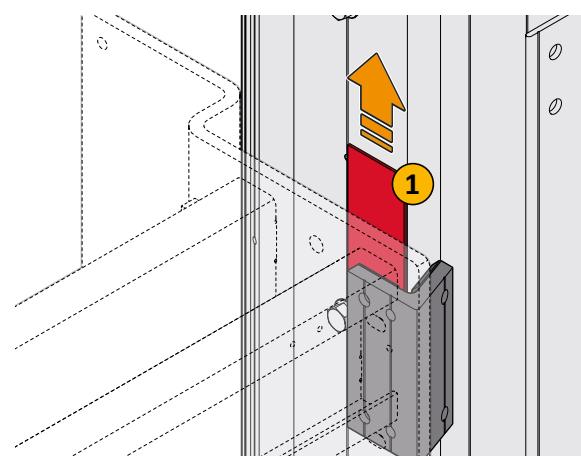


IMPORTANT!



Be sure to remove the shims once the installation of the platform wall is complete.

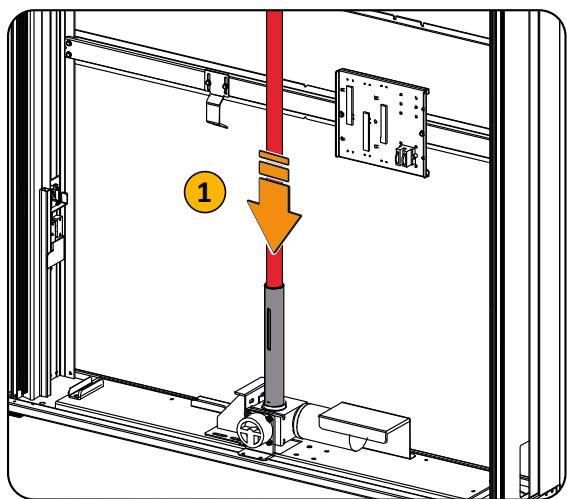
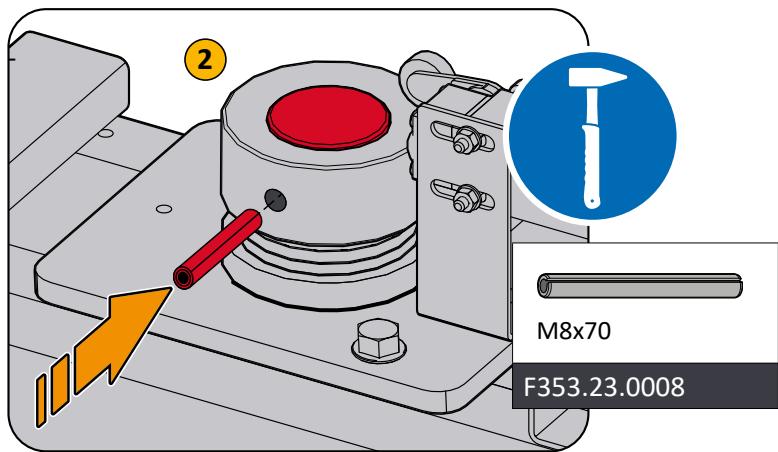
Failure to remove them may damage the rails guides and platform.



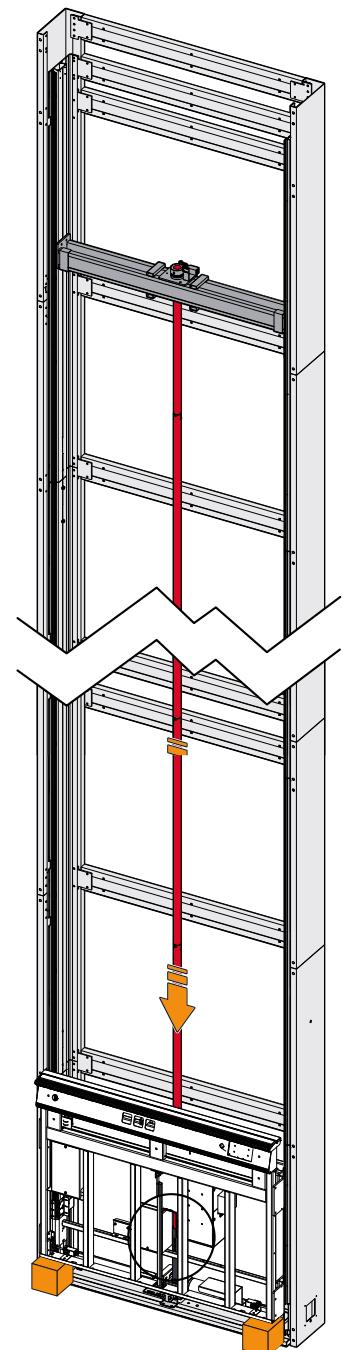
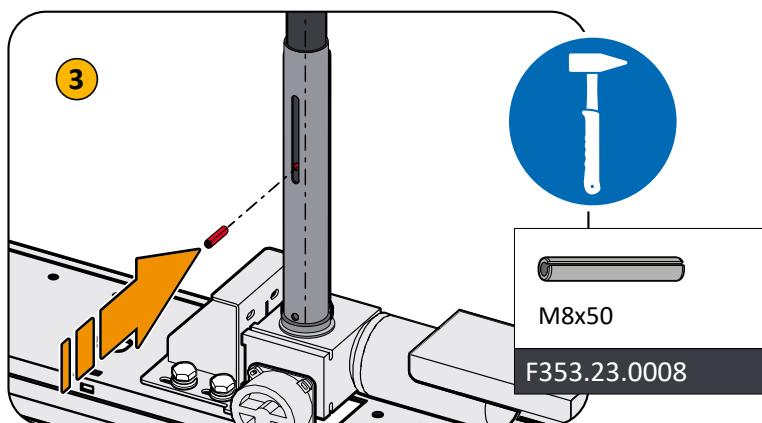
DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

- Lower the manoeuvring screw until it is inserted into the pit bush, passing through mechanics assembly motor (platform backboard) 1.
- Secure the manoeuvring screw to the headroom nut screw using the safety pin provided 2.

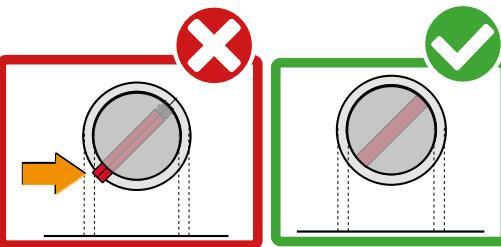


- Secure the screw to the pit bush using the safety pin provided 3.



WARNING

ANY PIN PROTRUSION CAN COMPROMISE MACHINE SAFETY

	<p>Ensure that fixing pins do NOT protrude from their seat on either side.</p>
	

13.10. Travelling cables - installation and connection



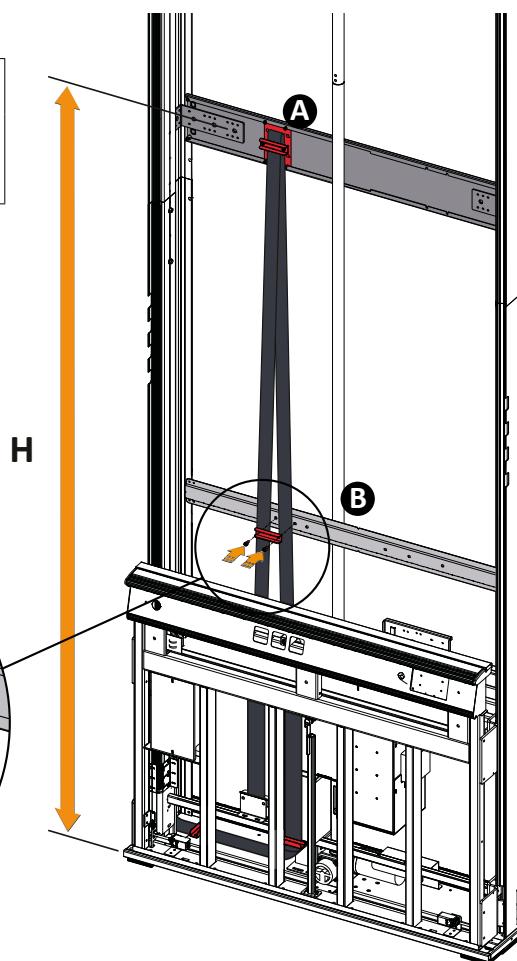
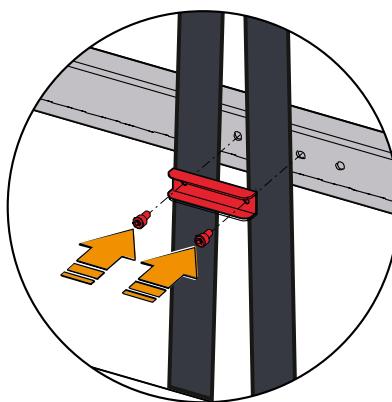
The cable is pre-assembled on the platform car sling.

The exact dimension of the bracket is shown in the assembly diagram provided.

- Position the cable support bracket on the transom positioned at a height equal to

$$H > \frac{\text{travel}}{2}$$

with respect to the lowest access.



- Unwind the cable starting from the platform wall and secure it to the cable support bracket **A** on the beam.
- Route the cable toward the pit template and secure it by positioning the brackets provided.
- Secure the cable to the beam every 2 m approximately by means of electrician cable ties as indicated in point **B**.

IMPORTANT!

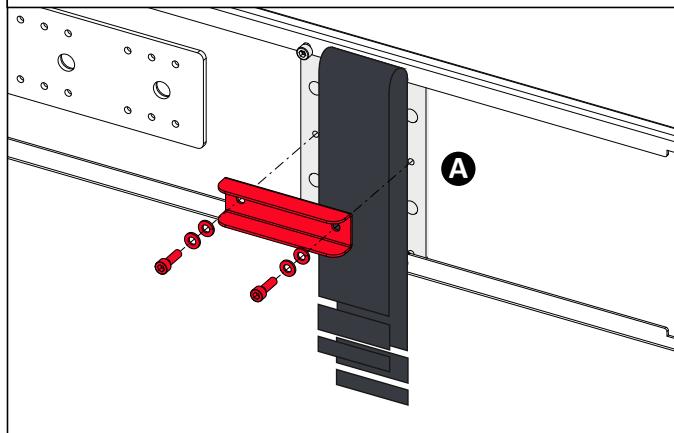


Route the cable so that the folds are soft and do not damage the cable itself.

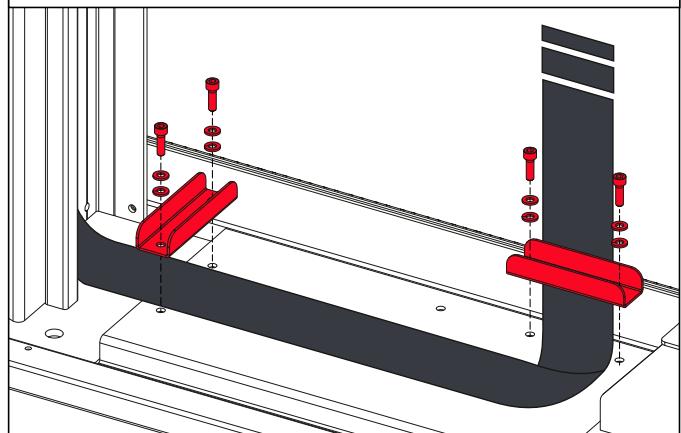


F353.23.0007

FLAT CABLE - BEAM FIXING - DETAIL

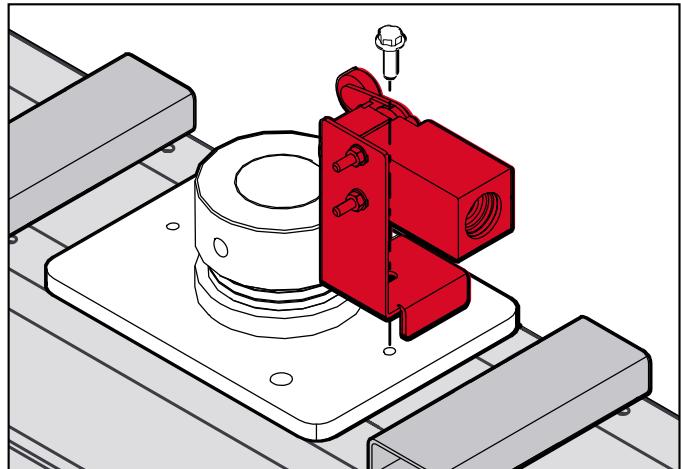


FLAT CABLE - PIT TEMPLATE FIXING - DETAIL



13.11. Headroom safety contact

- Place the headroom safety contact on the headroom beam.

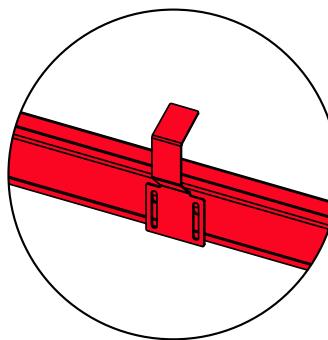


13.12. Magnet support brackets - contacts - ramps

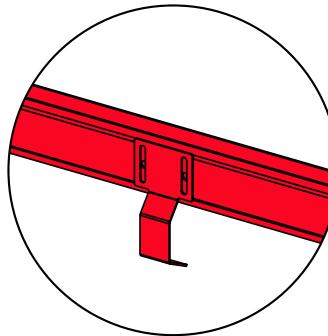


Pay attention to the positioning of the magnet support brackets:

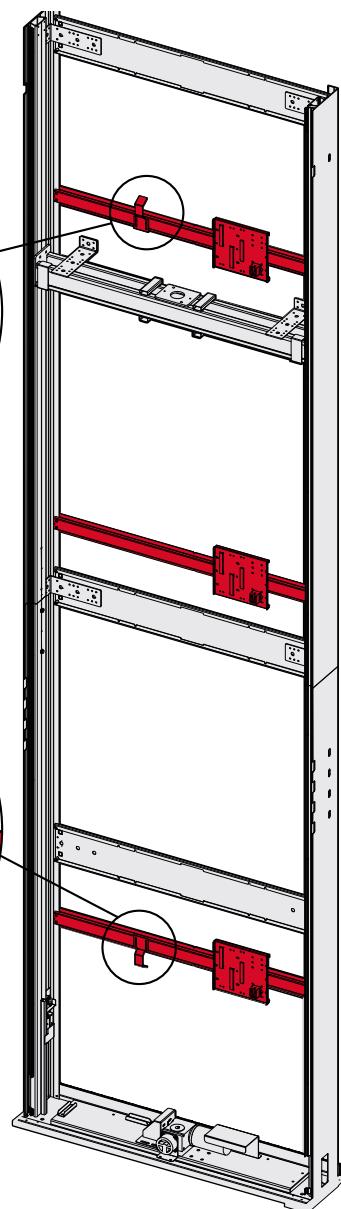
IN THE HEADROOM, the bracket with the overtravel contact must be positioned facing down (bottom overtravel).



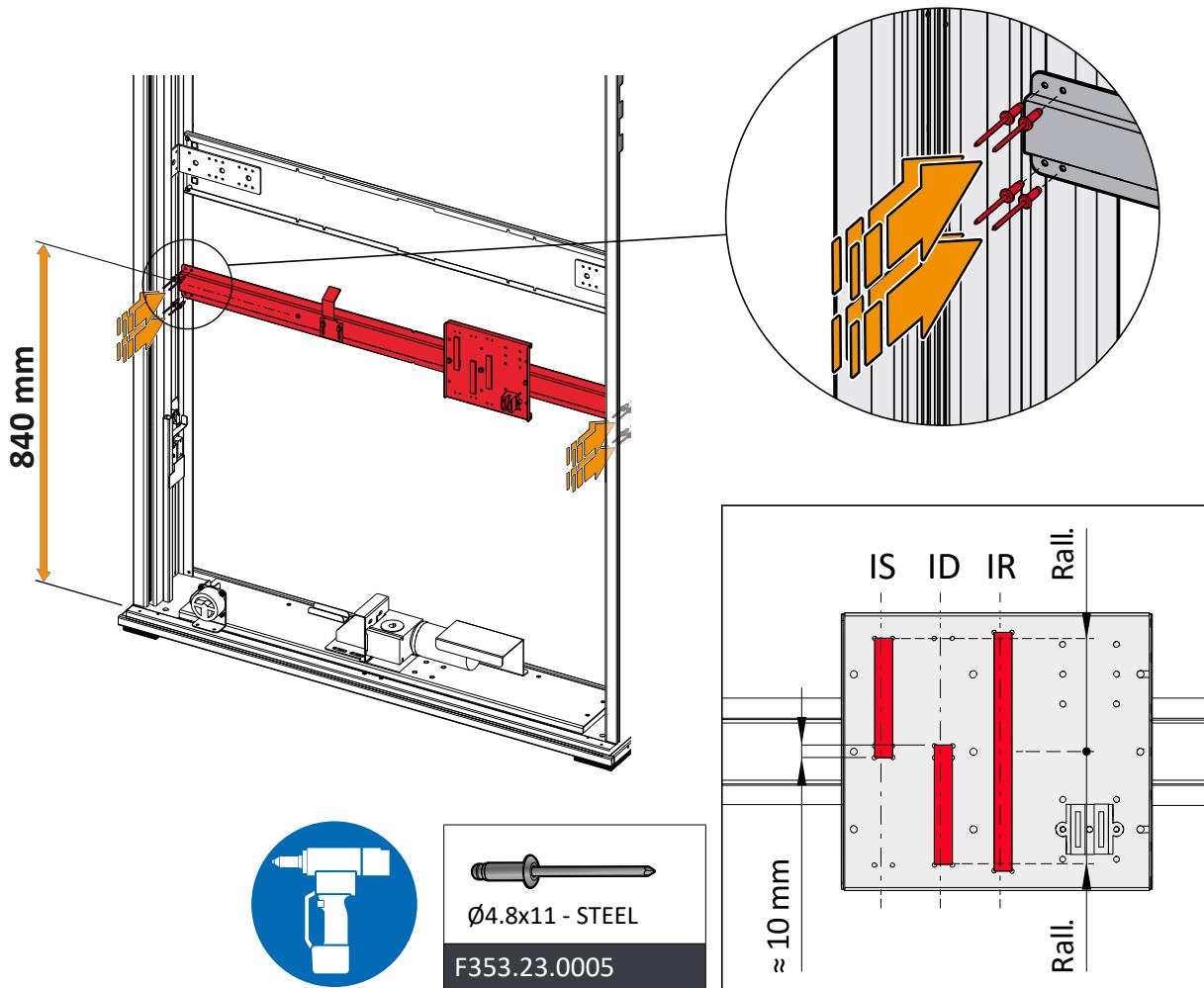
ALONG THE SHAFT, the brackets (if any) should be placed WITHOUT the pre-assembled contact.



IN THE PIT, the bracket with the overtravel contact must be positioned facing up (top overtravel).



- Position the magnet support brackets so that the centre of the bracket (identified by the reference notch) is at a distance of 840 mm from the floor level.
- Adjust the position of the magnets (IS, ID and IR) as shown in the figure: the magnet support plate is provided with holes to ease magnet alignment.



The IR magnet is located on the lowest access only.

- Repeat the procedure for each access.

13.13. Electric connections for first start-up



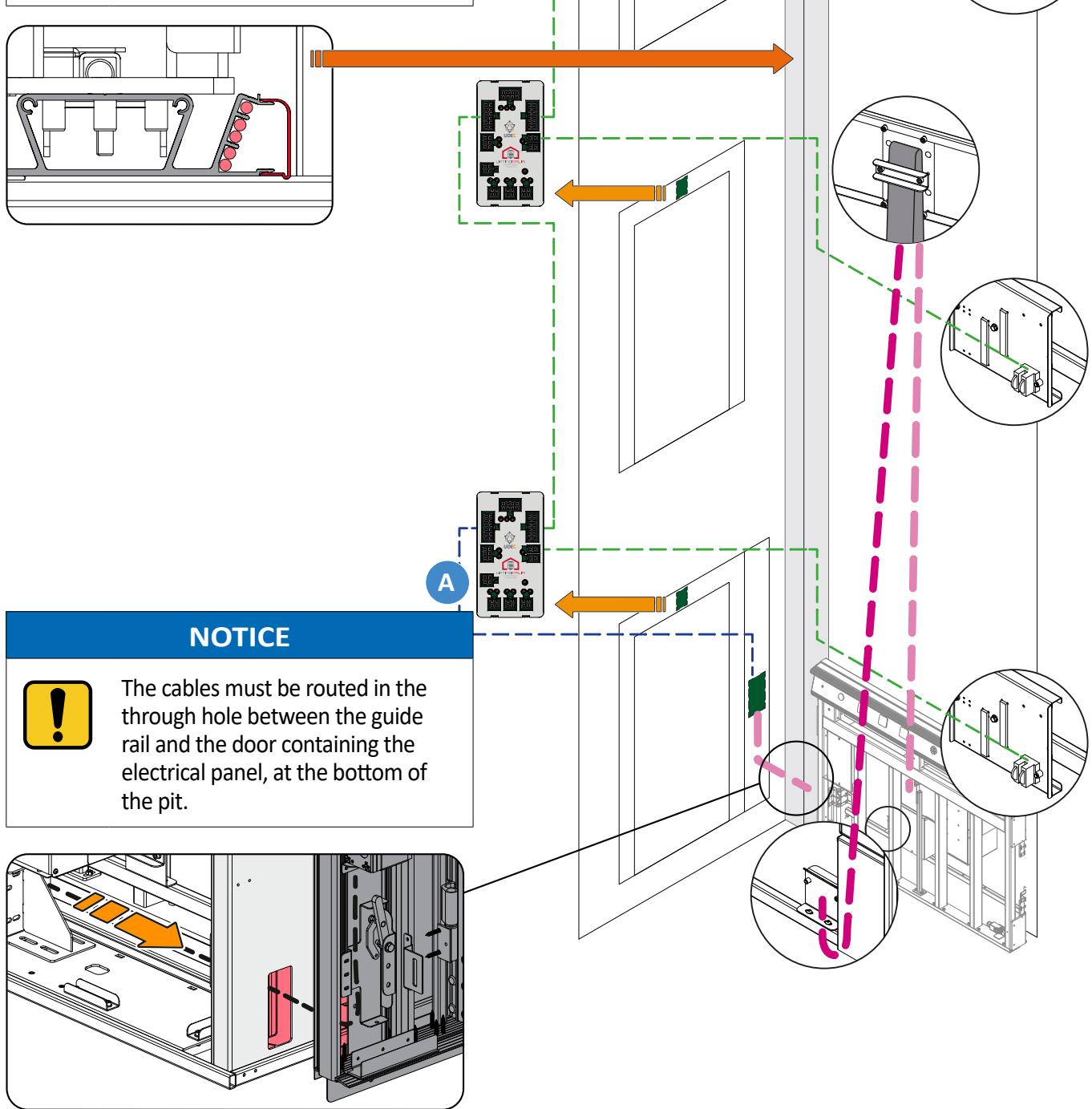
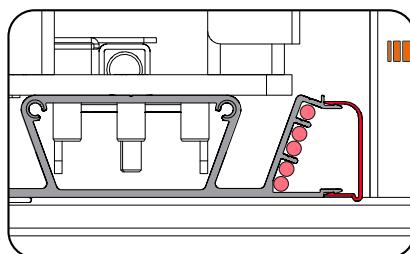
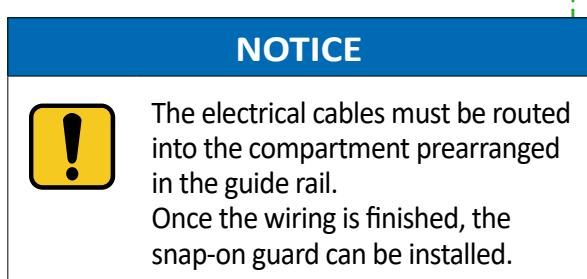
The electrical panel is inside the lowest access landing door jamb.
The door must be already installed (even temporarily, following safety requirements) in order to make the connections.



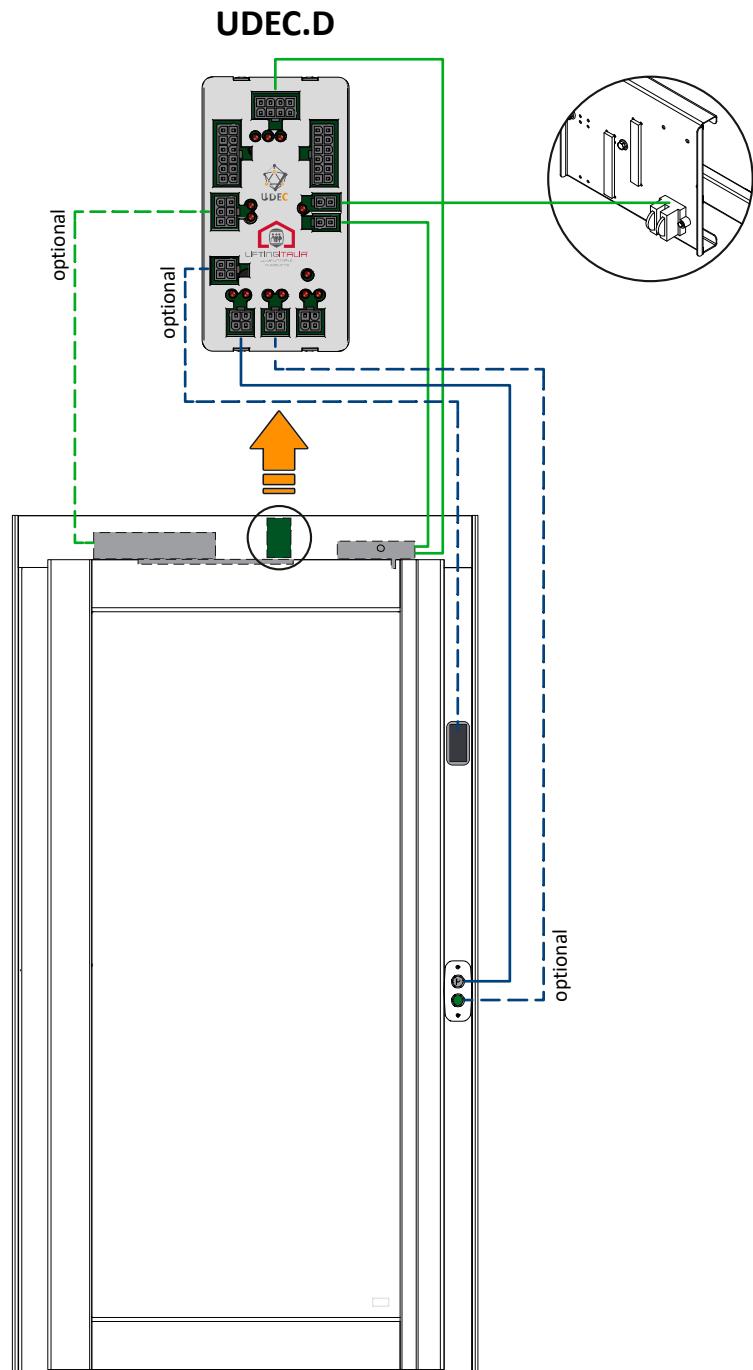
For electrical connections, refer to the manual IM.TEC.129 "ELECTRICAL EQUIPMENT (U.D.E.C.) INSTALLATION AND DIAGNOSTIC INSTRUCTIONS" and to the system wiring diagram.

13.13.01 SHAFT ELECTRICAL CONNECTIONS

- Wire the electrical components as they are installed.
- The shaft electrical line A must be the LAST connection to the electrical panel.



13.13.02 DOOR ELECTRICAL CONNECTIONS



13.14. Operations to be performed before operating the platform

NOTICE

LUBRICATE ALL GUIDE RAILS USING THE SILICONE SPRAY OIL SUPPLIED WITH THE SYSTEM (F353.05.9017).



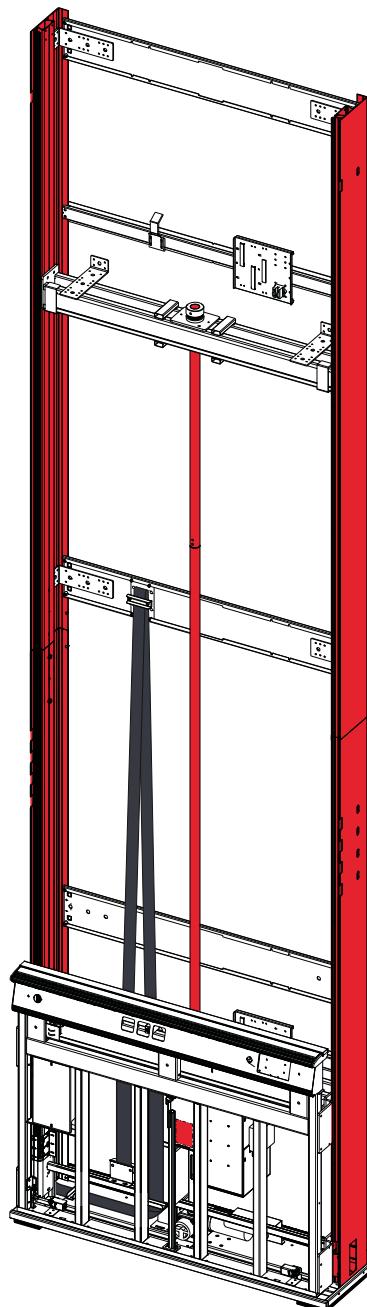
LUBRICATE THE SCREW WITH THE SUPPLIED LUBRICATING OIL EP 220 (KIT F352.23.0001).

FILL THE LUBRICATOR WITH THE SUPPLIED LUBRICATING OIL EP 220 (KIT F352.23.0001).

NOTICE



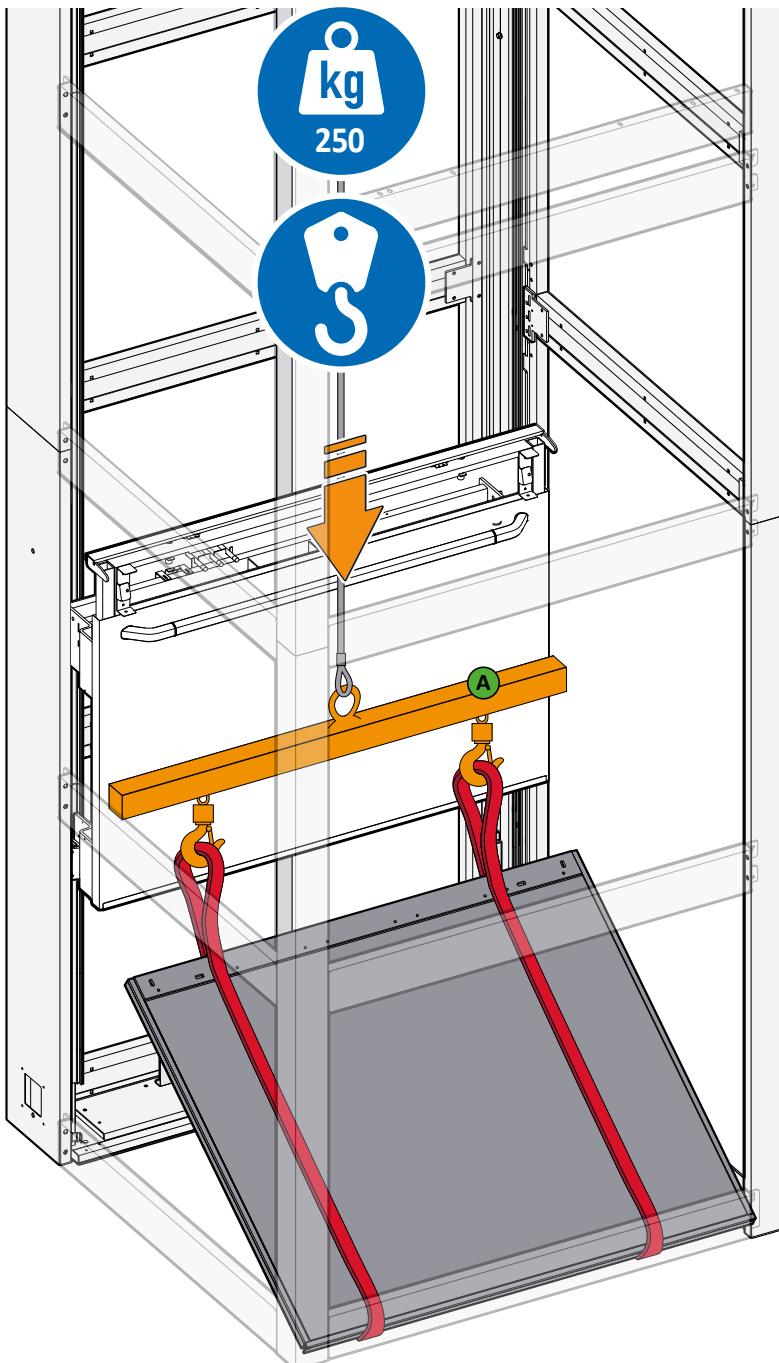
DURING THE FIRST OPERATION, CHECK THAT THE CABLE MOVES CORRECTLY.



13.15. Platform floor - handling

CAUTION	WEAR APPROPRIATE PPE
 DANGER OF CRUSHING Move/lift the components using suitable lifting gear (see Chapter 9).	  

For moving/lifting platform components we recommend the use of a winch/hoist anchored in the head (see Chapter 8) and a lifting sling bar **A**.



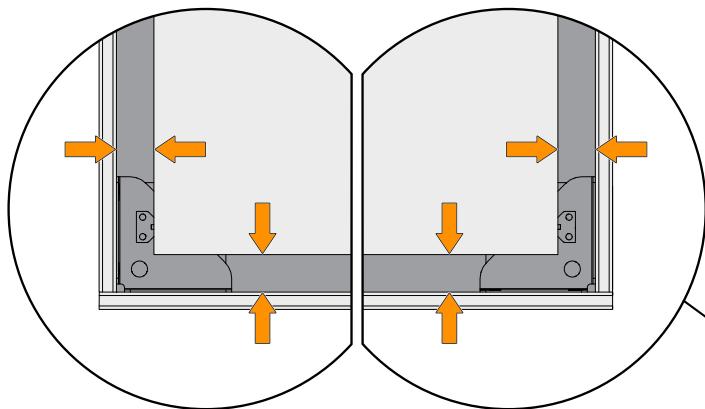
13.16. Platform carrier - installation

- Lift the platform backboard along the screw and remove the risers.
- Position the platform floor by resting it on the pit bottom.
- Lower the platform backboard until it touches the floor.

IMPORTANT!



Adjust the position of the floor so that it is equidistant from the edge of the shell.



- Secure the floor using the screws provided ① .

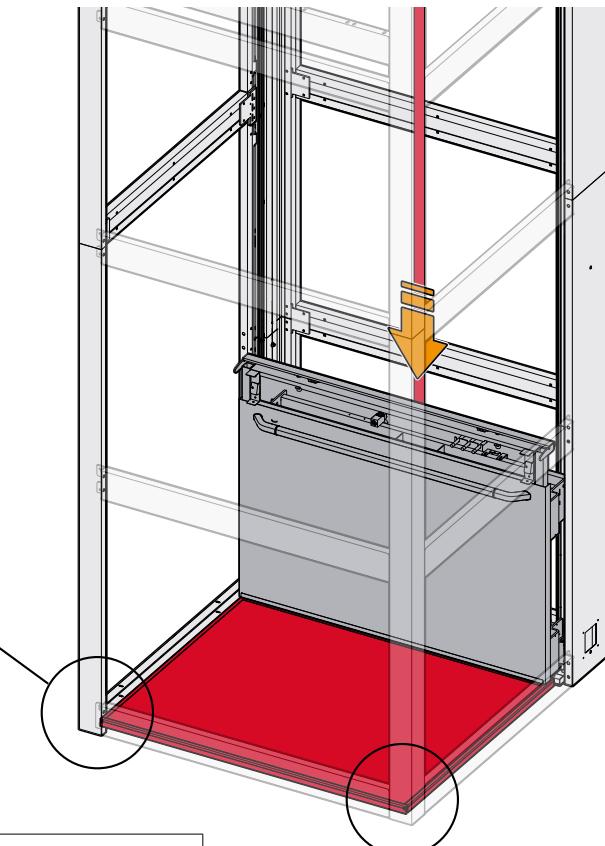
WARNING



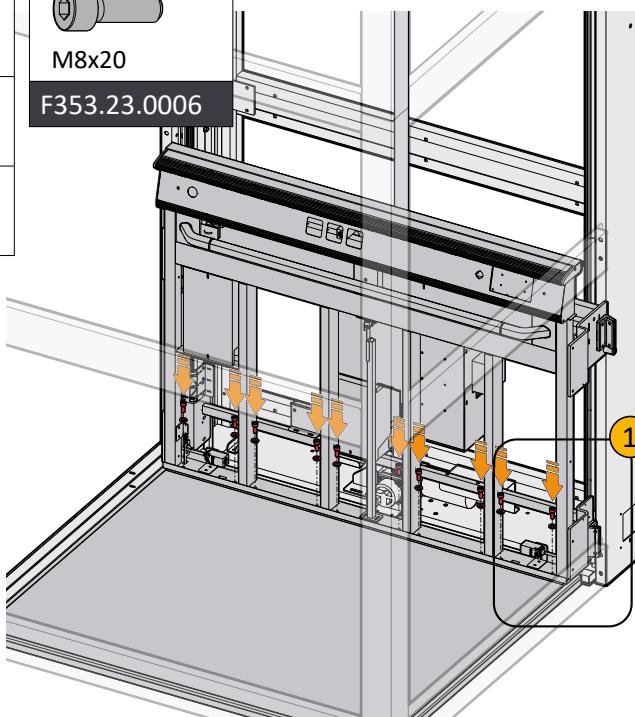
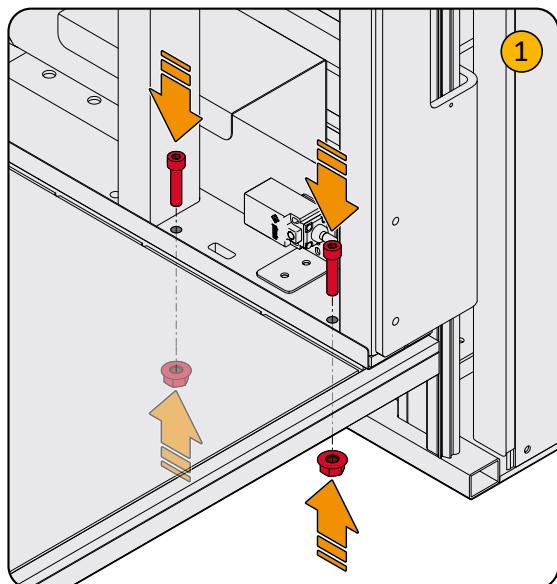
**FAILURE TO FOLLOW THE DIRECTIONS
MAY COMPROMISE PLATFORM SAFETY.**

The screws must be
SOCKET HEAD CAP SCREW M8x35 CLASS 12.9.

Observe the indicated tightening torques.
(MIN 17 Nm, MAX 21 Nm).



F353.23.0006



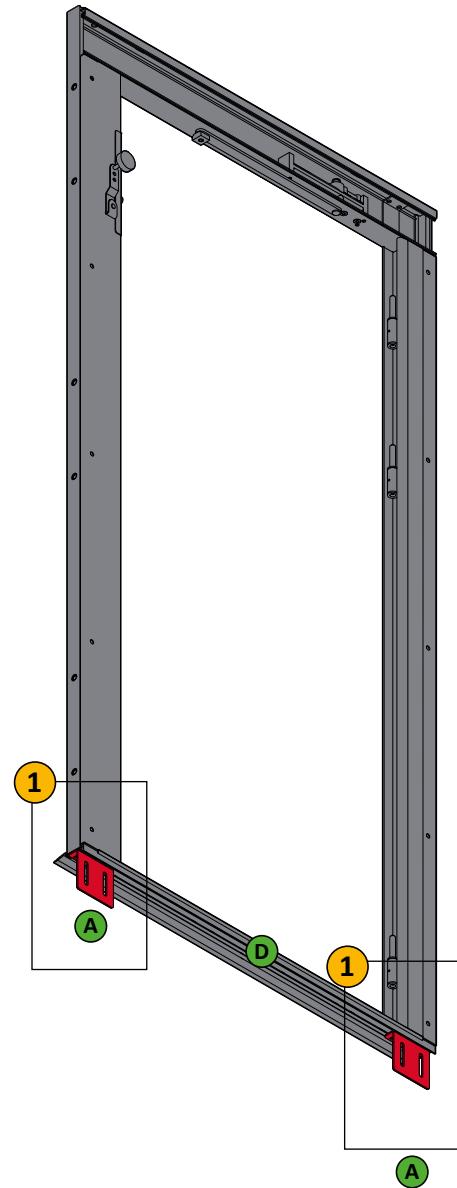
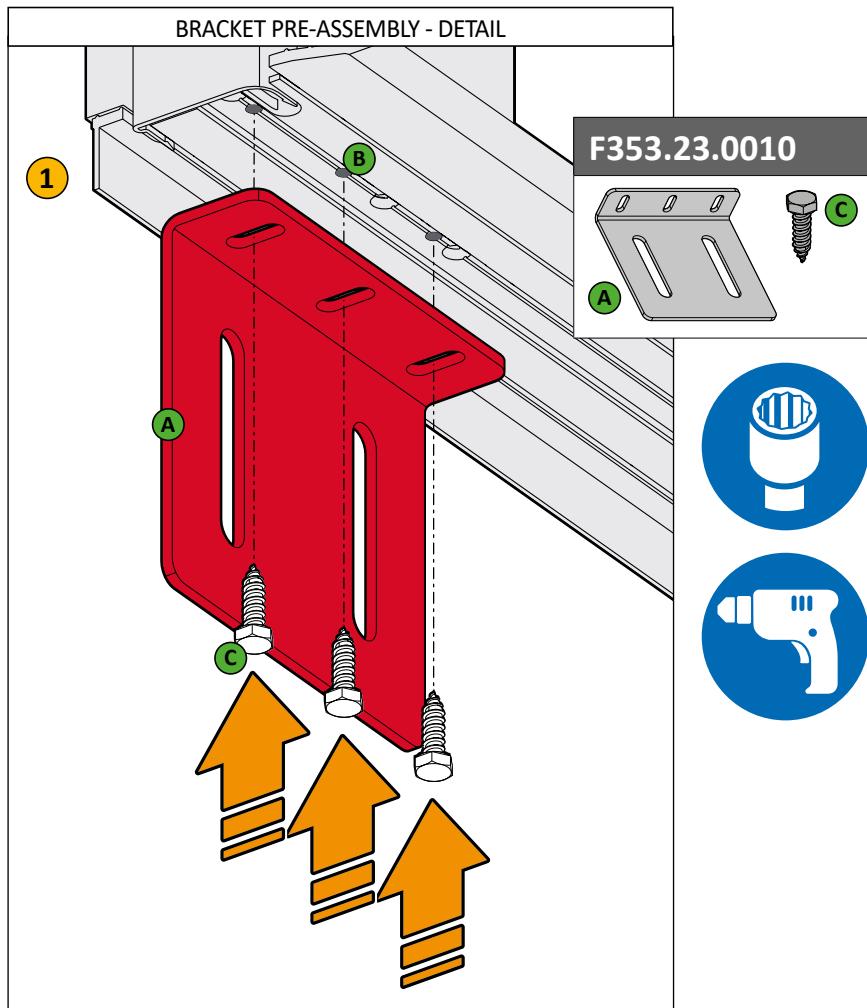
Connect the proximity edge sensors located on the floor, on the side opposite to the mechanics, to the car board (**UDEC.C**)

13.17. Landing door - assembly (only for masonry shaft)

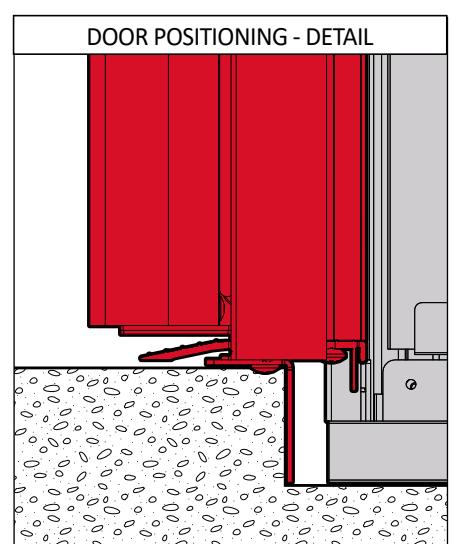
13.17.01 MOUNTING WITH BRACKETS

PRE-ASSEMBLY OF BRACKETS UNDER THE DOOR FRAME

1 Attach the brackets **A** to the underside of the door frame **D**, at the prepared holes **B**, using the self-tapping screws provided in the kit **C**.



CORRECT POSITIONING ON THE GROUND
Check that the door is correctly supported on the floor.

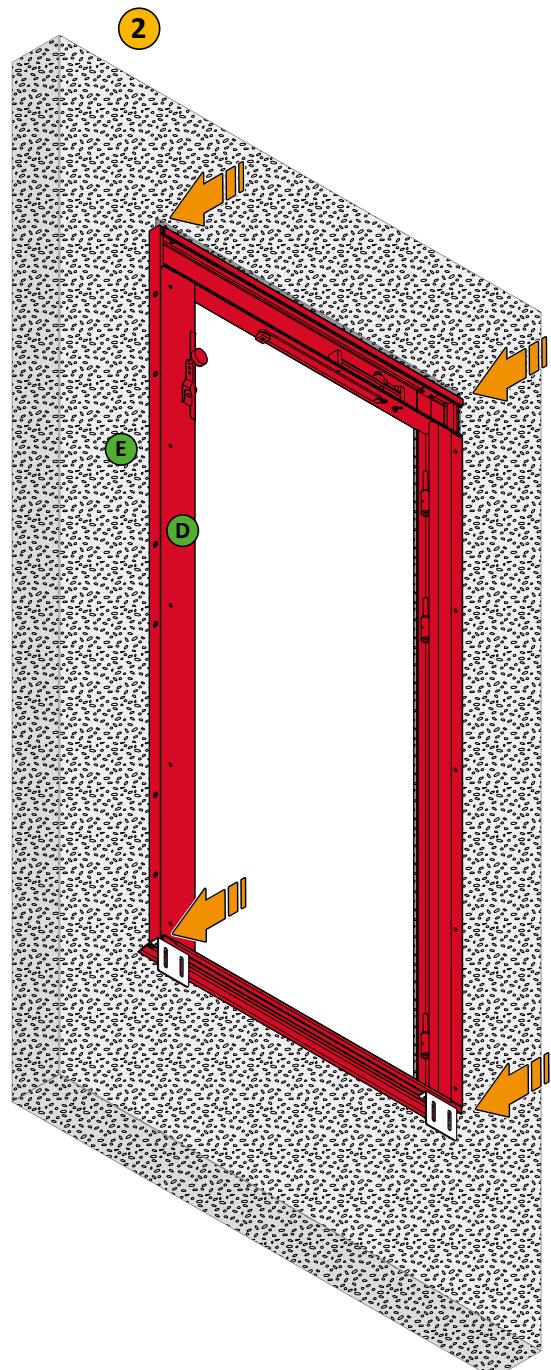
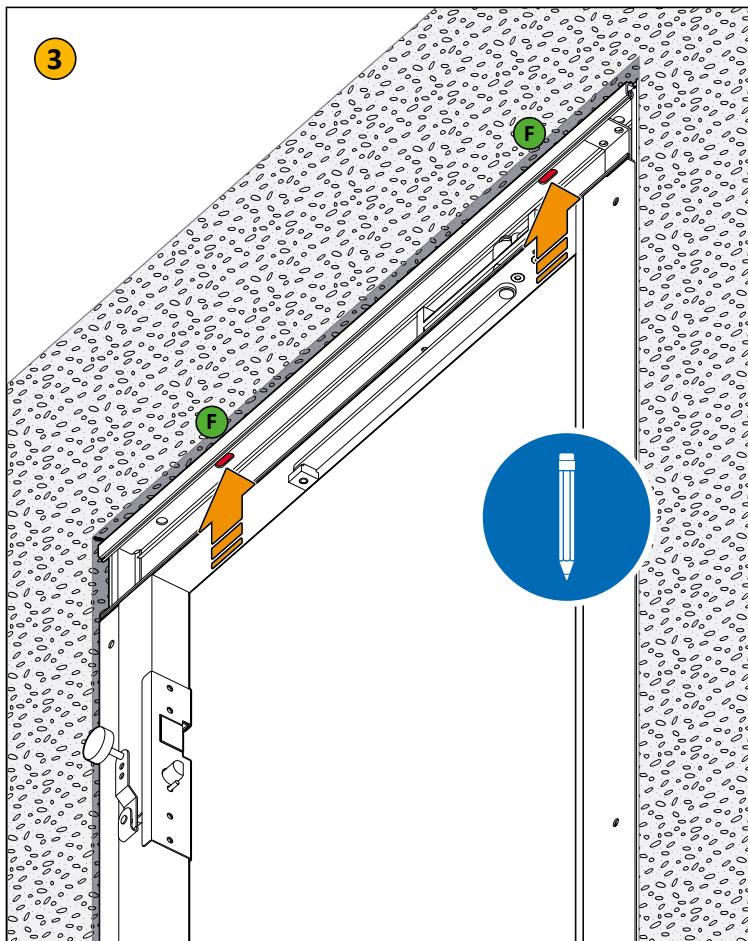


DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

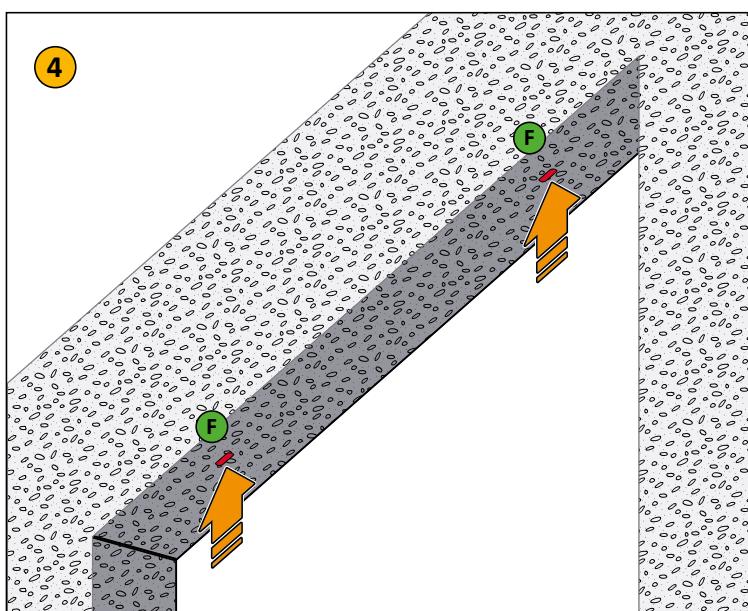
INSTALLATION AND COMMISSIONING INSTRUCTIONS

ASSEMBLING THE DOOR

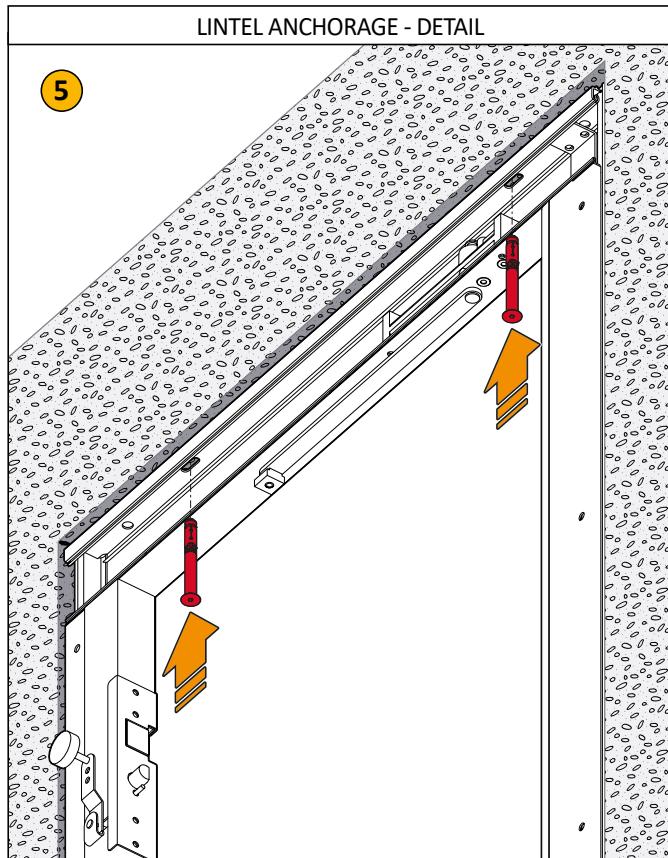
- 2 Position the door **D** accurately in the doorway **E**.
- 3 Mark on the lintel the points **F** where the door is to be anchored using dowels (using the door frame as a template).



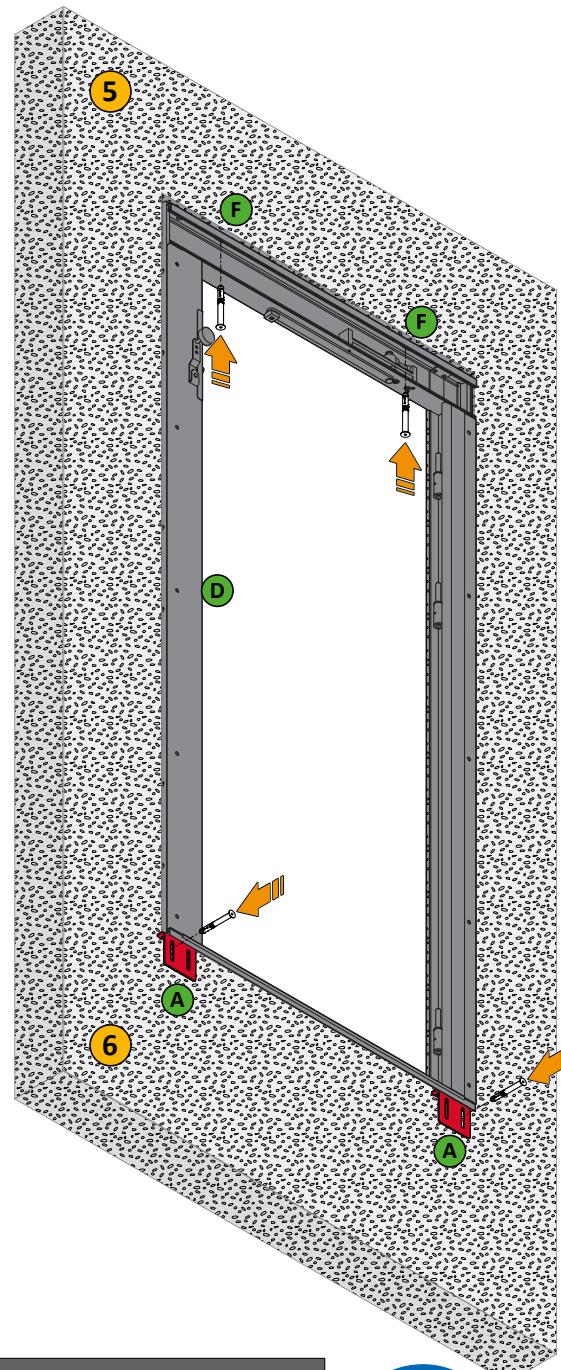
- 4 Remove the door **D** and drill the lintel at the anchoring points **F**.



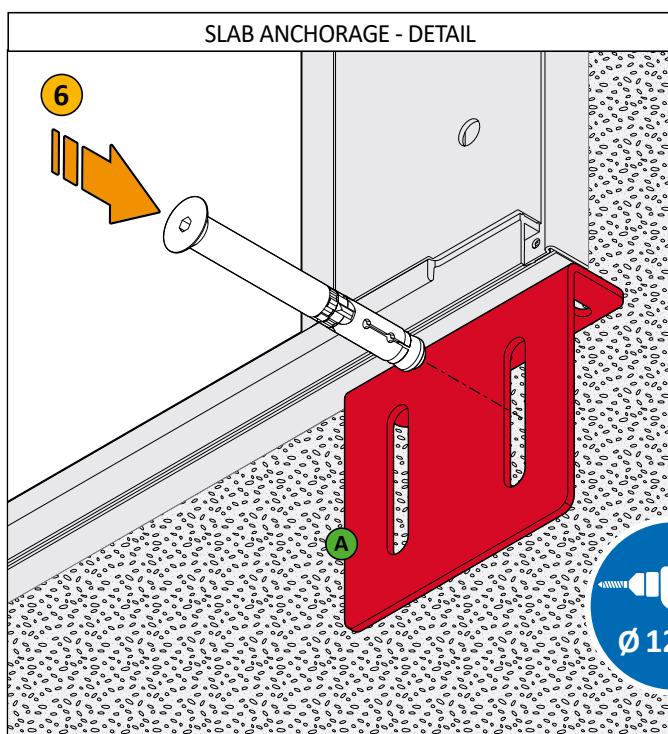
5 Reposition the door **D** and anchor it to the lintel with the expansion plugs.



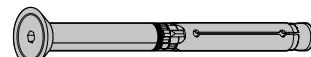
F353.23.0010



6 Drill the slab in the slots of the brackets **A** and anchor the door **D** to the slab with the expansion dowels..

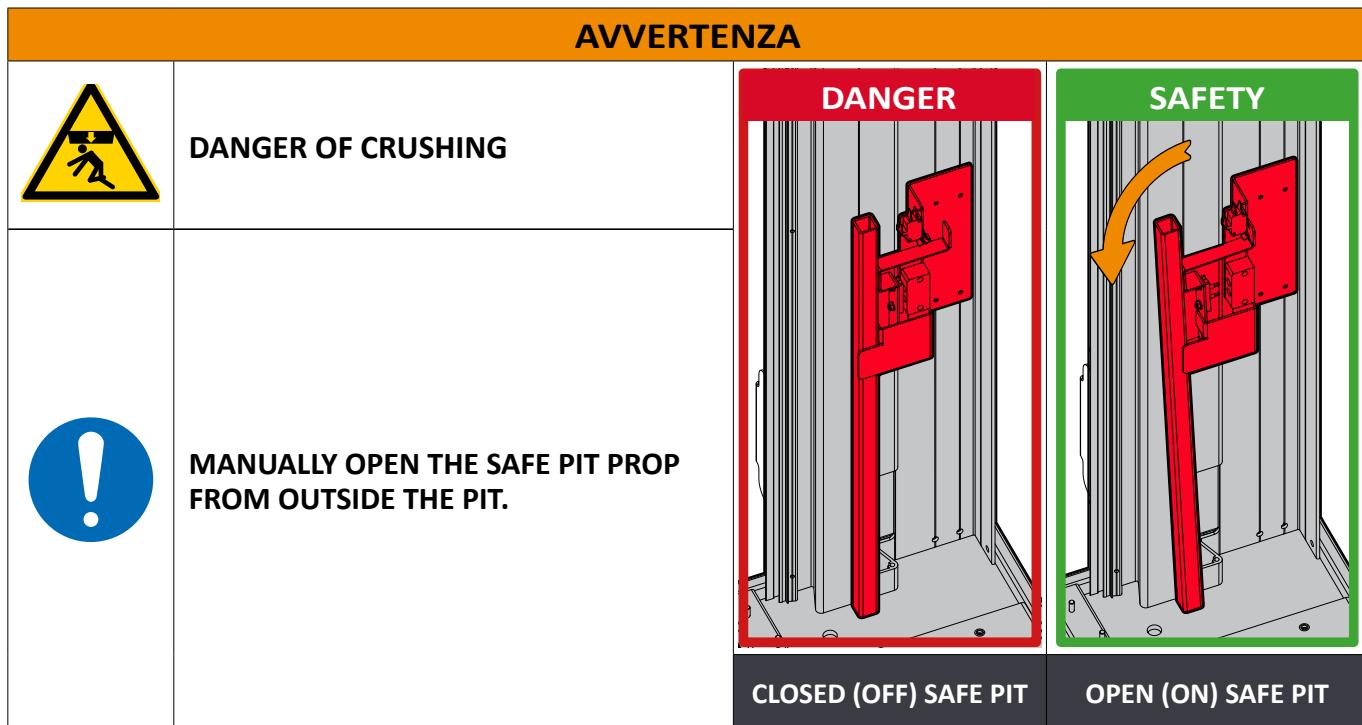


F353.23.0010

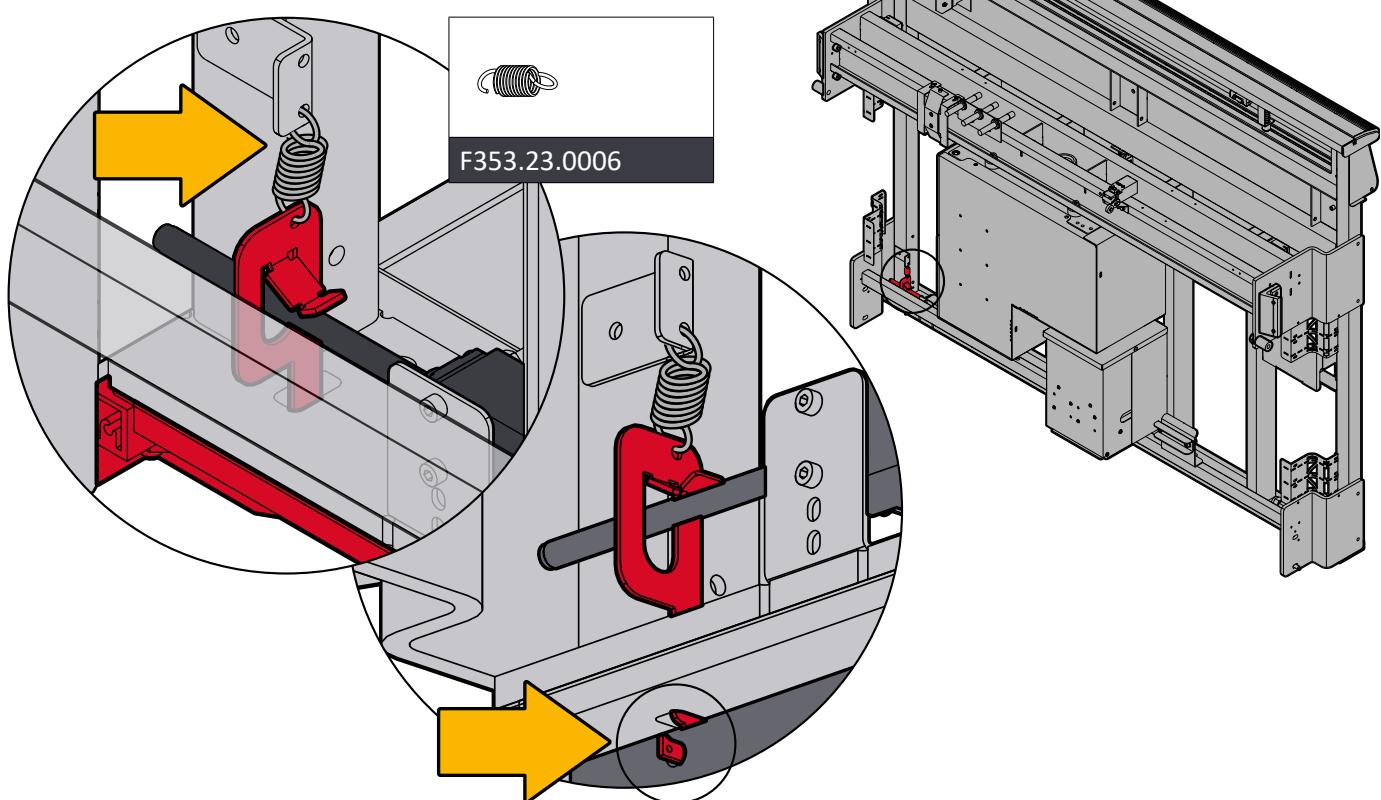


13.18. Sensitive edge (safety device)

13.18.01 SENSITIVE EDGE CONTACT - CONNECTION



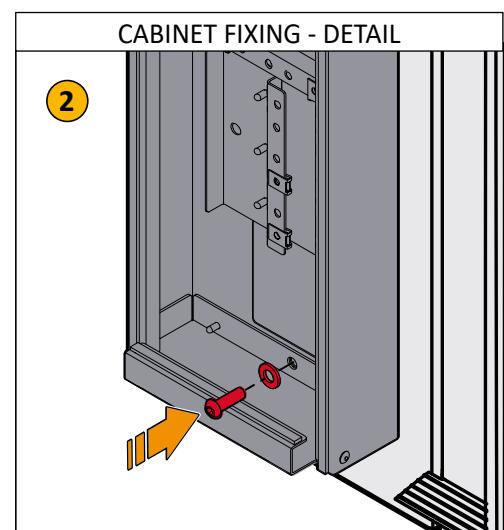
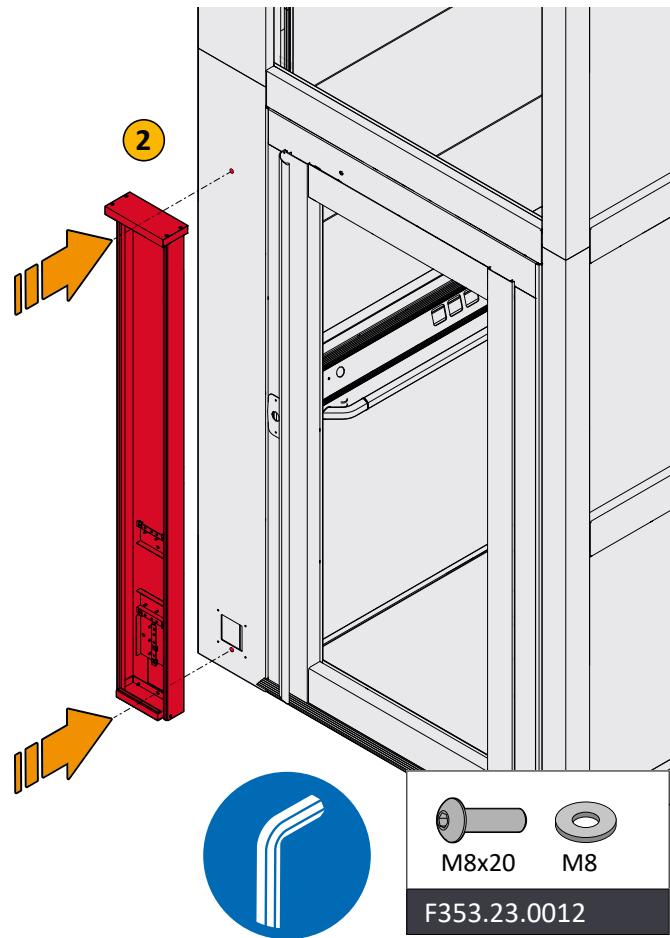
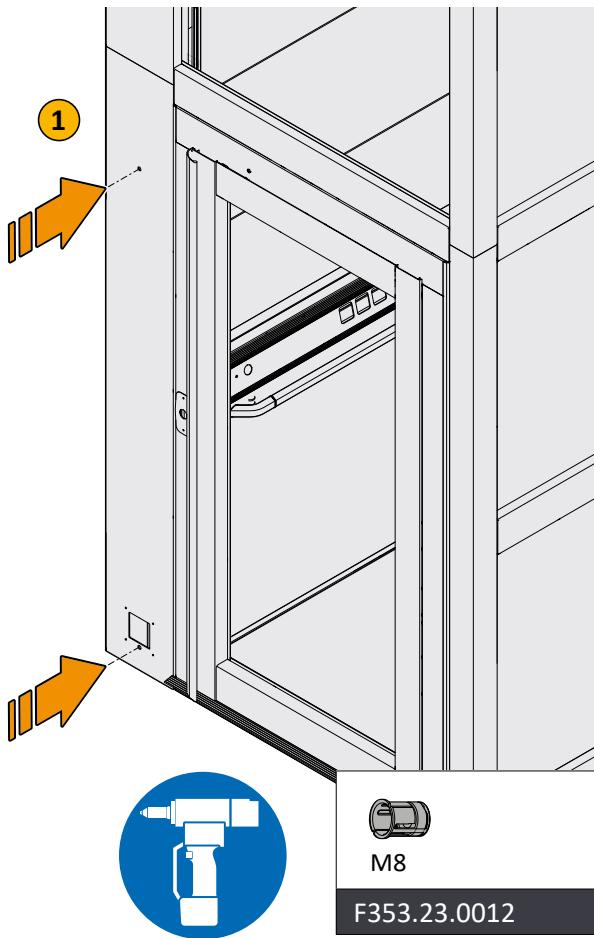
- Raise the platform so that there is room to operate and secure the hook to the proximity edge, making sure the sensor is working correctly.



13.19. Control cabinet

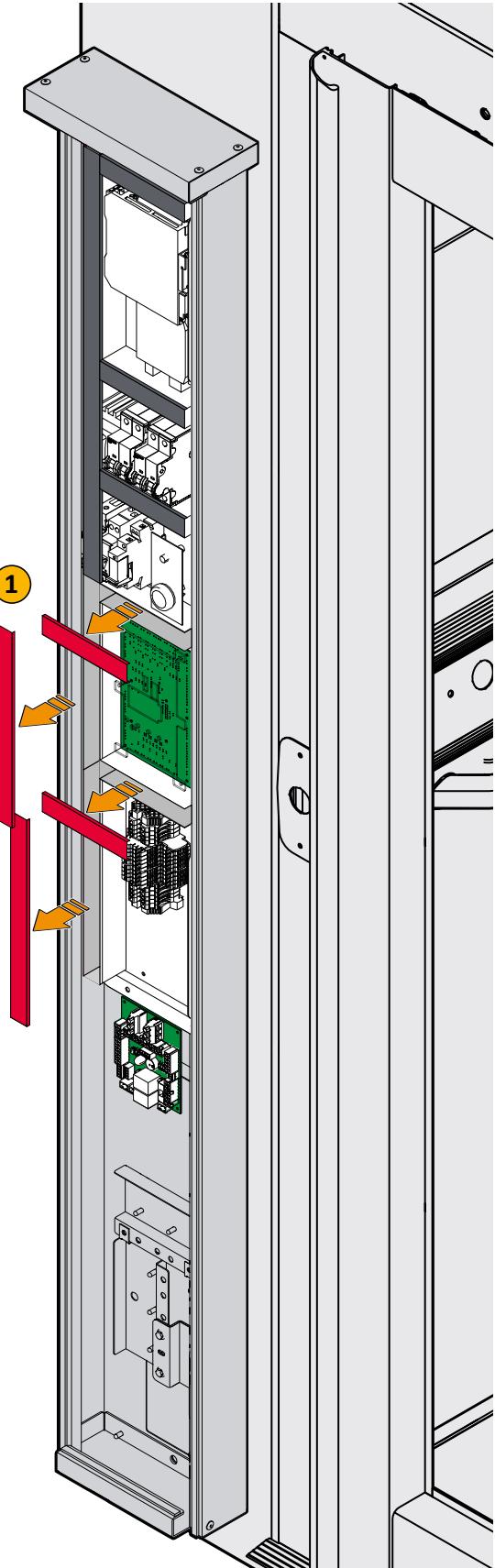
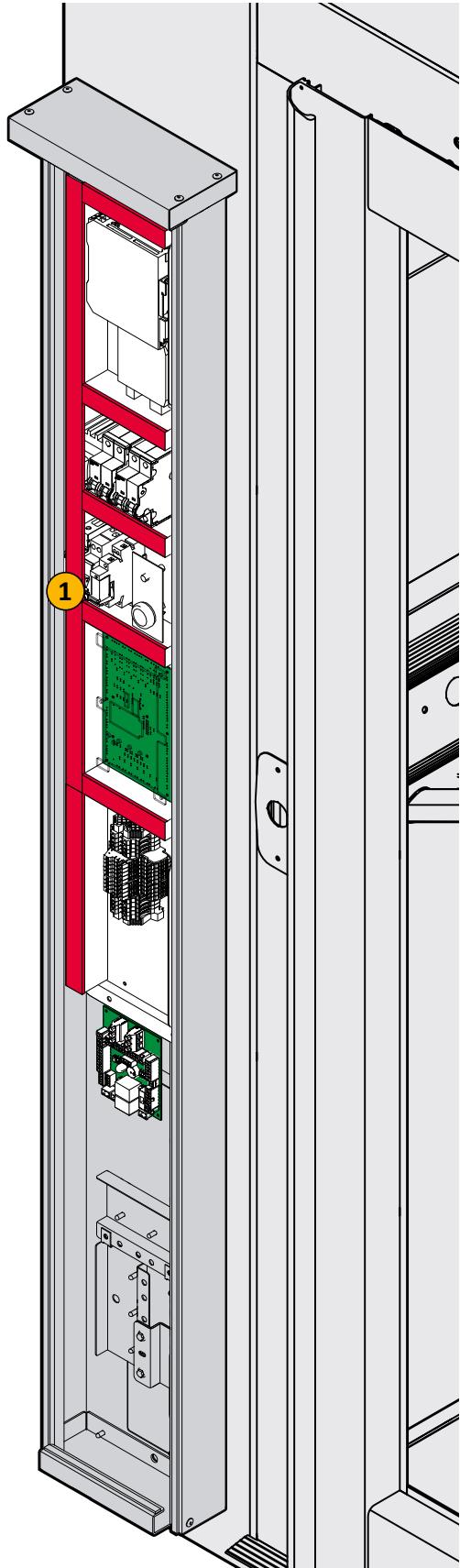
13.19.01 CONTROL CABINET - ASSEMBLY

- Insert the supplied threaded rivets into the holes provided ①.
- Position and fasten the cabinet with the supplied screws ②.

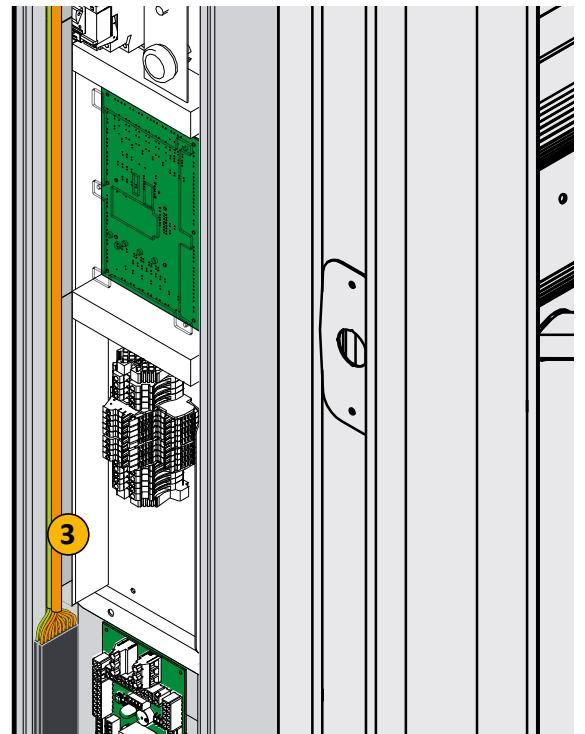
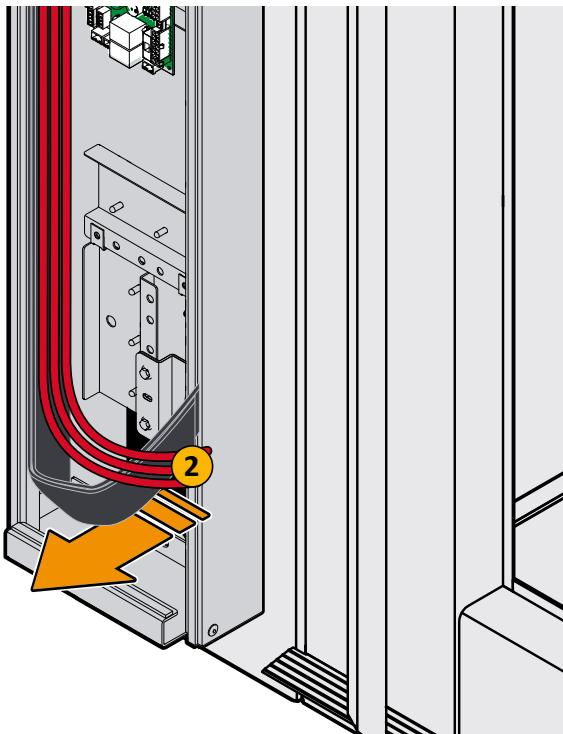


13.19.02 CONTROL CABINET - CABLE ROUTING

- Remove cable tray covers **1**.



- From the shaft, insert the cables into the control cabinet through the opening provided **2**.



- Insert flat cables **3** and main wiring **4** into the cable tray.



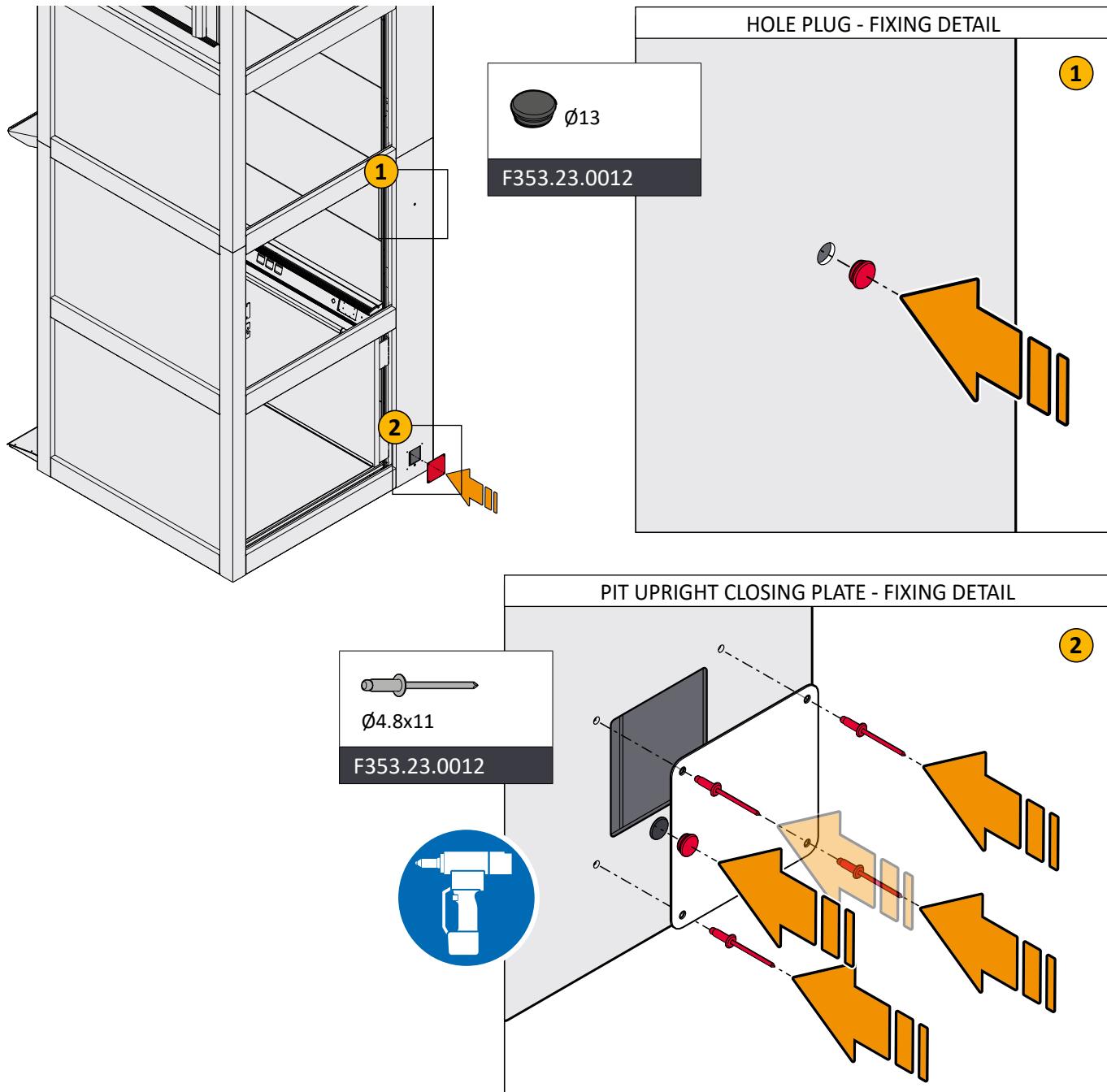
- After making the necessary connections, secure with cable ties and close the cable tray.

13.19.03 CONTROL CABINET - ASSEMBLY - UPRIGHT HOLE CLOSURE



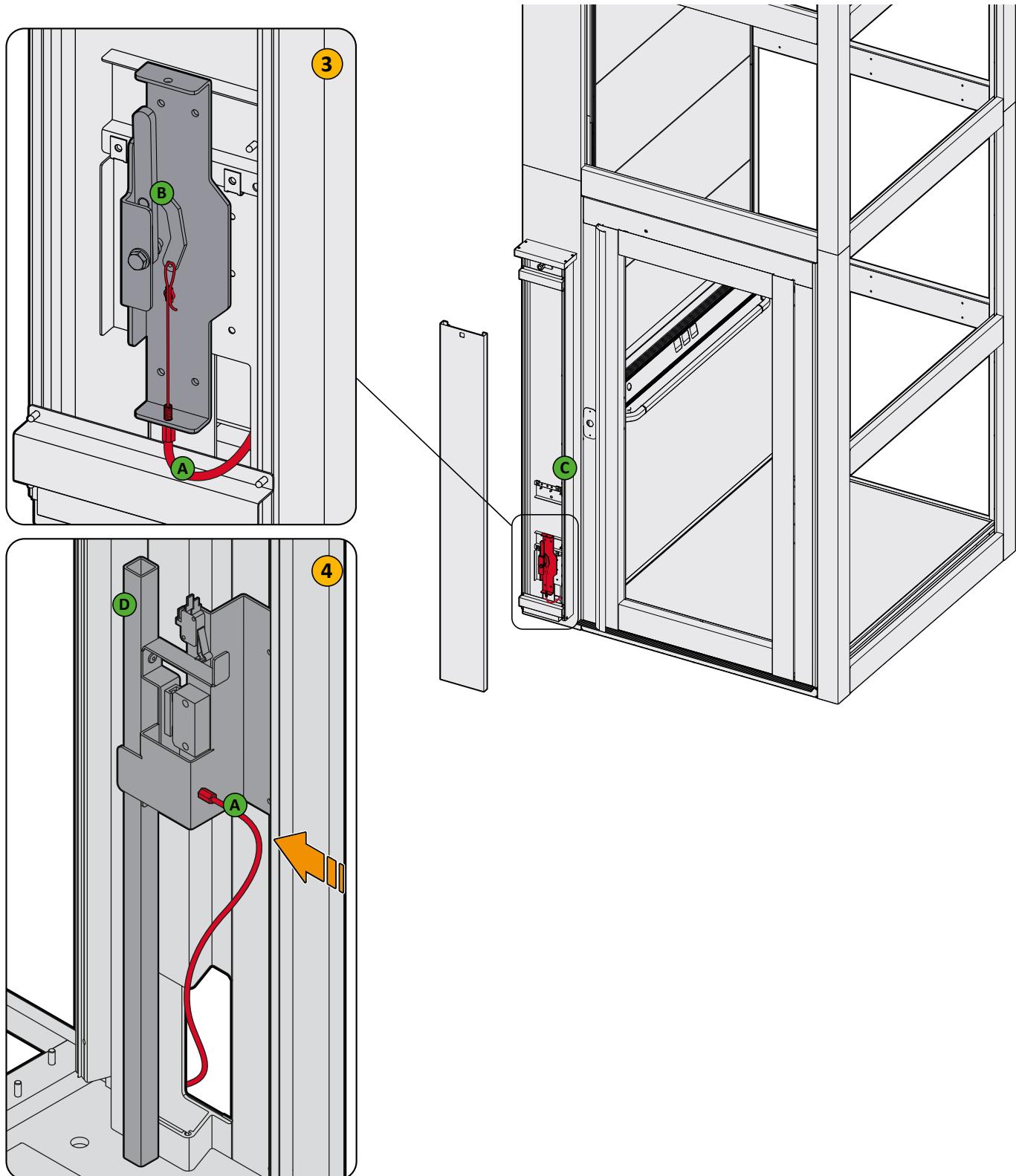
Both uprights are pre-drilled to allow control cabinet installation; therefore, unused access holes must be sealed with PVC plugs (supplied in the kit) and stainless steel closing plate provided in structure packaging.

- Insert the appropriate PVC plug in the Ø 13 hole 1.
- Close the hole with the stainless steel plate and the rivets supplied 2.



13.19.04 SAFE-PIT - EXTERNAL CONTROL LEVER CONNECTION

- Raise the platform so that there is room to operate.
- Manually open the safety jack stand **1**.
- Connect an end of the brake cable with sheath to the control lever (located inside the control cabinet on the ground floor) **2**.
- Connect the other end of the brake cable with sheath to safety jack stand in the pit **3**.

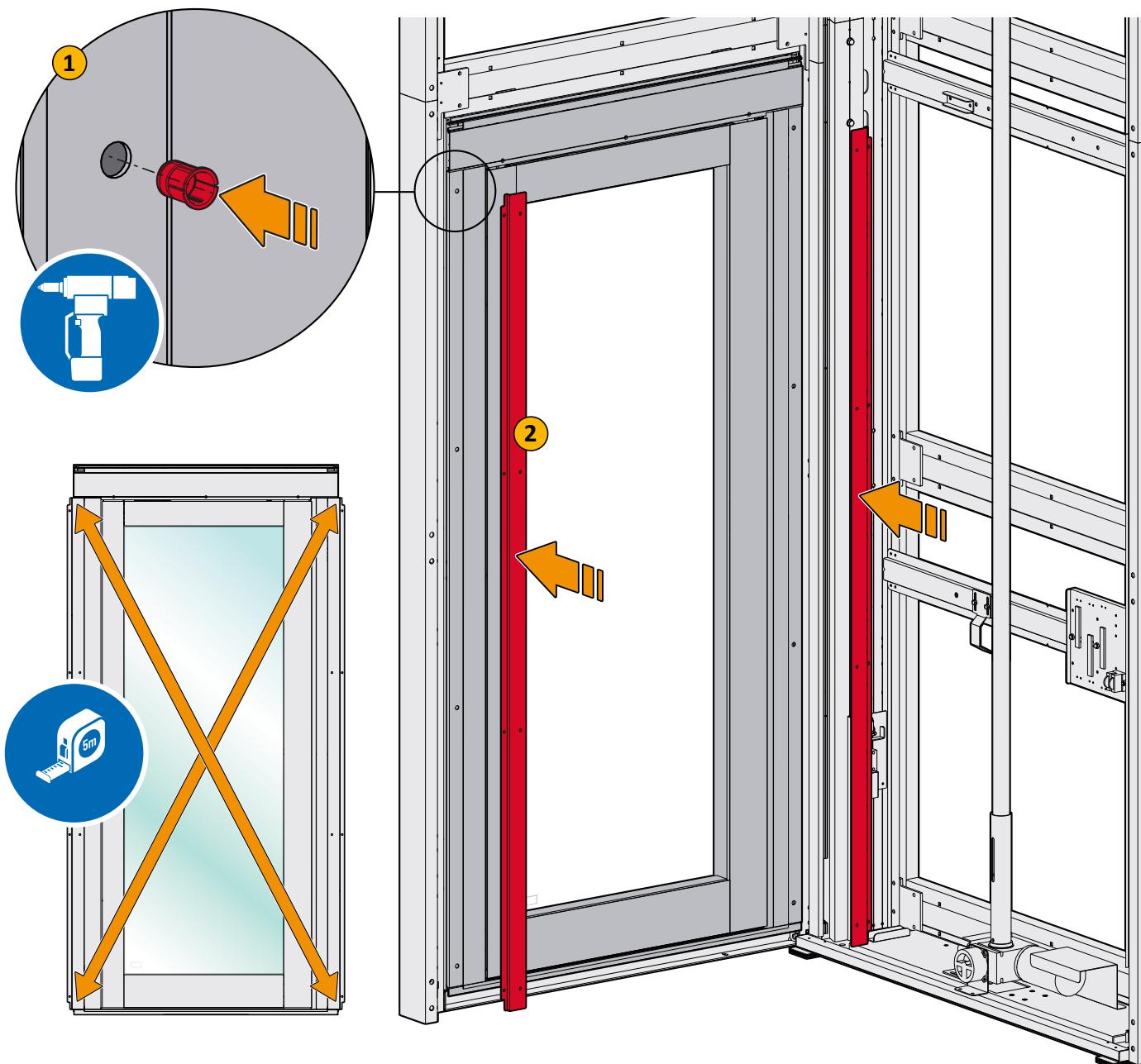


13.20. Landing door - assembly

- Position the door, inserting it into the prepared seat on the rear corner profiles.
- Pre-install the cage nuts in the pre-drilled holes in the door jamb **1**.
- Position the door fixing bar **2**.

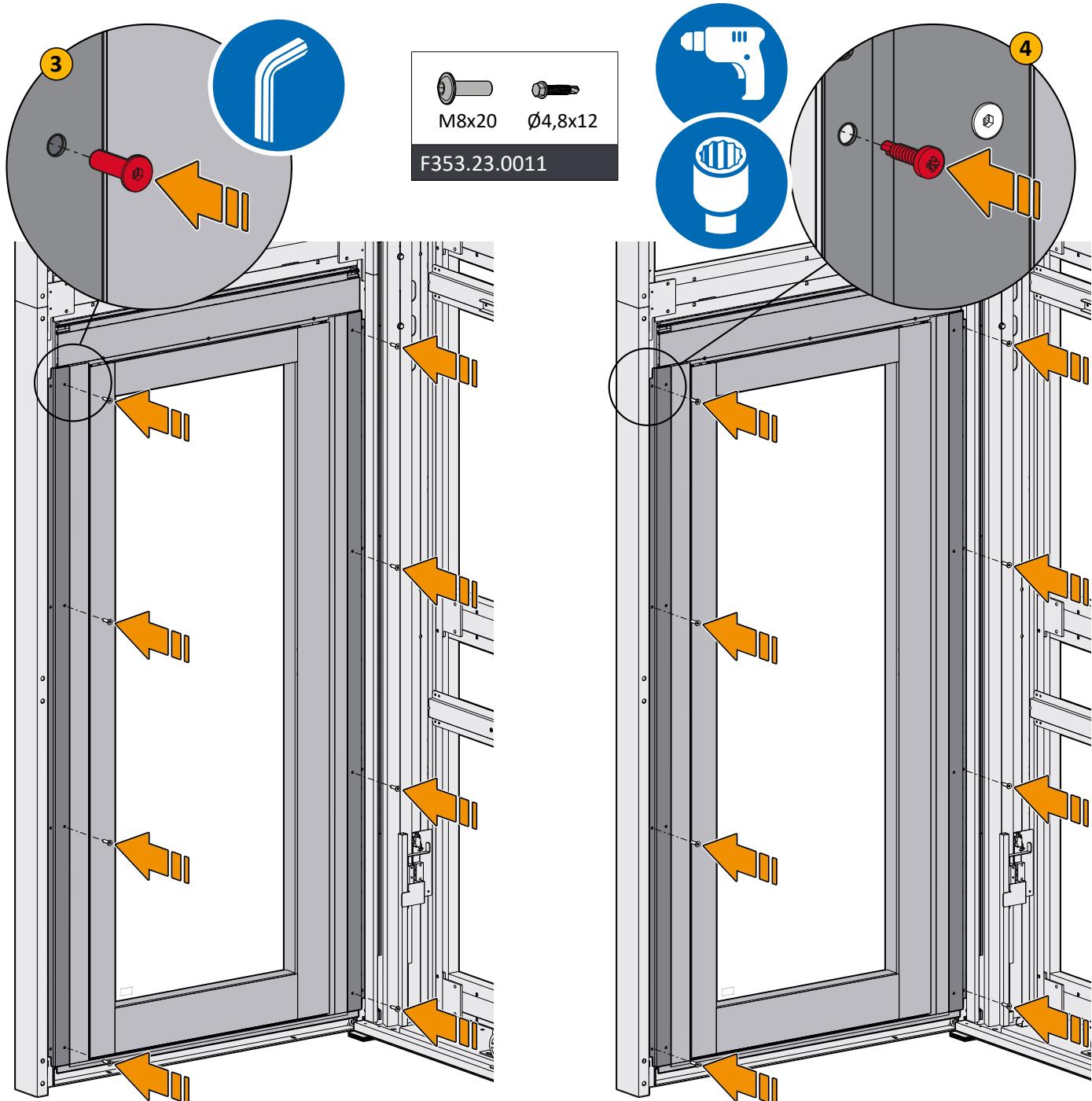


Check the correct door arrangement, as indicated on project drawing.



CHECK THAT THE DIAGONAL DIMENSIONS OF THE DOOR ARE THE SAME TO ENSURE PERFECT SQUARING.

- Secure the bar to the door with the screws provided 3.
- Secure the bar to the upright with the self-drilling screws provided 4.



GROUND FLOOR DOOR

Ensure that the door on the ground floor rests on the floor level.

IMPORTANT!



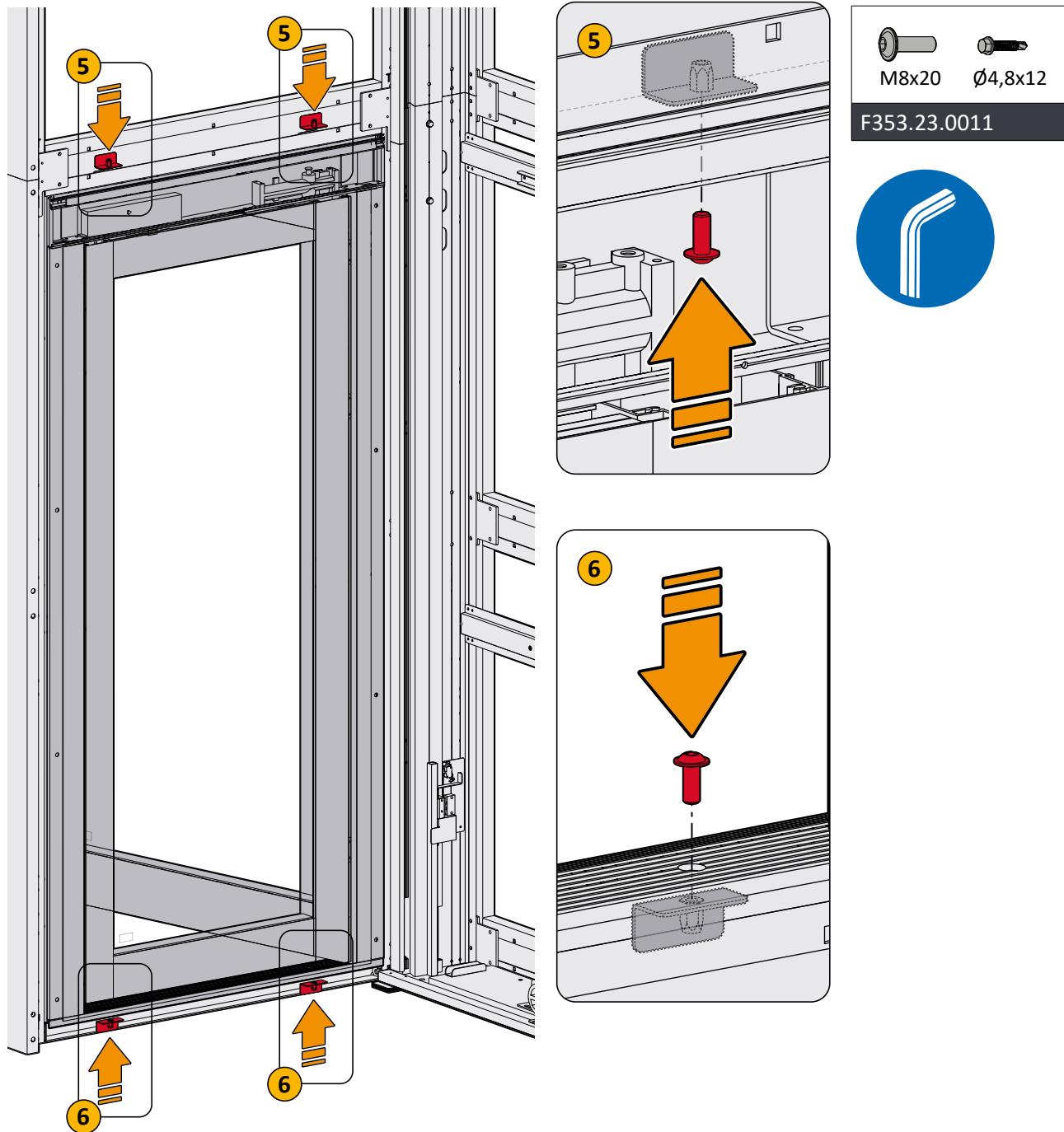
NO ADJUSTMENT IS NECESSARY.

If the door is fitted as planned, door inside face will be flush with the inside of the structure after fitting the infills.

DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

- Insert the L-shaped plates with threaded insert into the transom above the door and secure using the screws provided 5.
- Insert the L-shaped plates with threaded insert into the transom below the door and secure using the screws provided 6.



13.21. Landing door - adjustments

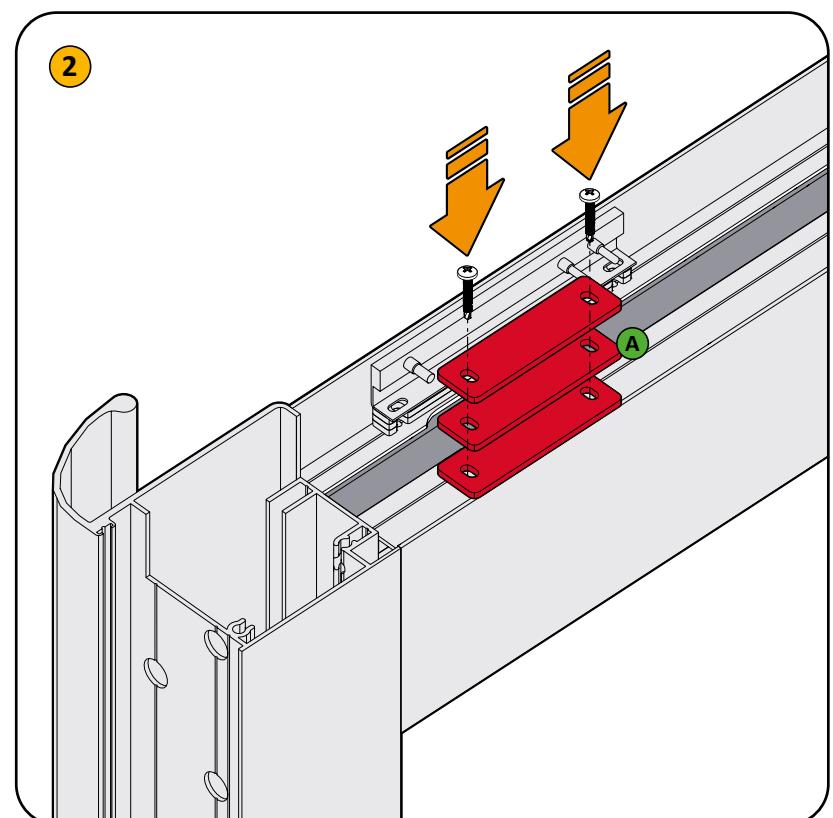
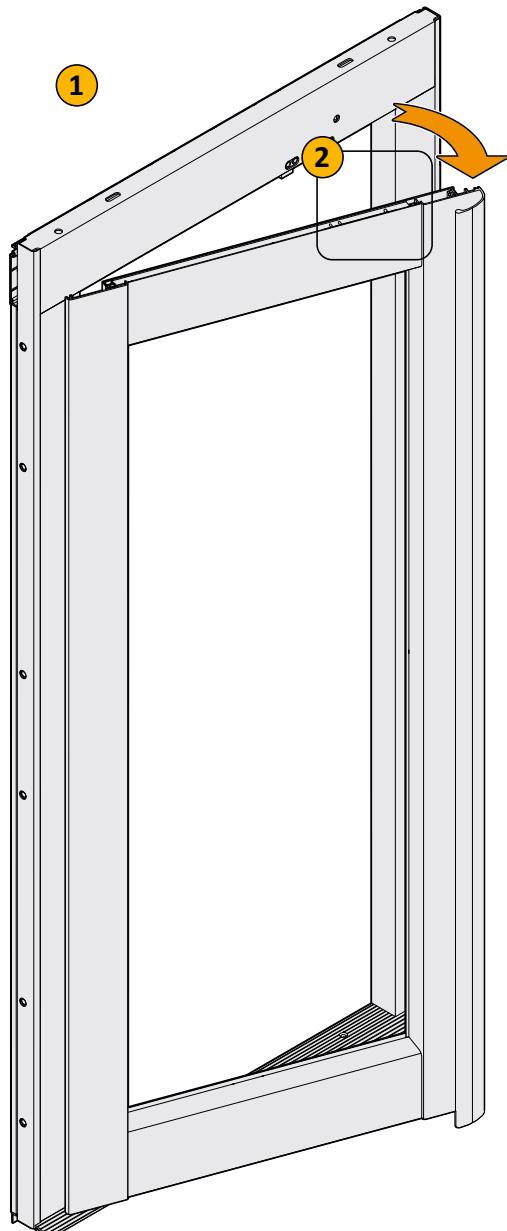
13.21.01 LANDING DOOR - STOP ADJUSTMENT



Should it be necessary to correct an "door stop mechanical clearance", KIT F353.23.0010 contains the equipment needed to carry out the operation as indicated below.

① Open the door leaf

② Fix the plates **A** with the self-drilling screws supplied in the kit at the slot in the guide rail.



14. Infills

14.01. Structure infills - preliminary information

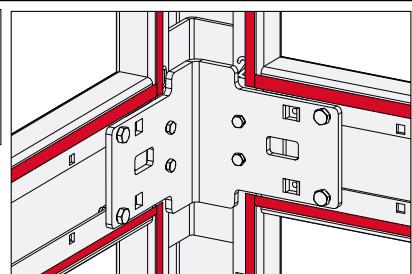
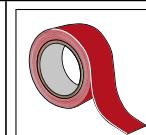


Infills, floor doors and rails (on the side opposite to the mechanics) are assembled in a circular sequence and from bottom to top.

Individual operations will be presented below; it is up to the fitter to take the correct reference for the assembly of the components.

NOTICE

In outdoor structures, place adhesive gasket or silicone on the inside face of uprights and transoms before mounting the infill.



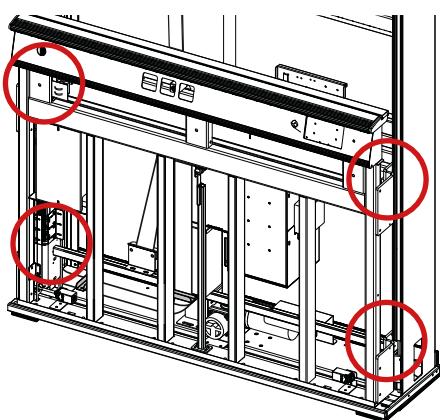
Mount the infill on all sides before installing the system.

IMPORTANT!

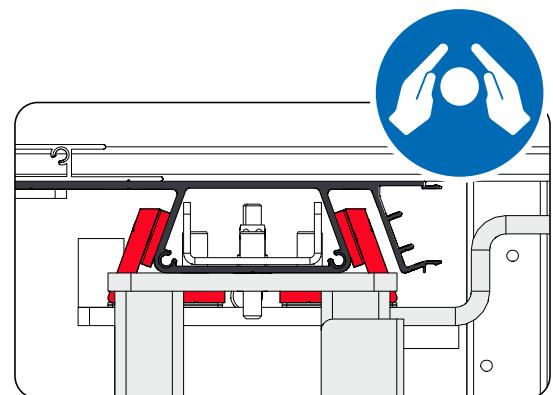


RISK OF RAIL-GUIDE DAMAGE.

Machining debris can damage rail-guides and guide shoes, thus compromising machine proper operation.

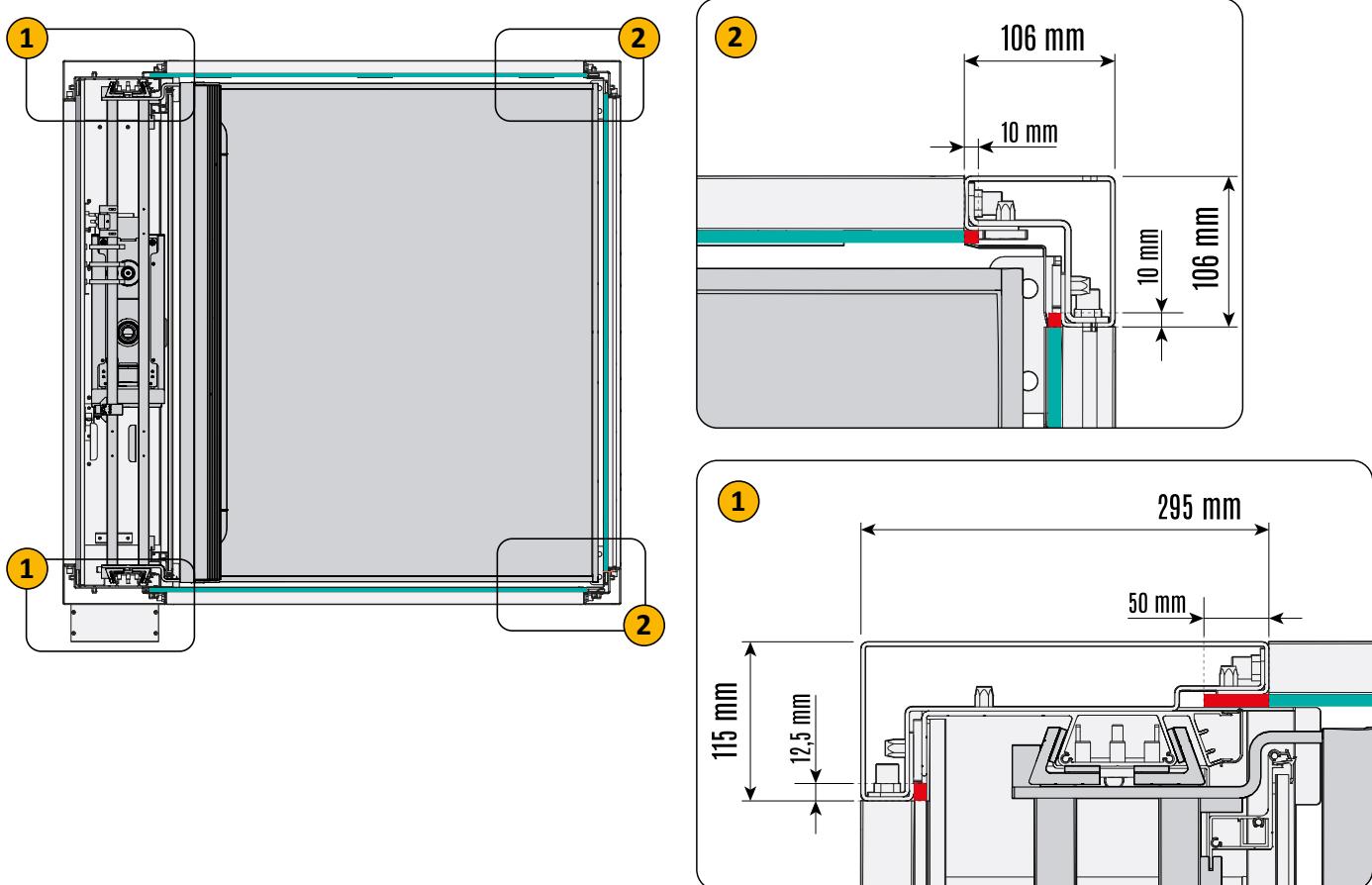


Cover/protect the guide shoes from machining debris that could seriously damage both rail-guides and guide shoes.
CHECK RUNNER BLOCK CLEANLINESS AT EACH HOLE.



14.02. Structure infills - correct positioning

- The following drawings give references for the correct positioning of the infill panels:

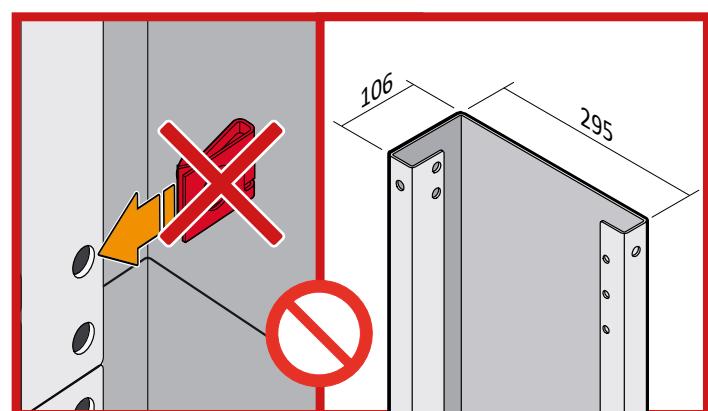
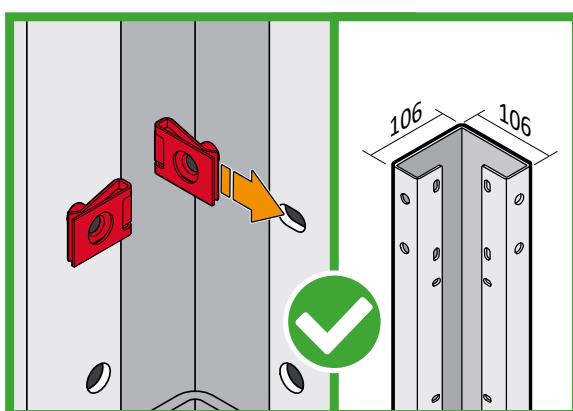


IMPORTANT!



RISK OF GLASS DAMAGE.

Do not insert deep threaded u nuts into the guide uprights. Failure to do so may result in glass breakage.



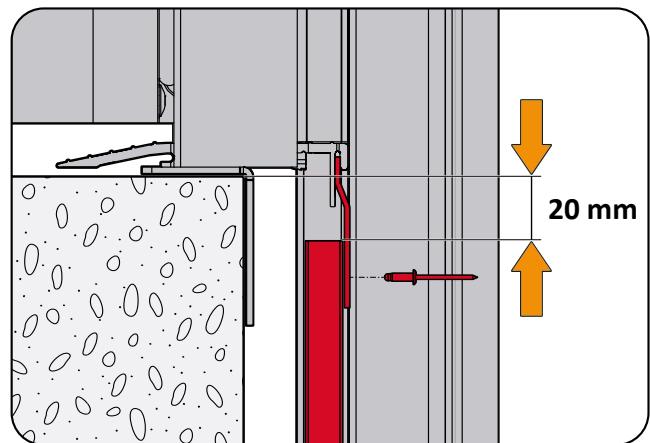
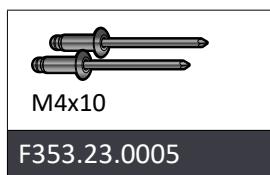
14.03. Infill under the floor door (different from ground floor)



FOR ALL DOORS EXCEPT GROUND FLOOR DOORS

Install the blind infill under the door BEFORE installing the landing door.

- Take a standard BLIND infill panel and cut it to size.
- Using the bar as a template, mark the holes, drill them and fasten the infill panel with the rivets provided.



14.04. Structure and mechanics infills - assembling

14.04.01 STRUCTURE INFILLS - PREPARATION AND ASSEMBLY

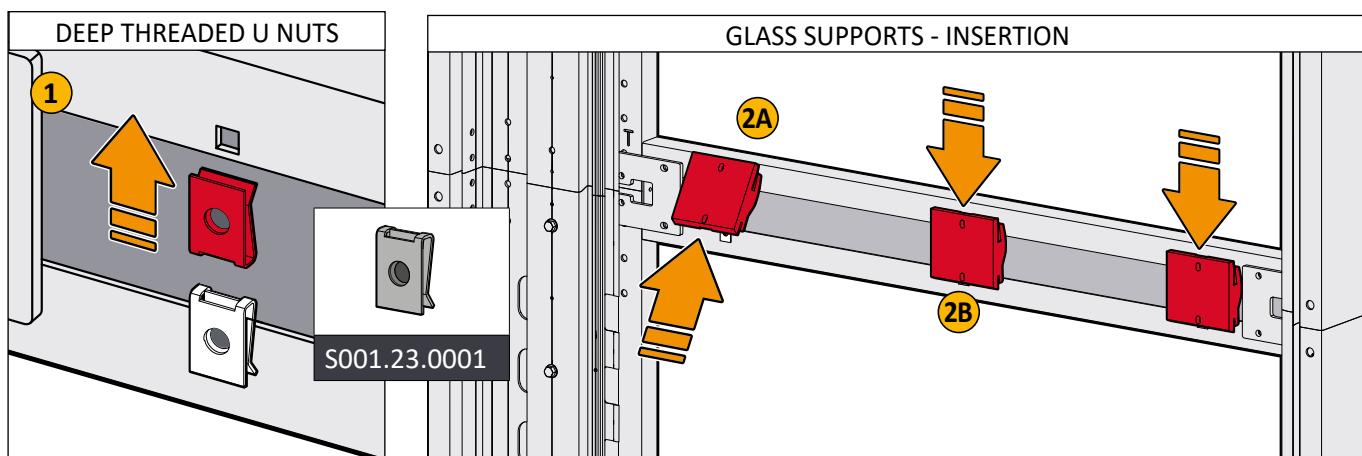
IMPORTANT!



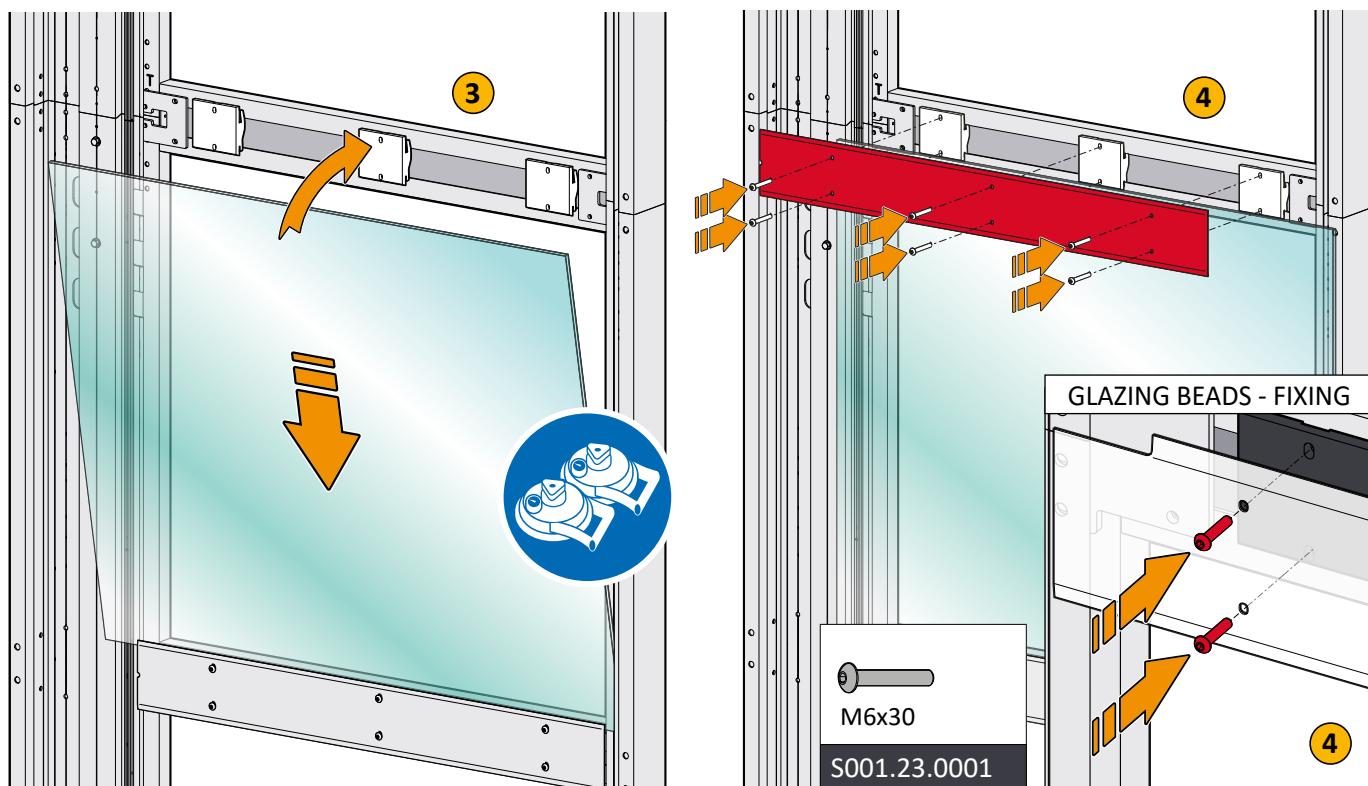
In outdoor structures, place adhesive sealant or silicone on the inside face of uprights and cross members before fitting the infill.

Mount the infill on all sides before installing the system.

- Pre-mount the cage nuts in the transoms, where the square hole is present ①.



- Insert the glazing beads following the two steps indicated, at a position corresponding to pre-mounted cage nuts ②A ②B.

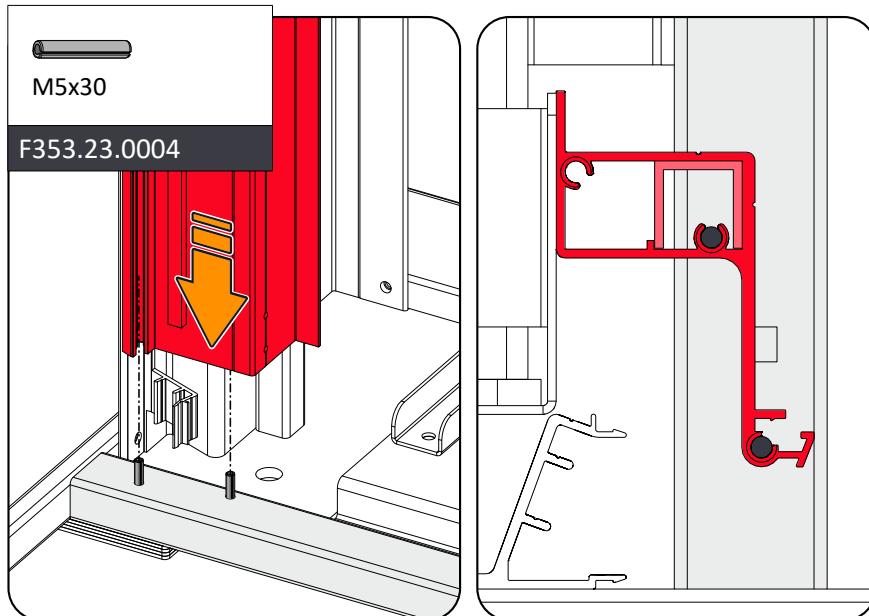


- Position the glass/panelling using the appropriate suction cups ③.
- Secure the glazing bead with the screws provided ④.

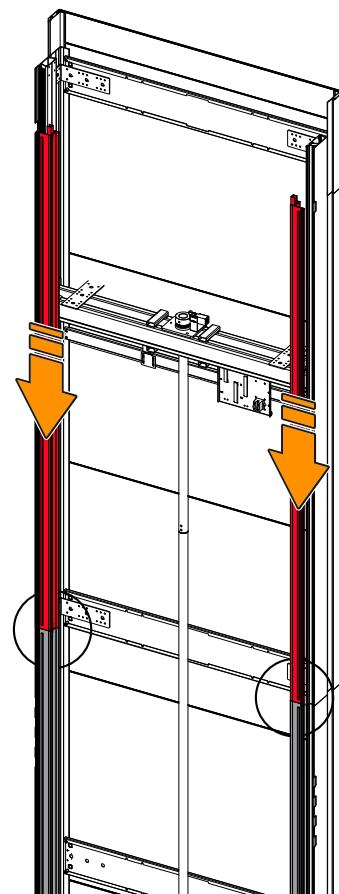
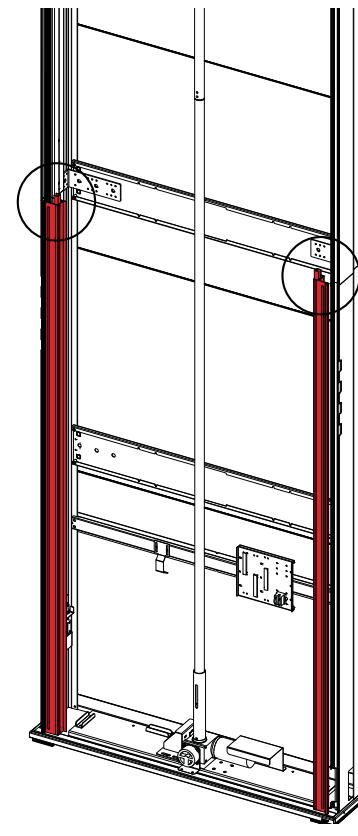
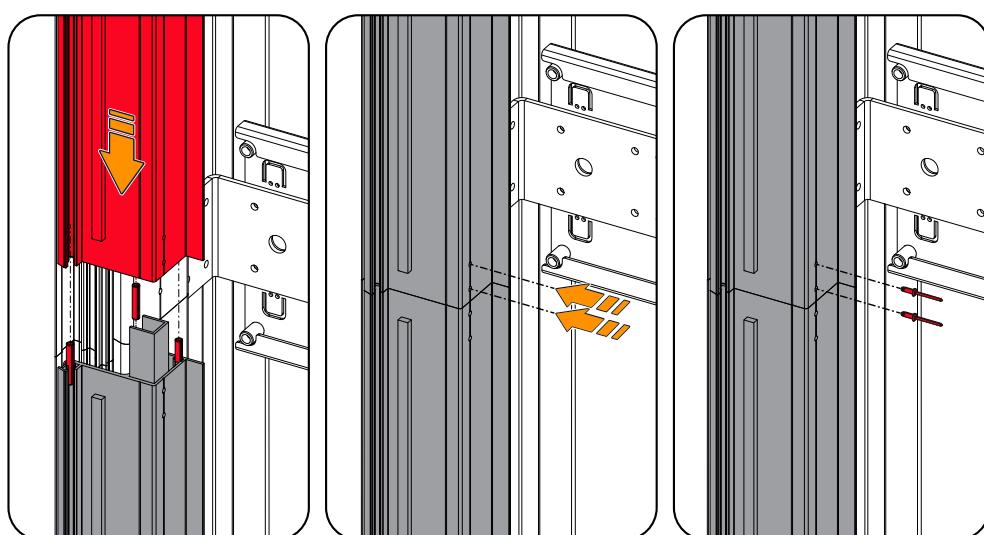
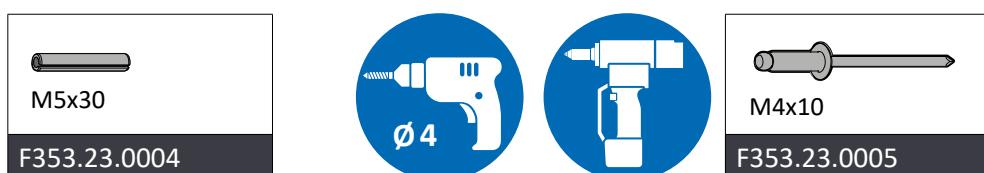
14.04.02 INTERNAL INFILL OF THE MECHANICS - PREPARATION AND ASSEMBLY

- Insert the pins into the appropriate slots on the pit bottom template only halfway along their length, allowing them to protrude halfway from the profile, and insert the casing support rails ②.

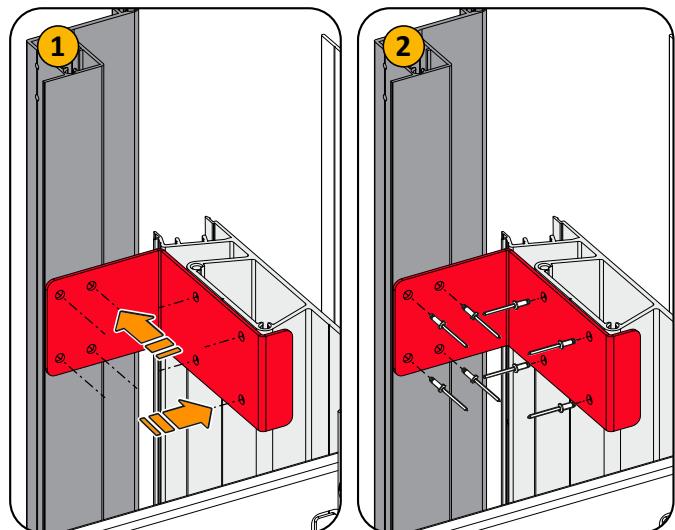
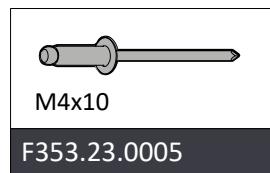
i Secure the pins with a drop of cyanoacrylate adhesive to improve rail assembly.



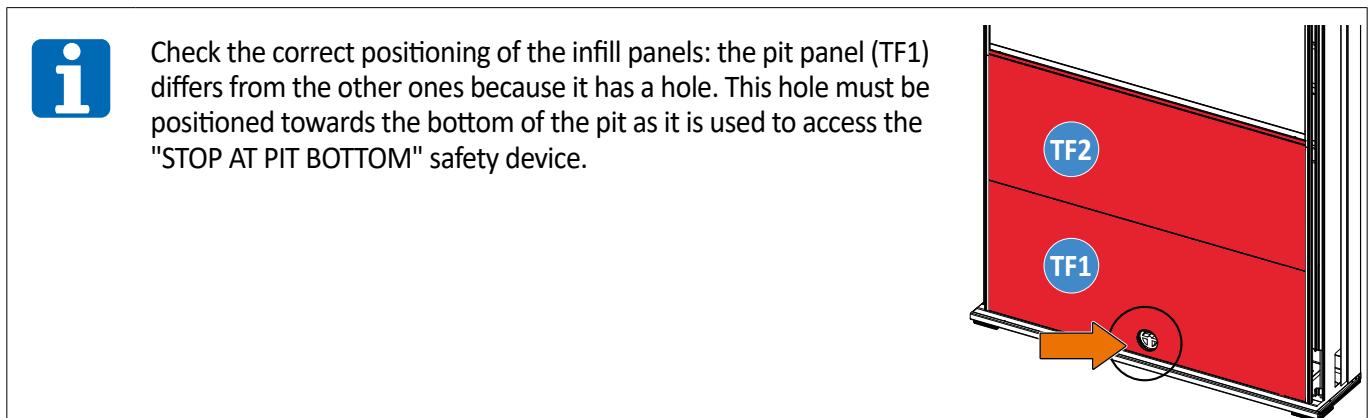
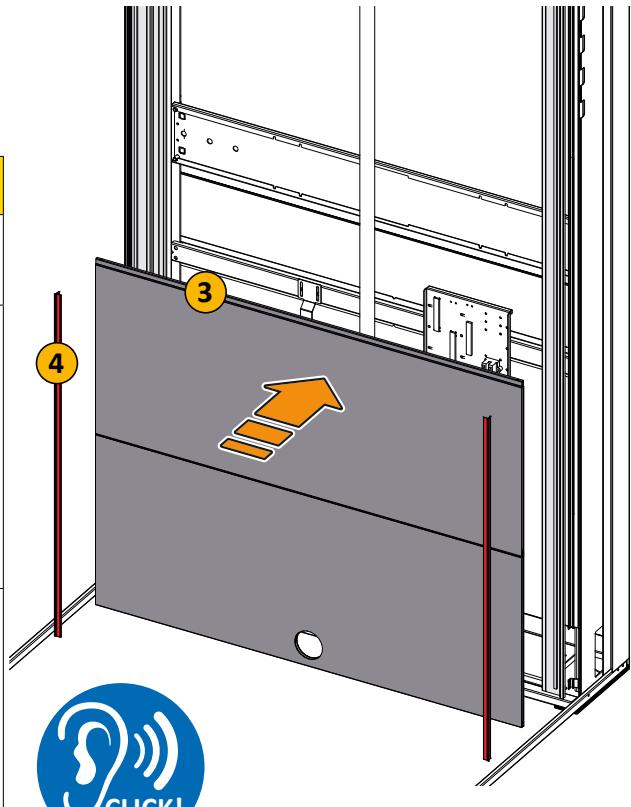
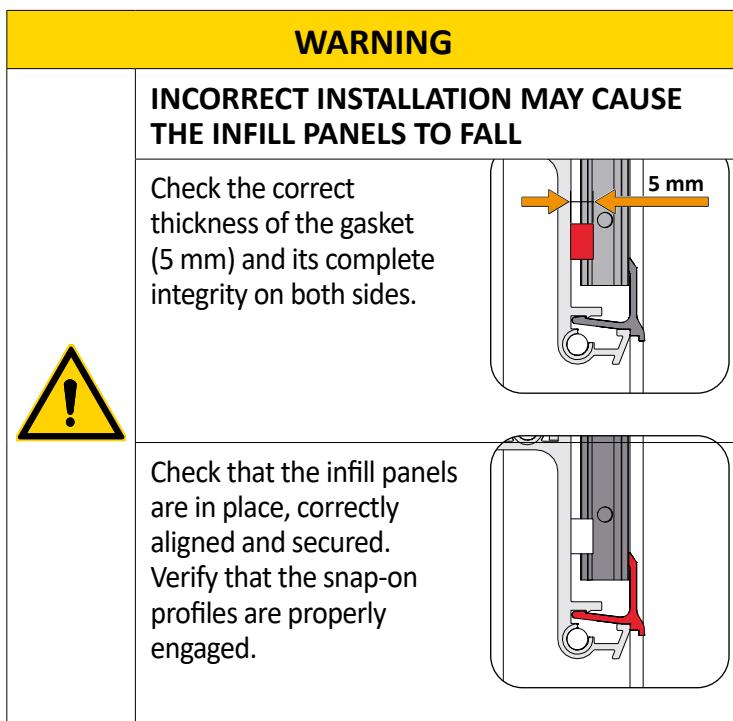
- Position the pins in the profile and insert the next rail.
- Drill the rail joint (pre-assembled in the lower rail) at a position corresponding to pre-drilled holes.
- Assemble the rail sections with the screws provided.



- Position the brackets in the header and drill the infill support rail and mechanical rail-guide.
- Drill ① and fasten the brackets with the rivets provided ②.



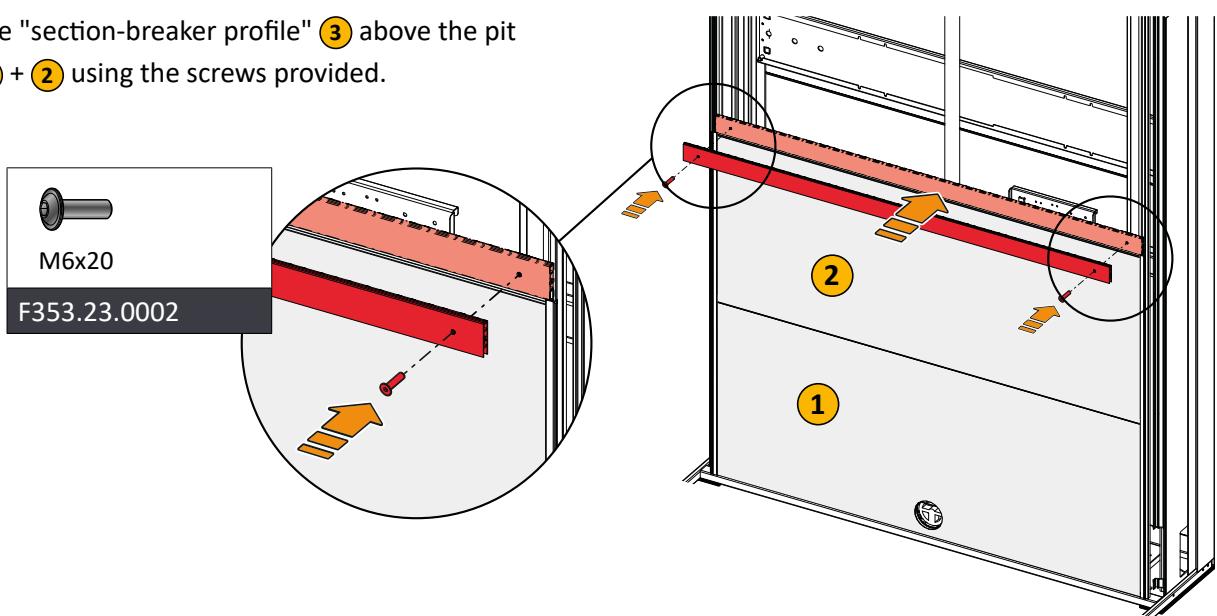
- Position the mechanical protection panels ③ together with the snap-on profiles ④ on the support rails of mechanics infill panels.



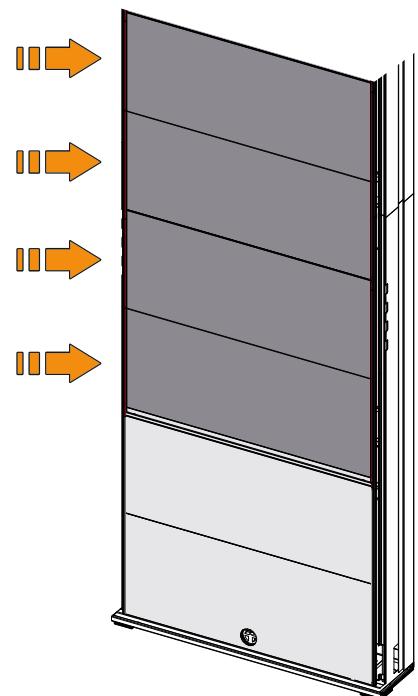
DomoFlex 2[®] - Cross 50.2 structure and masonry shaft

INSTALLATION AND COMMISSIONING INSTRUCTIONS

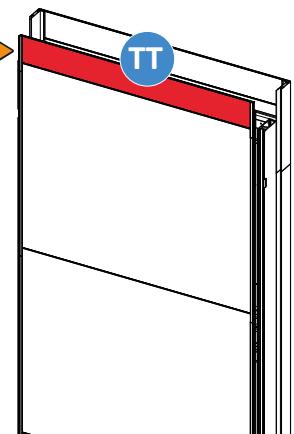
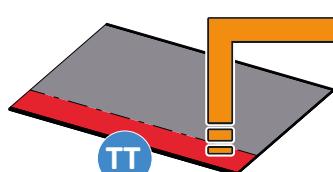
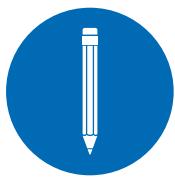
- Secure the "section-breaker profile" (3) above the pit panels (1) + (2) using the screws provided.



- Proceed with the installation of all mechanical protection panels with the snap-on profiles provided.



i The infill panels in the header are TO BE CUT ON THE BUILDING SITE.



WEAR APPROPRIATE PPE



14.04.03 MECHANICS INTERNAL INFILL - PANELS RECOGNITION

There are 3 types of infill panels:

① PIT PANEL.

Consists only of a single panel and it is installed at the pit bottom.

② MECHANICAL COVER PANEL.

Consists only of a single panel and it is installed above the pit panel.

③ SECTION-BREAKER PROFILE.

Allows easy removal of the mechanical cover panel.

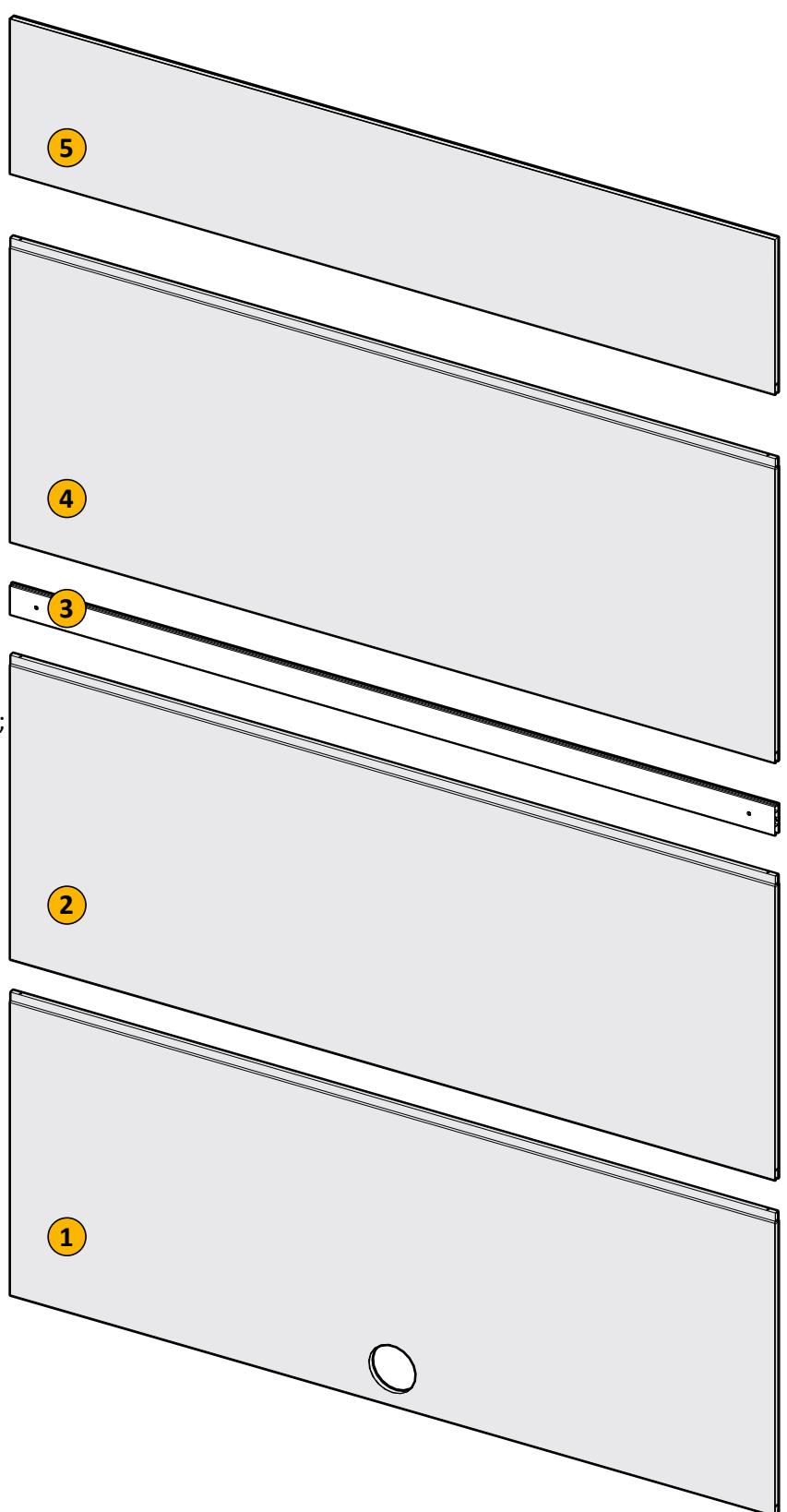
It is installed above the mechanical cover profile **②** and secured to the profiles by means of the appropriate screws.

④ STANDARD PANEL.

Being of standard height they are interchangeable with each other.

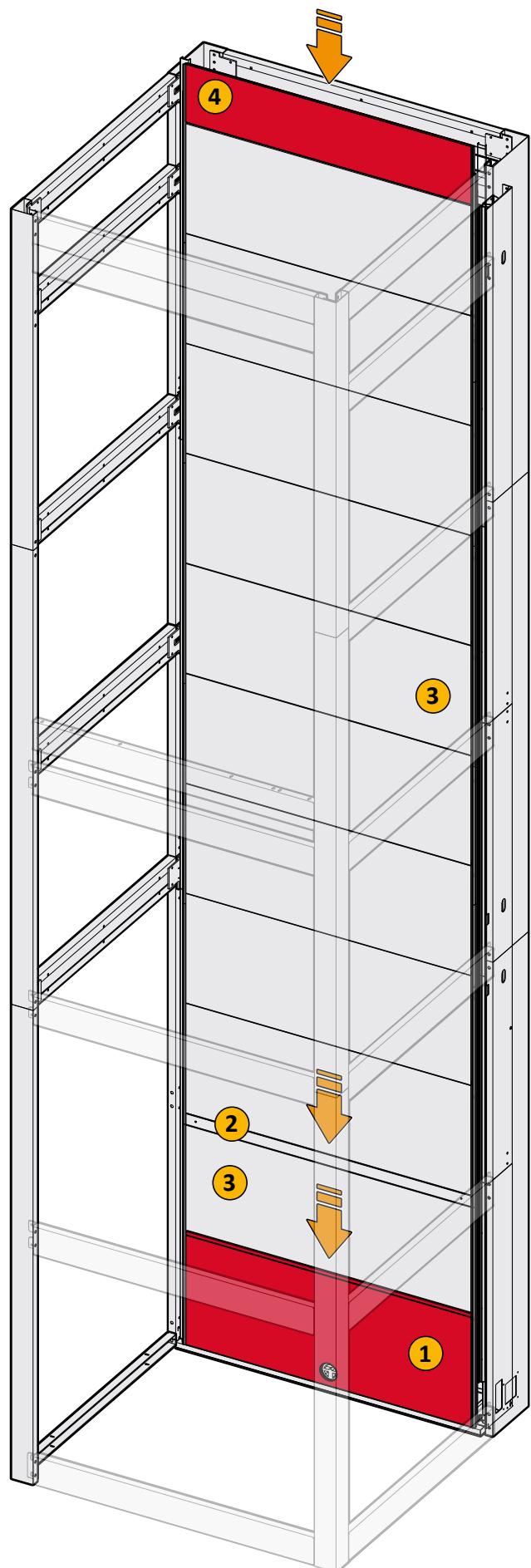
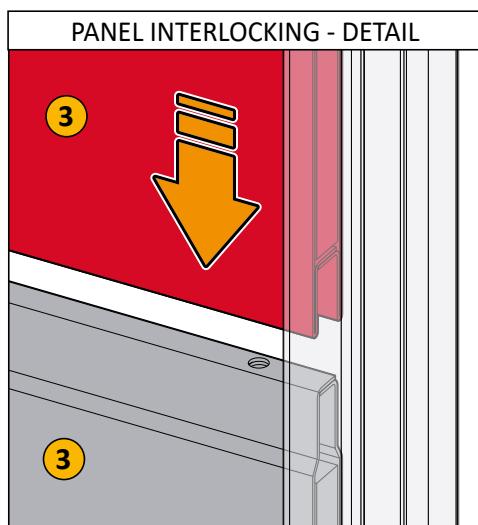
⑤ HEADER PANEL.

Varies in height according to the system; in the case of a roof, it is equipped with a fastening lug with the same.



14.04.04 MECHANICS INTERNAL INFILL - MOUNTING

- Insert the panels into the appropriate guides starting from the bottom (pit panel) 1.
- Insert a standard panel 3 for closing the mechanical compartment.
- Continue with the standard panels 3 above the section-breaker profile 2, closing with the header panel 4.



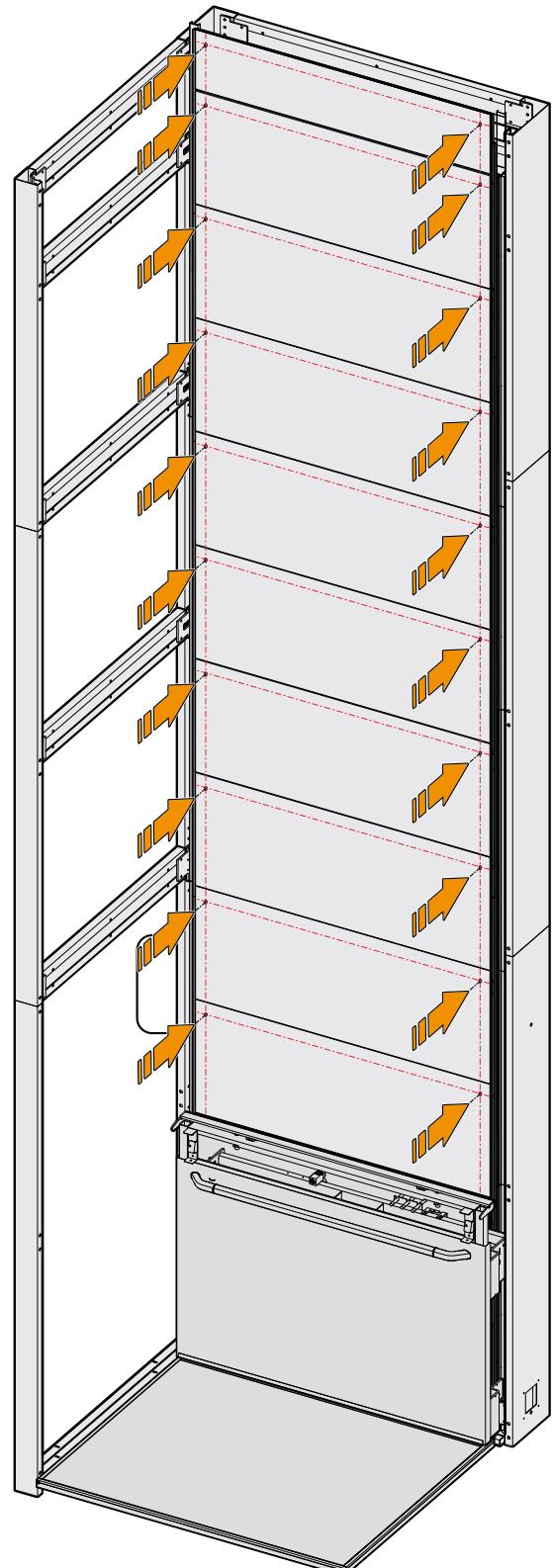
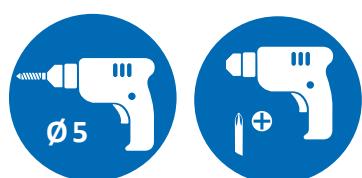
14.04.05 MECHANICS INTERNAL INFILL - ADDITIONAL SAFETY FASTENING

IMPORTANT!



Supplementary securing is mandatory according to local safety regulations.
Ensure that it is carried out if such regulations are in force in the country of installation.

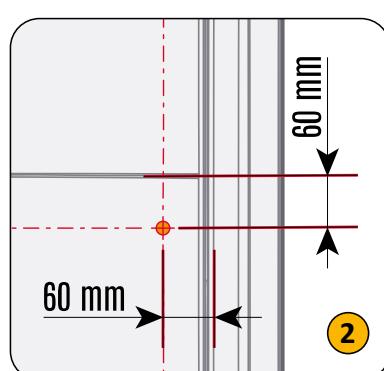
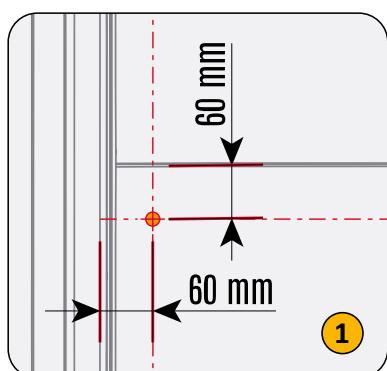
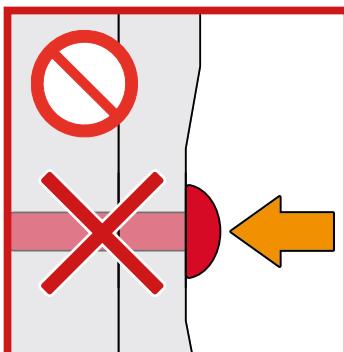
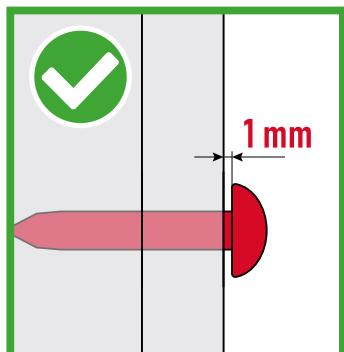
- With the infill panels installed, drill holes as shown in figures ① + ②.
- Secure to rear support rails using the self-tapping screws provided.



IMPORTANT!



RISK OF PANELS DAMAGING.
Do not tighten the safety screw, to avoid damaging the panels. Leave a clearance of 1 mm..

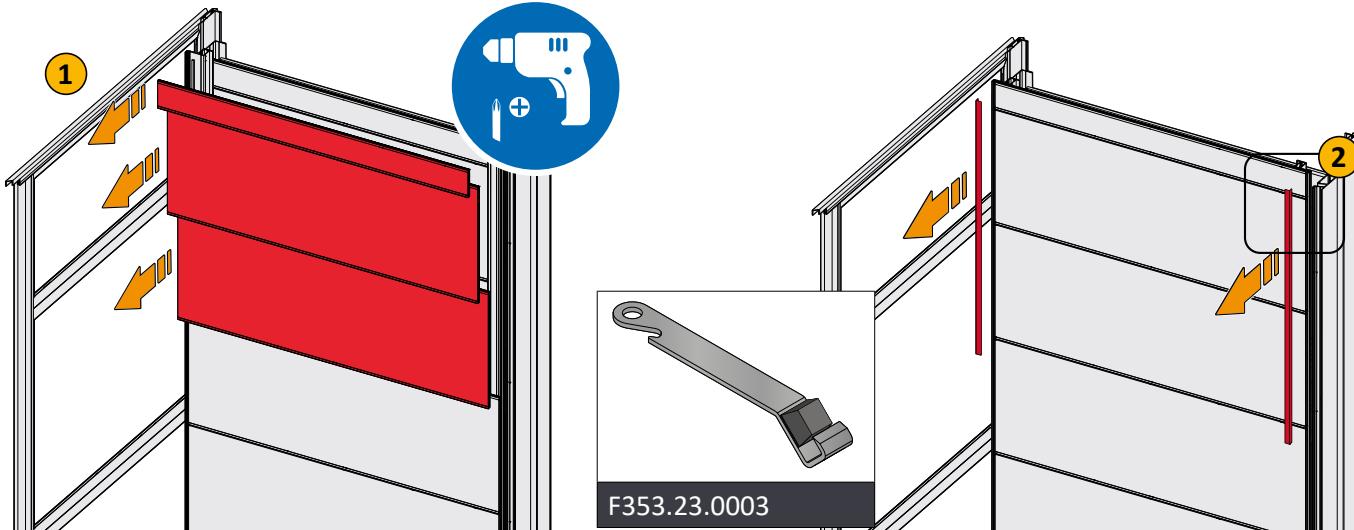


14.05. Mechanics internal infill - removal

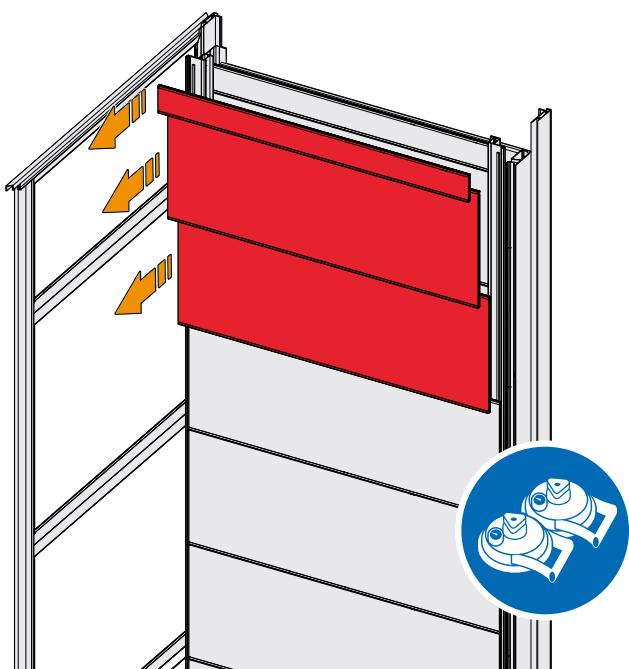
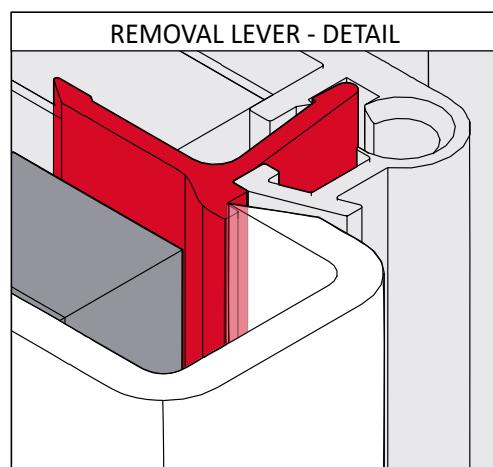
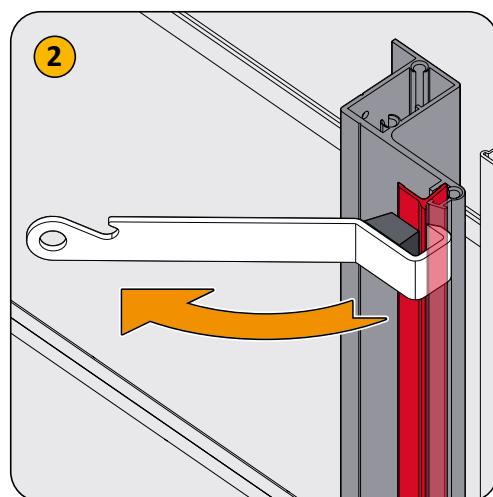
IMPORTANT!



Check whether additional safety fastening has been carried out and remove the screws if any ①.



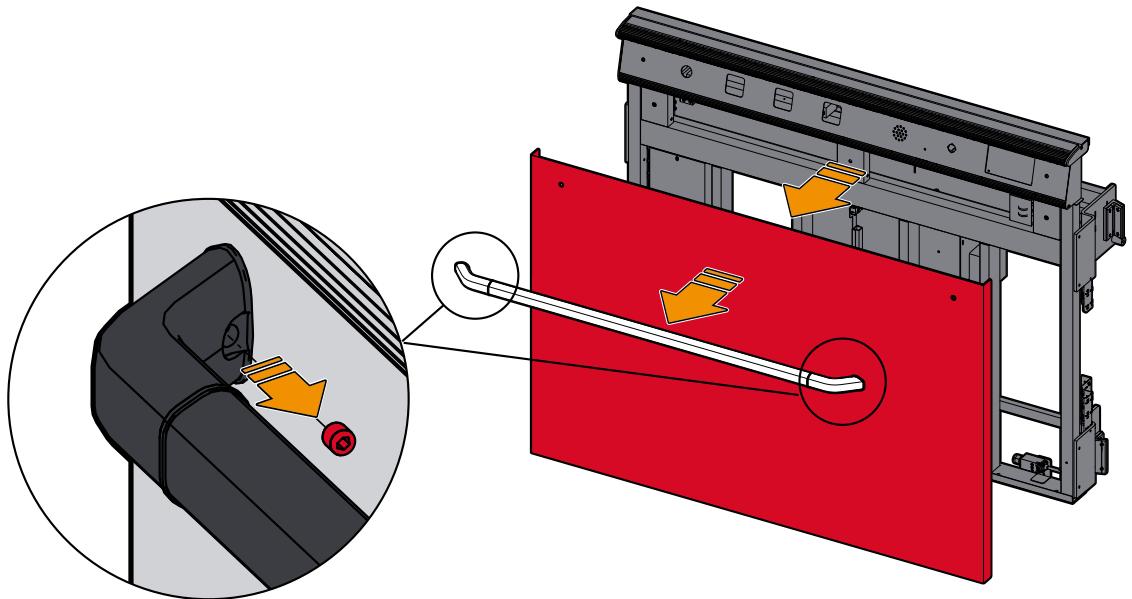
- Remove the snap-in profiles using the lever provided in the kit ②.
- Remove the infill panels starting from the top ③.



14.06. Platform protection infill and handrail - assembly

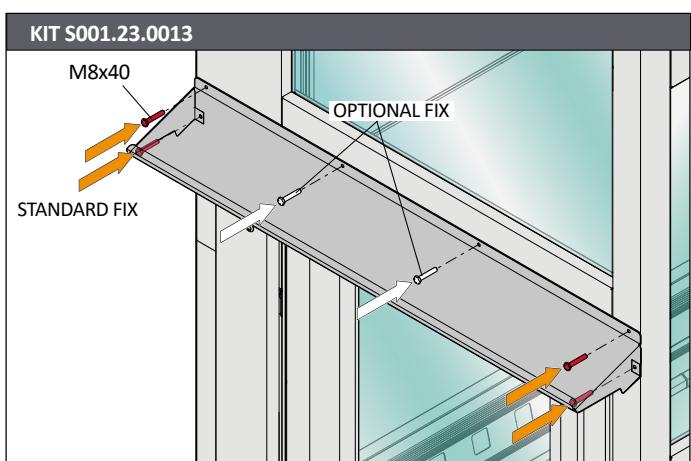
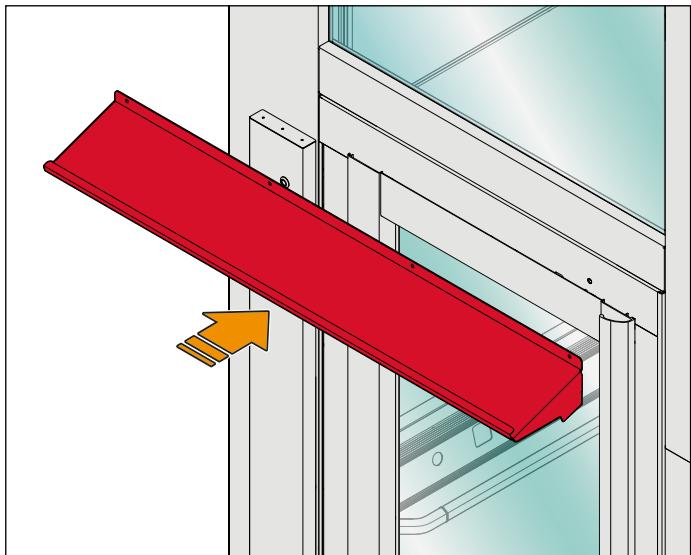
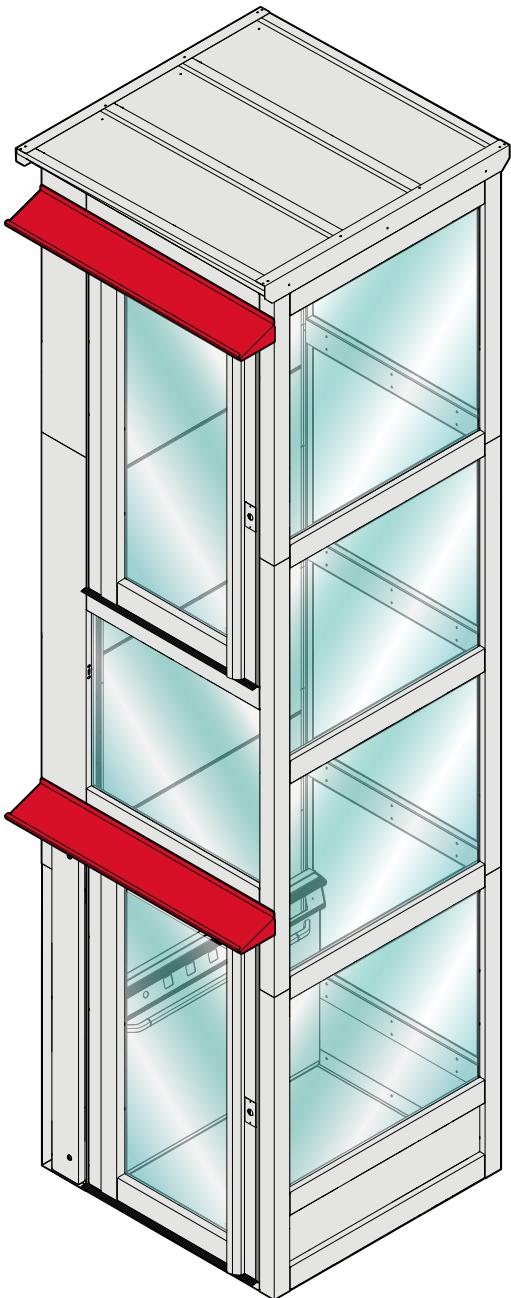
CAUTION	WEAR APPROPRIATE PPE
 DANGER OF CRUSHING Move/lift the components using suitable lifting gear (see Chapter 9).	   

- Reposition the front panel and handrail, securing them with the handrail locking pins.



15. Additional installations

15.01. Protective canopy (if supplied)



Apply silicone carefully on the three sides of the canopy in order to prevent water seepage.

16. Operations to be performed before moving the platform

NOTICE



CAUTION! RISK OF MATERIAL DAMAGE!

Below are some obligatory instructions for preventing any material damage.



AREALIFTING disclaims any liability in case of damage arising from failure to observe this "Technical communication".

16.01. Technical cleaning - pre-movement of the platform

NOTICE



ALWAYS PROTECT THE INTEGRITY OF THE RUNNERS AND GUIDES.

Thoroughly clean the runners and guides, removing debris, metal shavings and dirt that could irreparably damage them during handling.

16.02. Lubrication of guides

NOTICE



Lubricate the guides thoroughly with the supplied silicone spray lubricant before the first manoeuvre..

16.03. Lubrication of the manoeuvring screw

IMPORTANT!



LUBRICATE THE ENTIRE SCREW and properly fill the oil collecting tray with the supplied lubricant before the first manoeuvre.

OIL TANK - CORRECT FILLING!

Correct filling of the oil tank and subsequent impregnation of the sponge is essential to avoid damage to the platform caused by failure to lubricate the drive screw.



USE ONLY THE SPECIFIED OIL
(5W-40)

17. First test travel

WEAR APPROPRIATE PPE



Before performing the first test travel, make sure that all electrical components are connected correctly.

NOTICE

IT IS RECOMMENDED TO PERFORM A FULL TRAVEL WITH THE SLING IN ADVANCE:



- Thoroughly clean the guide rails and lubricate them with SILICONE-BASED SPRAY OIL (SUPPLIED WITH THE PLATFORM - F353.05.9017).
- 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 STOP devices are disabled.
- Check that the safe pit device is disabled.
- Check that the distance between the carrier and the headroom is the same as that indicated by the design.
- Power the controller by operating it in SERVICE mode.

NOTICE

WITH THE SLING STATIONARY AT THE TOP FLOOR:

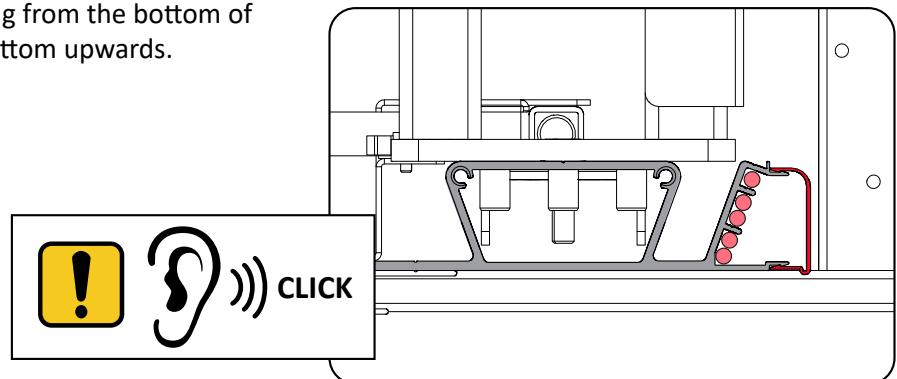


- Check that the sling upper travel margin on the guide rails corresponds to design drawing.
- Adjust the position of the limit switch so that it trips after a lifting of approximately 30mm above the floor.
- Lower the platform to the lowest floor.
- Pay close attention to travelling cable proper length and any interference during the travel.
- Adjust the position of the lower limit switch so that it trips after a downward travel of approximately 10 mm below the lowest access.
- Perform a few full travels, checking:
 1. Cable movement.
 2. Any abnormal noise.
 3. That the limit switches do not encounter obstacles.

18. Platform completion assembly

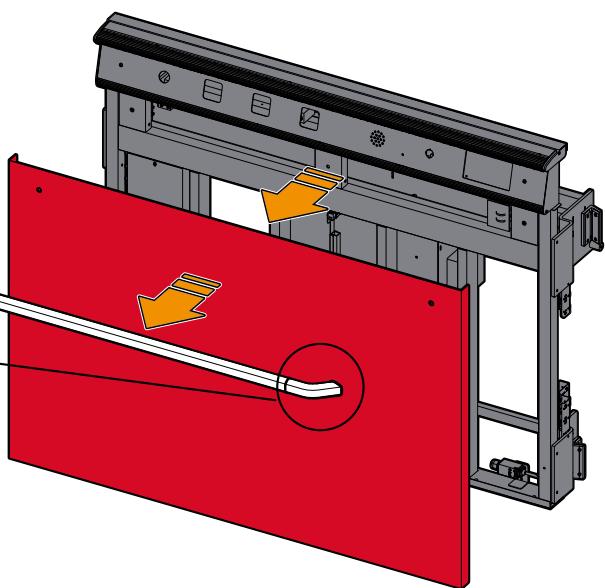
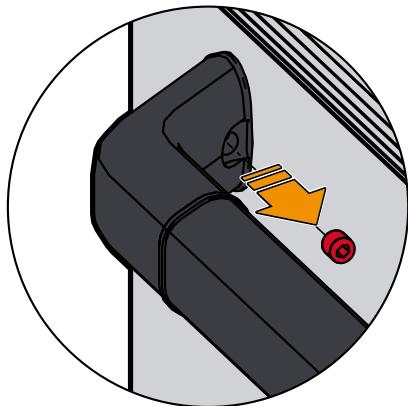
18.01. Wiring cover profile

- Install the wiring cover profile starting from the bottom of the pit to the headroom from the bottom upwards.

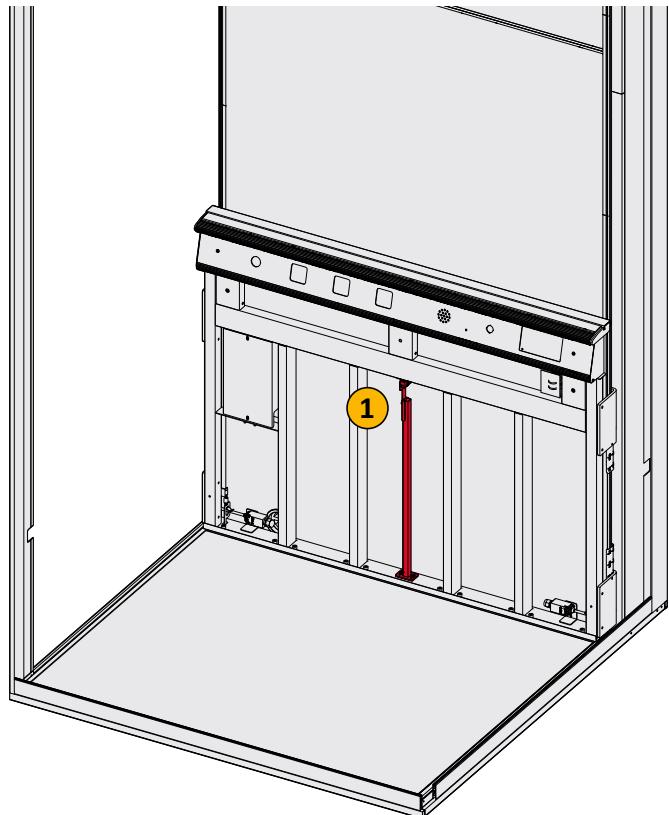
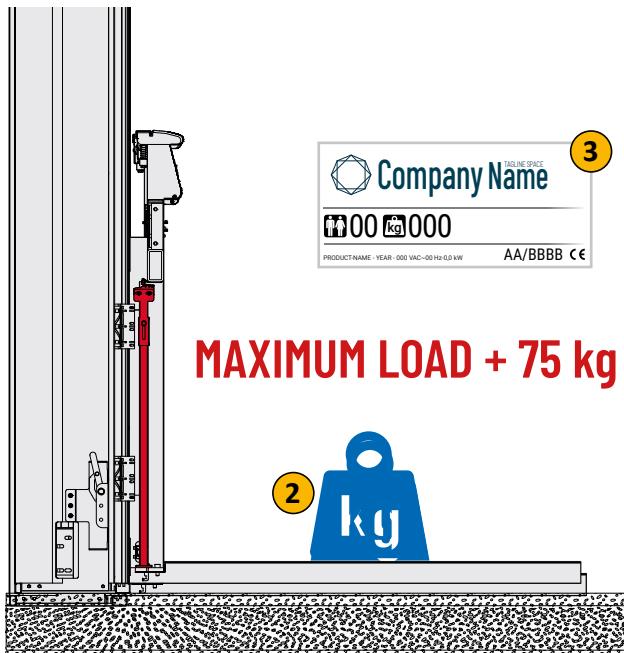


18.02. Overload contact setting

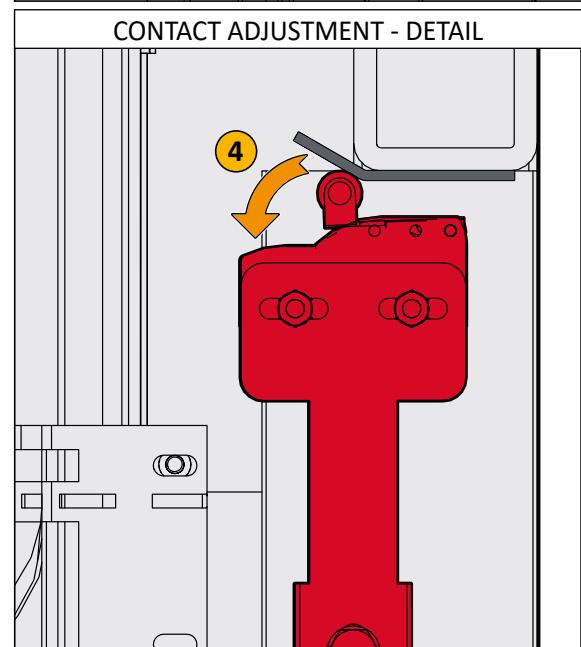
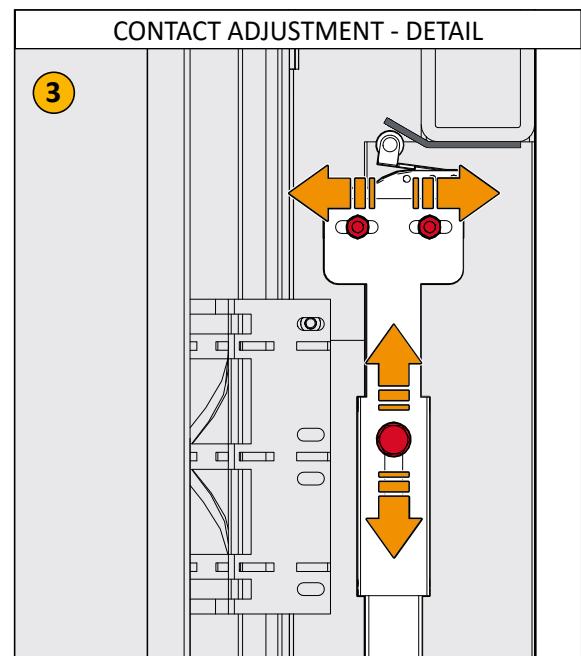
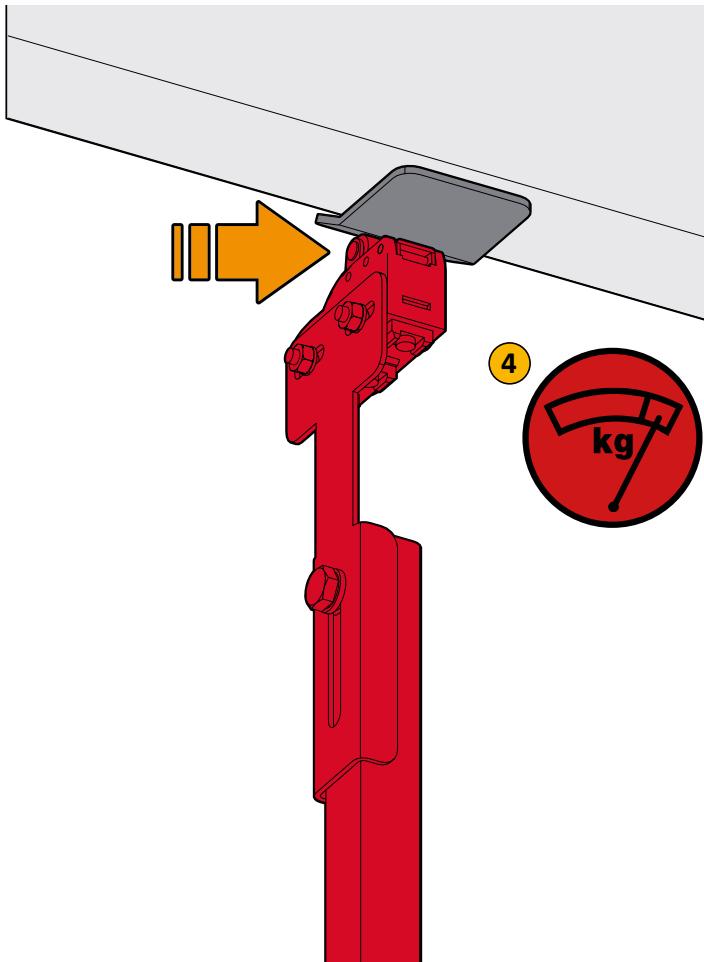
- Remove the handrail and front panel by unscrewing handrail locking pins.



- Locate the overload contact in the platform (1) with its supporting pillar.
- Load the platform with the maximum permissible weight (2), as indicated on the installation plate, and add a weight of 75 kg.



- With the "overload load" of the maximum permitted weight on the leveller, adjust the leveller contact **3** so that it is closed (alarm active) **4**.



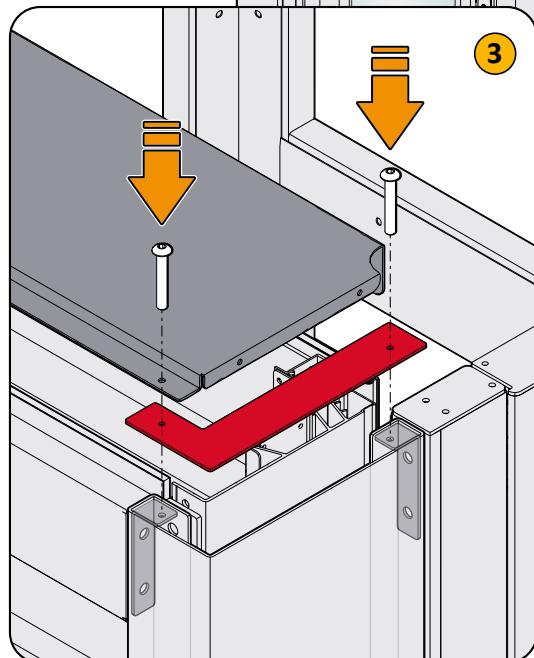
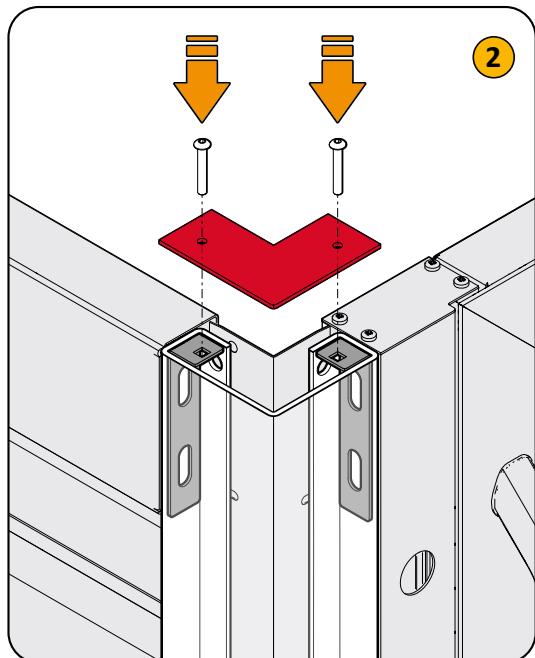
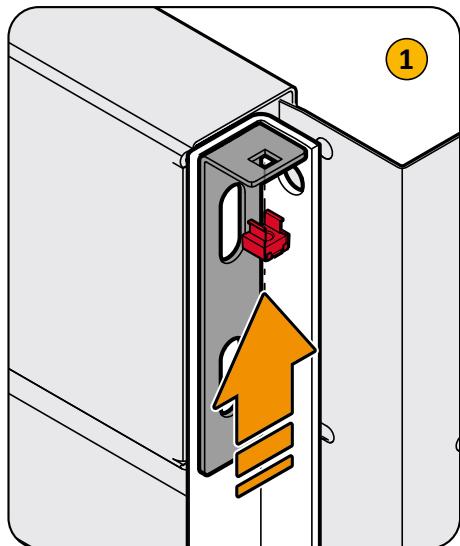
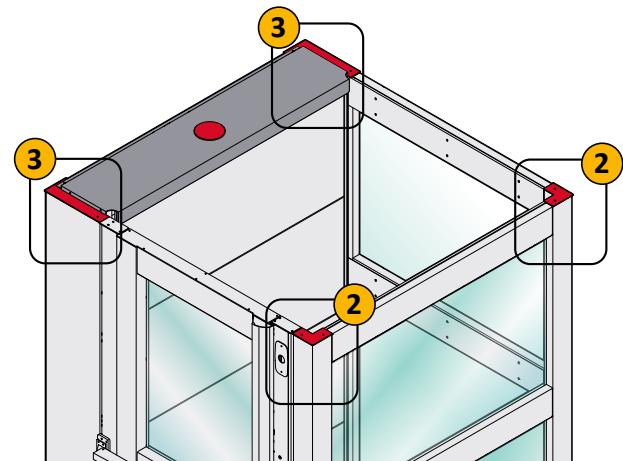
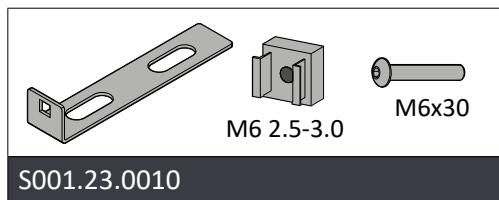
- When the load is removed from the platform, the sensor will reopen (alarm off) due to loading platform return to its position, thus leading to an alarm activation adjustment.

18.03. OPEN version



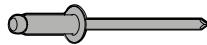
The "OPEN" version is characterized by an open structure (without shaft closing roof) that proves lower than the standard model. At the top landing floor, the platform is equipped with a gate (replacing the landing door) having the same height as the structure itself.

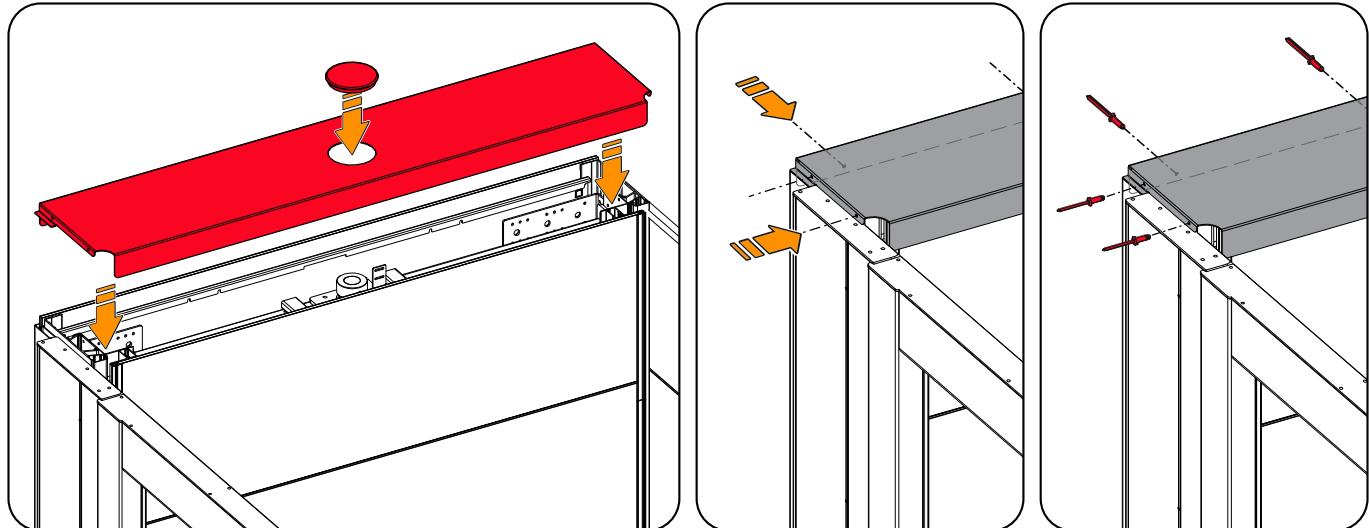
- Secure the cage nuts on the "L" brackets 1.
- Mount and secure the top covers 2 and 3.



- Position the mechanical cover with the screw protection cap.
- Drill using the mechanical cover as a template (in the holes provided) and assemble by means of the screws provided.

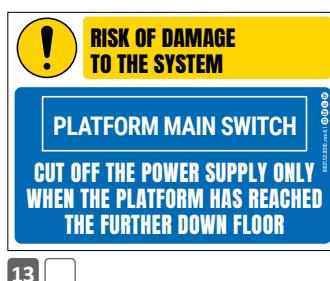
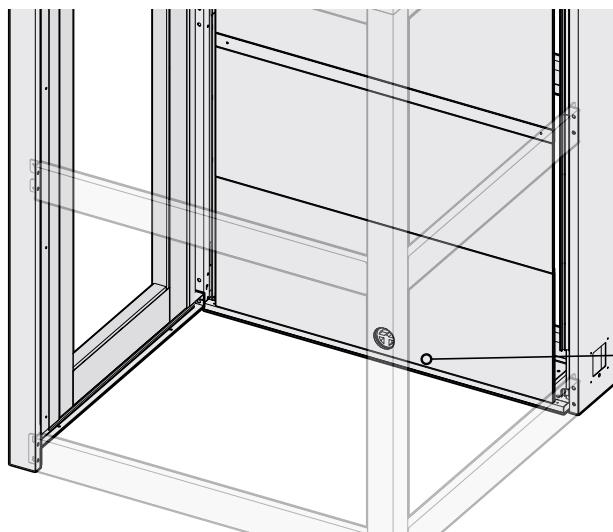
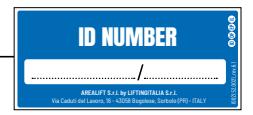



M4x10
F353.23.0005

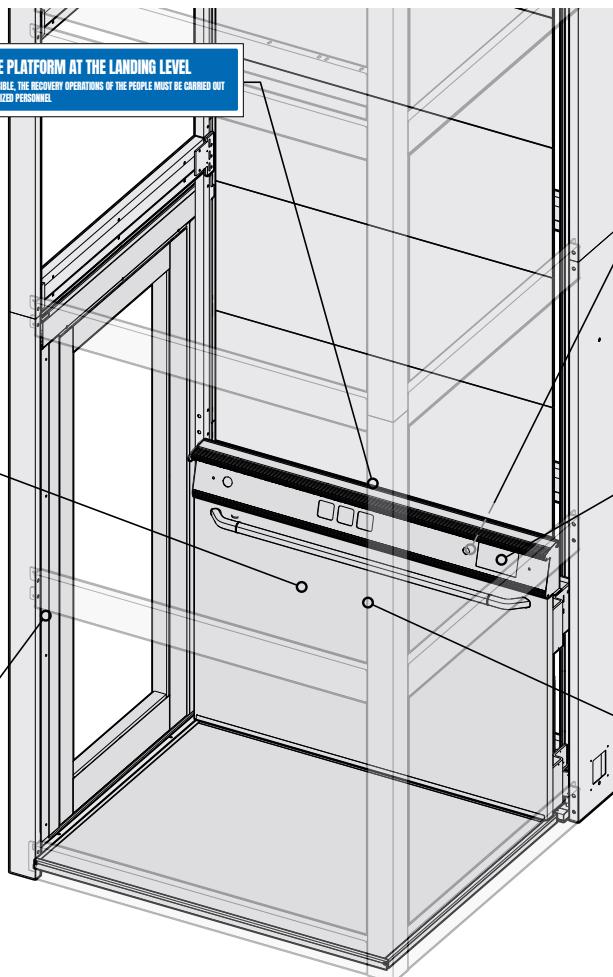
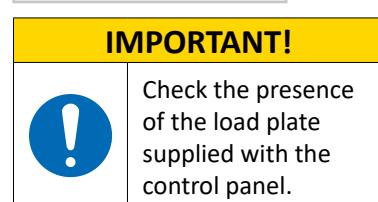


19. Safety signs to be applied on the platform lift



13 14 15 16 17 18 24 

Apply inside the manual landing doors, on the lock side.

19 

E02.32.002 rev.01

20 21 22 23

20. Final checks and adjustments

IMPORTANT!



Perform the checks and adjustments described in the manual IM.TEC.126 "FINAL CHECKS" in order to be able to consider system installation as completed.

21. Platform noise



The sources of platform noise are the motor, the brake, and the shoes that slide on the guide rails, particularly during full load lifting (including maximum permissible overload).

The motor is located at the rear of the sling between the guide rails and behind the protective casing.

User position is located on the carrier, so the user is not directly subject to noise emissions from noise disturbance sources. Despite this assumption, as precautionary measure, measurements were taken directly around the above sources, in an industrial environment without other machines in operation.

In the various configurations examined, all measurements resulted in sound pressure levels below the value of 70dB(A).

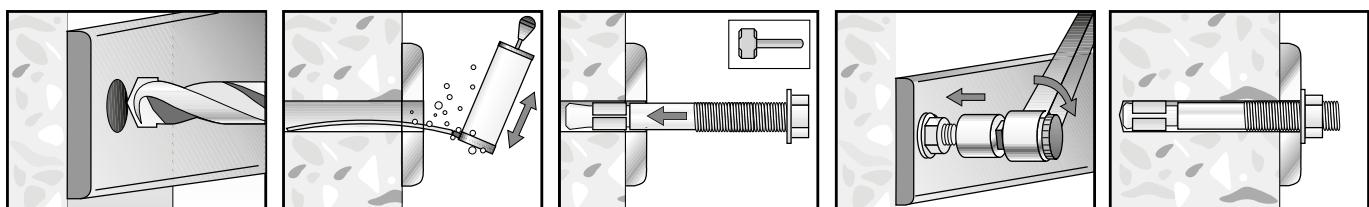
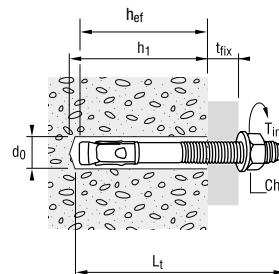
ANNEX 1

Anchoring to the shaft by means of plugs (mechanical or chemical)

SHAFT IN REINFORCED CONCRETE

Unless otherwise noted, all plugs are M10 in size and require a hole in the wall with 10 mm bit.

h_1	=	Hole minimum depth
l_t	=	Plug length
d_0	=	Hole diameter
t_{fix}	=	Fixable shim
t_{inst}	=	Tightening torque
Ch	=	Wrench
h_{ef}	=	Anchoring depth



Carefully clean the hole before installation.

SHAFT IN LOAD-BEARING MASONRY

CAUTION



The anchoring of the jambs in shaft in masonry (**realized with elements suitable for the construction of load-bearing/structural masonry***), requires a reduction of the bracket pitch in order to cope with the lower mechanical strength of the shaft wall.

- * Building materials suitable for the realization of load-bearing walls also in seismic areas, calculated and realized in compliance with the law in force in the field in the installation sites (IT) - D.M. January 17, 2018 (Building technical standards 2018).

The bracket pitches are 1250 mm, starting from the pit bottom = 500 mm.

NOTICE

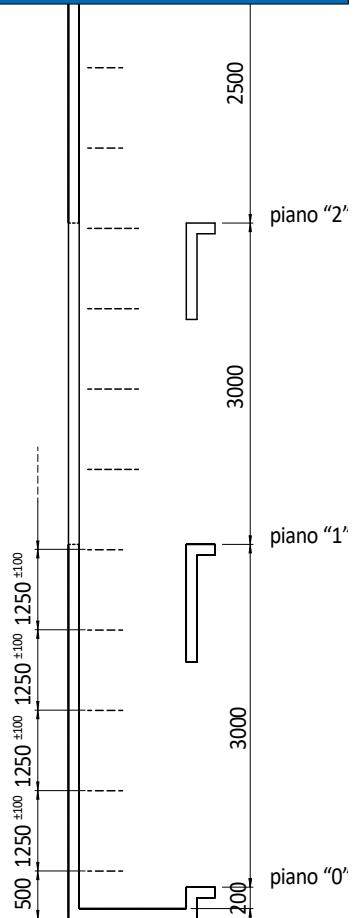


Always refer to the design drawing for installation.

CAUTION



For all the cases not covered by the described types, a site survey and a project by a qualified technician is necessary.



ANCHORING in LOAD-BEARING MASONRY SHAFT WITH SOLID, COMPACT ELEMENTS

For the application of chemical anchors on load-bearing masonry with solid, compact elements, a special kit has been developed (code F350.23.0026V01), consisting of:

- 16 x galvanized THREADED RODS M10x130 with 45° cut (anti-rotation);
- 2 x CARTRIDGES (300 ml each) of injection anchor*, usable with normal silicone guns;
- 2 x Universal MIXERS ø9 mm in addition to the 4 supplied with the cartridges.

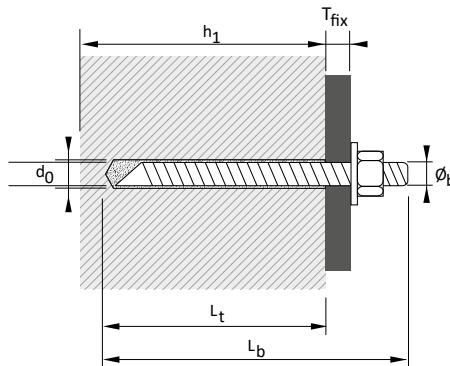
* Applicable for solid and hollow elements in cement, natural stone.

Each kit is suitable for the installation of 8 guide rail fixing brackets, which correspond on average to one stop. Therefore, by way of example, for a 3-stop system, 3 F350.23.0026V01 KITS will be required, with the positioning of the brackets according to the example drawing.

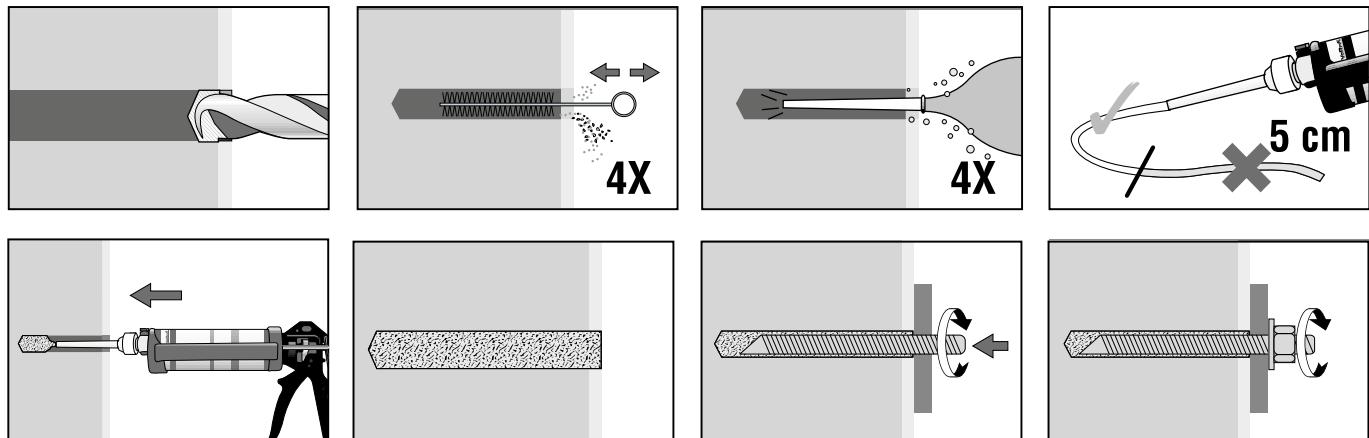
h_1	=	Hole minimum depth
L_b	=	Bar length
L_t	=	Plug length
d_0	=	Hole nominal diameter
ϕ_b	=	Bar diameter
T_{fix}	=	Fixable shim

Calculation of the bar length:

$$L_b = L_t + T_{fix}$$



INSTALLATION SEQUENCE:



Carefully clean the hole before installation.

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 GALVANIZED 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.

* Valido per elementi in: calcestruzzo, pietra naturale, mattone pieno e semipieno.

Each kit is sufficient for 8 brackets, required for approx. 1 stop.

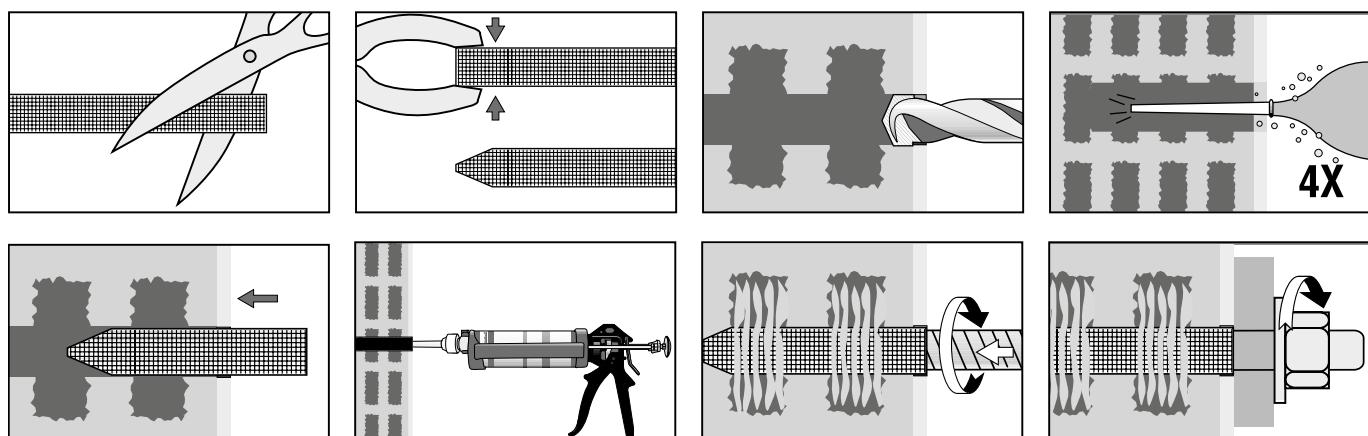
For instance, 3 F350.23.0025V01 kits are required for a 3 stops' lift, the brackets being positioned as per the sample drawing.

h_1	=	Minimum hole depth
L_b	=	Rods length
L_t	=	Dowel length
d_0	=	Hole diameter
d_b	=	Metal Mesh Sleeve diameter
\emptyset_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.



Via Caduti del Lavoro, 16/22
43058 Sorbolo Mezzani (PR)

Tel. +39 0521 695311
info@arealifting.com
www.arealifting.com

MADE IN ITALY
