EN

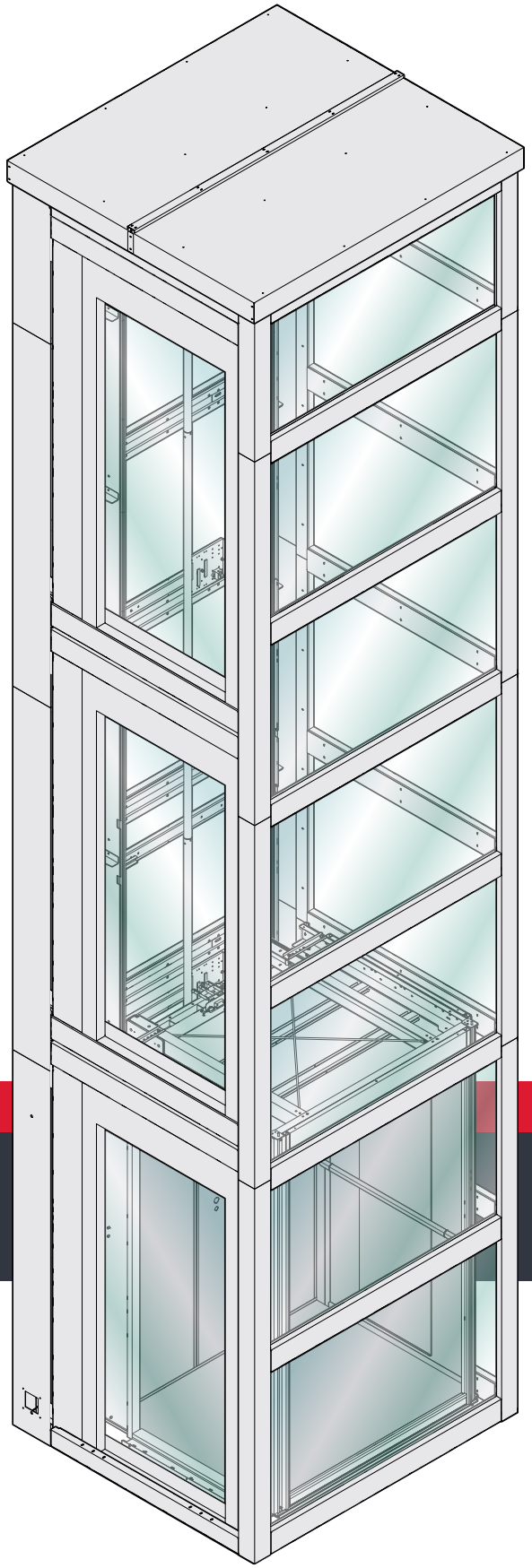
SimpLift®

in Cross 50.2 structure and masonry shaft

Electric screw driven Homelift with car

INSTALLATION AND COMMISSIONING INSTRUCTIONS

(Rev.0)



sample image

AREALIFTING®

THE VERTICAL MOBILITY MANUFACTURER

20241029

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TABLE OF CONTENTS

1. Manual reading guide 8
   1.01. Preliminary information 8
   1.02. Personal security and risk recognition 9
3. Safety and information Signs 10
   3.01. DANGER Signs 10
   3.02. PROHIBITION Signs 10
   3.03. MANDATORY Signs 10
   3.04. Information symbols and infographics 10
4. Manual reading guide 11
   4.01. Preliminary information 11
5. Manual reading guide 12
   5.01. Preliminary information 12
6. Tools required for installation 13
7. Preliminary checks and shaft preparation 15
8. Installing the scaffold 16
9. Load lifting devices 17
10. Box content - screws kit 18
11. Steel structure 22
   11.01. Upright recognition and positioning 22
   11.02. Transom - recognition and positioning 24
   11.03. Shell - installation 25
      11.03.01 SHELL - ELEMENT IDENTIFICATION 25
      11.03.02 SHELL - FASTENER IDENTIFICATION 25
      11.03.03 BASEMENT PERIMETER ASSEMBLY - INSTALLATION AND ANCHORING 26
      11.03.04 REINFORCEMENT PLATES - INSTALLATION 29
      11.03.05 SHELL - INSTALLATION (GUIDE RAIL SIDE) 30
      11.03.06 SHELL - IDENTIFICATION OF THE GUIDE RAIL SIDE TRANSOMS 31
      11.03.07 SHELL - INSTALLATION (SIDE OPPOSITE TO THE GUIDE RAILS) 33
      11.03.08 DOOR TRANSOM INSTALLATION 35
      11.03.09 DOOR TRANSOM ON TOP OF JAMB JOINT - INSTALLATION 36
   11.04. Mechanics infill rear panels - installation 37
   11.05. Shell roof - installation (flat / sloping roof) 38
      11.05.01 SHELL ROOF - PRE-INSTALLATION OF CORNER PLATES 38
      11.05.02 OUTDOOR ROOF - SIDE-MEMBER INSTALLATION 38
      11.05.03 INDOOR ROOF - SIDE-MEMBER INSTALLATION 39
      11.05.04 BRACKETS FOR SHELL TIE-RODS (SPIDERS) - INSTALLATION 39
      11.05.05 SHELL TIE-RODS (SPIDERS) - INSTALLATION 40
   11.06. Shell - anchoring 43

11.06.01 WALL anchoring . . . 43
11.06.02 PIT anchoring . . . 43
12. Mechanics - installation . . . 44
12.01. Guide rail supports - installation . . . 44
12.02. Pit bottom template - installation . . . 46
12.03. Guide rails . . . 48
12.03.01 GUIDE RAILS - PRELIMINARY OPERATIONS . . . 48
12.03.02 GUIDE RAILS - PUTTING INTO PLACE AND FASTENING . . . 50
12.03.03 GUIDE RAILS - JOINT . . . 53
12.04. Sensor and flat cable support bars - installation . . . 54
12.05. Headroom beam and transoms - installation . . . 55
12.06. System installation in masonry shaft . . . 56
12.06.01 PIT BOTTOM TEMPLATE - GROUND ANCHORING . . . 56
12.06.02 Guide rails - wall anchoring . . . 56
12.06.03 HEADROOM BEAM - WALL FASTENING (MASONRY SHAFT ONLY). . . . 57
12.07. Shell - plumb / wall anchoring . . . 58
13. Electrical system - preliminary checks . . . 59
13.01. Electrical system upstream of the platform - preliminary arrangements . . . 59
14. Mechanics - installation . . . 60
14.01. Geared motor - installation . . . 60
14.02. Pit stop - installation . . . 60
14.03. Safe Pit - installation . . . 61
14.04. Flat cables - installation and connection . . . 62
14.05. Magnet support brackets - contacts - ramps . . . 63
14.06. Manoeuvring screw - checks and precautions . . . 65
14.07. Manoeuvring screw - preliminary operations . . . 66
14.07.01 SCREW SLEEVE (IN PIT) . . . 66
14.07.02 MANOEUVRING SCREW PRE-ASSEMBLY . . . 66
14.08. Safety contact in the headroom . . . 67
14.09. Nut screw - check for wear and tear . . . 68
14.10. Sling (with mechanics) - preliminary operations . . . 70
14.11. Sling (with mechanics) - handling . . . 71
14.12. Sling (with mechanics) - installation . . . 72
14.12.01 SHOES - PROPER POSITIONING . . . 75
14.13. Manoeuvring screw - installation . . . 76
14.13.01 STANDARD installation . . . 76
14.13.02 installation in case of pre-assembled screw (§ 13.07.02) . . . 77
14.14. Car floor - handling/putting into place . . . 79
14.15. Car floor - fastening and adjustment . . . 80
14.16. Car operation panel (COP) - temporary installation . . . 81

14.17. Shell infills - installation 82
14.18. Automatic sliding doors - installation 83
14.18.01 DOOR FASTENING BRACKETS - IDENTIFICATION 83
14.18.02 DOOR FASTENING BRACKETS - installation 84
14.19. Swing doors - installation 85
14.19.01 shell - preliminary operations 85
14.19.02 shell - preliminary operations 86
14.20. Shaft electrical system - installation 87
14.20.01 WIRING - INSTALLATION 87
14.20.02 MAGNETS FOR SENSORS - INSTALLATION 87
14.21. Car - installation 88
14.21.01 SUPPORT BRACKET - INSTALLATION 88
14.21.02 CAR ROOF - FRAME - INSTALLATION 89
14.21.03 Car jambs and electronic barrier - Installation 90
14.21.04 FRONT TIE-RODS AND ROOF TIE-RODS - Installation AND CAR PLUMBING 91
14.21.05 Wall opposite to the mechanics - installation 92
14.22. Automatic sliding doors - installation 93
14.22.01 DOOR OPERATORS - installation 93
14.23. Automatic sliding doors - installation 95
14.23.01 THRESHOLD SUPPORT - installation 95
14.24. Swing doors - installation 96
14.24.01 THRESHOLD SUPPORT - installation 96
14.25. Car electrical connections 97
14.25.01 CAR CONTROL BOARD (UCEC.C) - CONNECTION 97
14.26. Mechanics side wall and car operation panel - Installation 98
14.26.01 MECHANICS SIDE WALL - INSTALLATION 98
14.26.02 CAR OPERATION PANEL (COP) WITH SAFETY CONTACT - INSTALLATION 98
14.27. Wall with mirror and handrail - Installation 99
14.27.01 WALL - INSTALLATION 99
14.27.02 MIRROR - INSTALLATION 99
14.28. Car counter-ceiling - Installation 101
14.28.01 CAR COUNTER-CEILING (WITH SAFETY CONTACT) - INSTALLATION 101
14.29. Car doors - Panels - Installation 102
14.29.01 SLIDING PANELS - INSTALLATION 102
14.30. Electric connections for first start-up 103
14.30.01 COLLEGAMENTI ELETTRICI DI VANO 104
14.30.02 COLLEGAMENTI ELETTRICI DELLE PORTE 105
14.31. Operations to be performed before operating the platform 106
14.32. Landing door - adjustments 107

14.32.01 LANDING DOOR - STOP ADJUSTMENT 107
14.33. Shaft in structure - assembly 108
14.33.01 IN STRUCTURE SHAFT (WITH SIDE INFILL) - ASSEMBLY 108
14.34. Control cabinet 110
14.34.01 CONTROL CABINET - ASSEMBLY 110
14.34.02 CONTROL CABINET - CABLE ROUTING 111
14.34.03 ARMADIO QUADRO ELETTRICO - CHIUSURA FORO MONTANTE 113
14.34.04 SAFE-PIT - EXTERNAL CONTROL LEVER CONNECTION 114
15. Infills 115
15.01. Infills - preliminary operations 115
15.02. Infill - silicone application for outdoor use 116
15.03. Structure infills - correct positioning 117
15.04. Infill under the floor door (different from ground floor) 118
15.05. Structure and mechanics infills - assembling. 119
1.1.01 Structure infillS - PREPARATION AND ASSEMBLY 119
1. Additional installations 120
1.01. Protective canopy (if supplied). 120
1.02. Structure - anchoring by ties (optional). 121
1.02.01 ANCHORING TIES - PREPARATION 121
1.02.02 ANCHORING TIES - WALL ANCHORING 122
17. First test travel 123
18. Assembly and completion adjustments of the platform 124
18.01. Overload - adjustment. 124
19. Manual reading guide 125
20. Final checks and adjustments 128
21. Platform noise. 128

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.	RISK LEVEL
WARNING	The symbol indicates that the failure to observe the corresponding safety measures can cause death or serious personal injury.	
CAUTION	The symbol indicates that failure to observe the relevant safety measures can cause minor or moderate personal injury or damage to the device.	
NOTICE	It is not a symbol of security. It indicates that the failure to comply with relevant safety measures can result in property damage.	
INFORMATION	It is not a symbol of security. It indicates important information.	

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

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.

3. Safety and information Signs

3.01. DANGER Signs


GENERAL DANGER


ELECTRICITY DANGER


DANGER FLAMMABLE MATERIAL


DANGER OF FALL BY A LEVEL


DANGER SUSPENDED LOADS


DANGER OF CRUSHING

3.02. PROHIBITION Signs


GENERIC PROHIBITION


FORBIDDEN TO STEP ON


PROHIBITED TO WALK ON OR STOP IN THIS AREA

3.03. MANDATORY Signs


OBLIGATIORY TO WEAR THE PROTECTION HELMET


OBLIGATORY TO WEAR SAFETY SHOES


OBLIGATORY WEAR THE PROTECTIVE GLOVES


OBLIGATORY TO WEAR EYE PROTECTION


OBLIGATION TO WEAR THE AUDIO PROTECTION

3.04. Information symbols and infographics


MARK


DRILL AND/OR SCREW


CUTTING AND/OR GRINDING


MEASURE


APPLY RIVETS


USE SUCTION CUPS


USE THE HAMMER


LEVELING


USE HOIST

	**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.

4. Manual reading guide

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4.01. Preliminary information

NOTICE	
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	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.

5. Manual reading guide

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READ THIS MANUAL CAREFULLY
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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.

5.01. 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.
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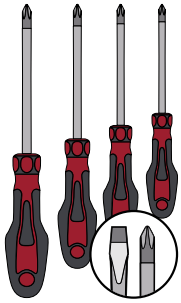
The drawings included in this manual are to be considered as indicative and are NOT an exact reference to the product concerned.

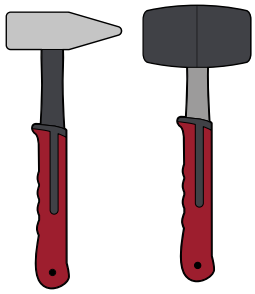
6. Tools required for installation

BALL POINT LONG HEX KEY WRENCH

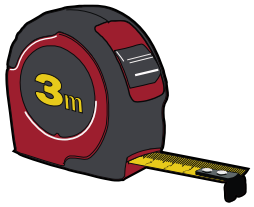
ELECTRICIAN SCREWDRIVER SET



HAMMER + RUBBER HAMMER



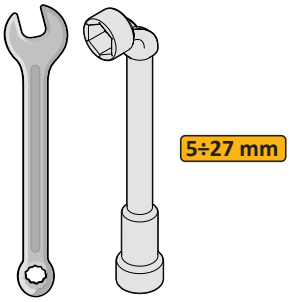
TAPE MEASURE



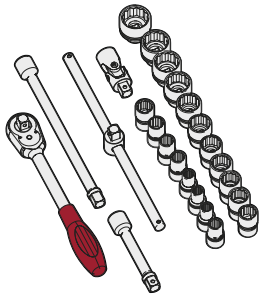
SPIRIT LEVEL

SCISSORS FOR ELETTRICIANS

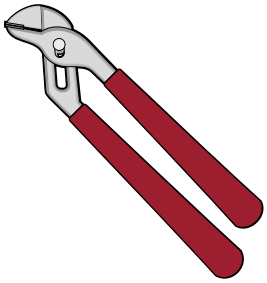
SPANNER + SOCKET WRENCH



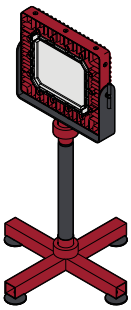
RACKETING RING SPANNER SET



PLIERS WRENCH



PORTABLE LAMP

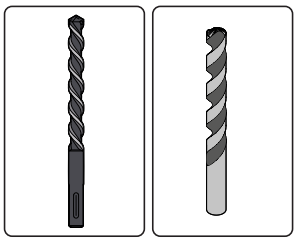


SAFETY LADDER 5 STEPS

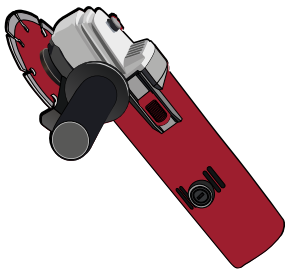
LIFTING BELTS

DRILL + ELECTRIC SCREWDRIVER

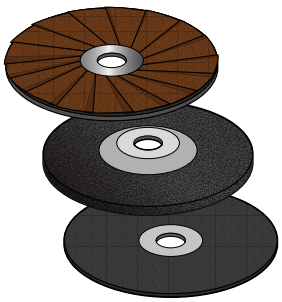
DRILL BITS

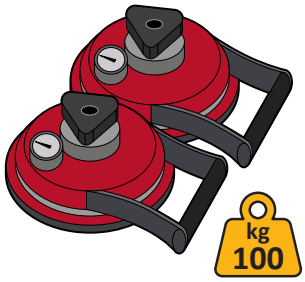
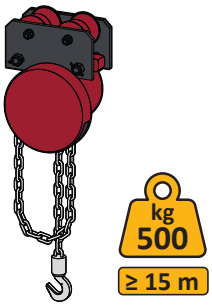
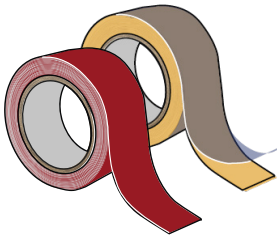
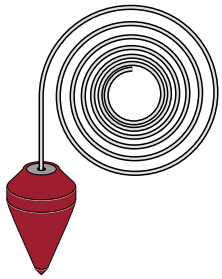
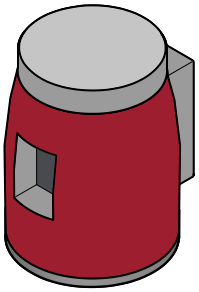
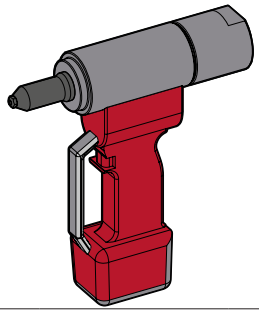
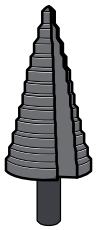
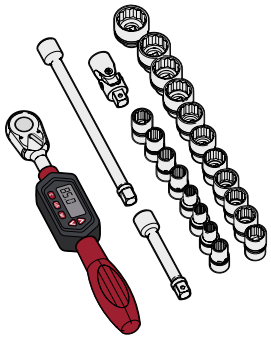


CORNER GRINDER



CUT-OFF AND GRINDING WHEELS



VACUUM LIFTER WITH MANOMETER	MANUAL HOIST	INSULATING TAPE + DOUBLE-SIDED ADHESIVE	PLUMB BOB
			
DIGITAL MULTIMETER	**LASER LEVEL**	**CORDLESS RIVETER GUN**	**HSS STEP DRILL BIT**
			
TORQUE WRENCH SET WITH EXAGONAL INSERT			
			

7. Preliminary checks and shaft preparation

IMPORTANT!

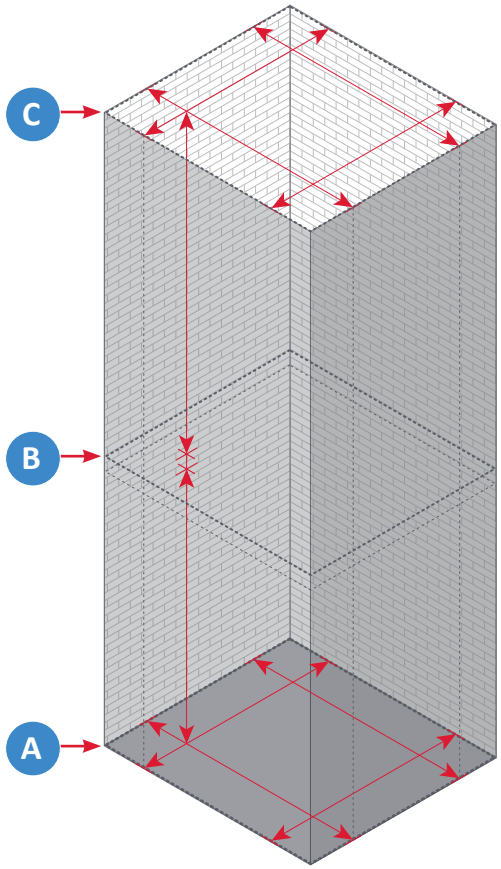
The checks can only be carried out by direct confirmation with the final GAD in its latest approved revision.

- 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.

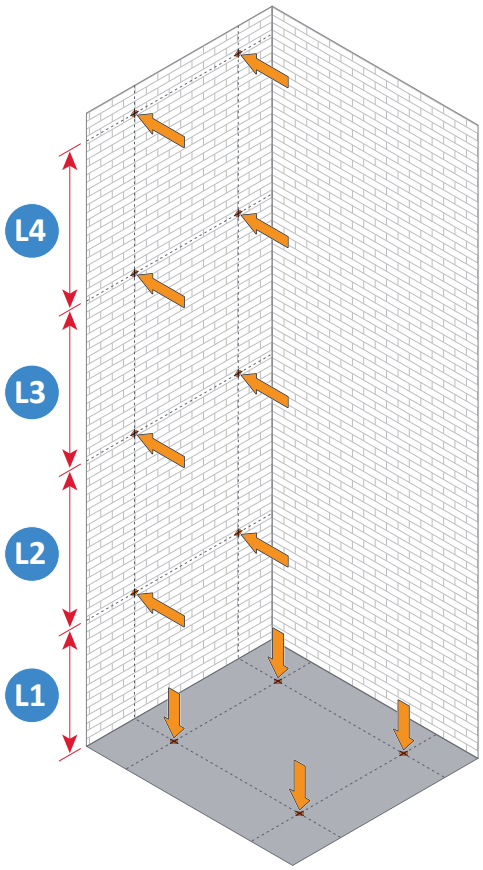
A = PIT
B = LANDING STOP
C = HEADROOM



- 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

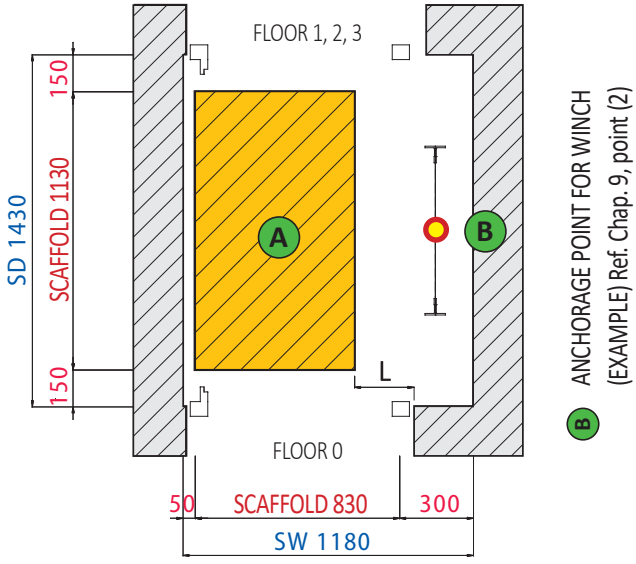
WARNING

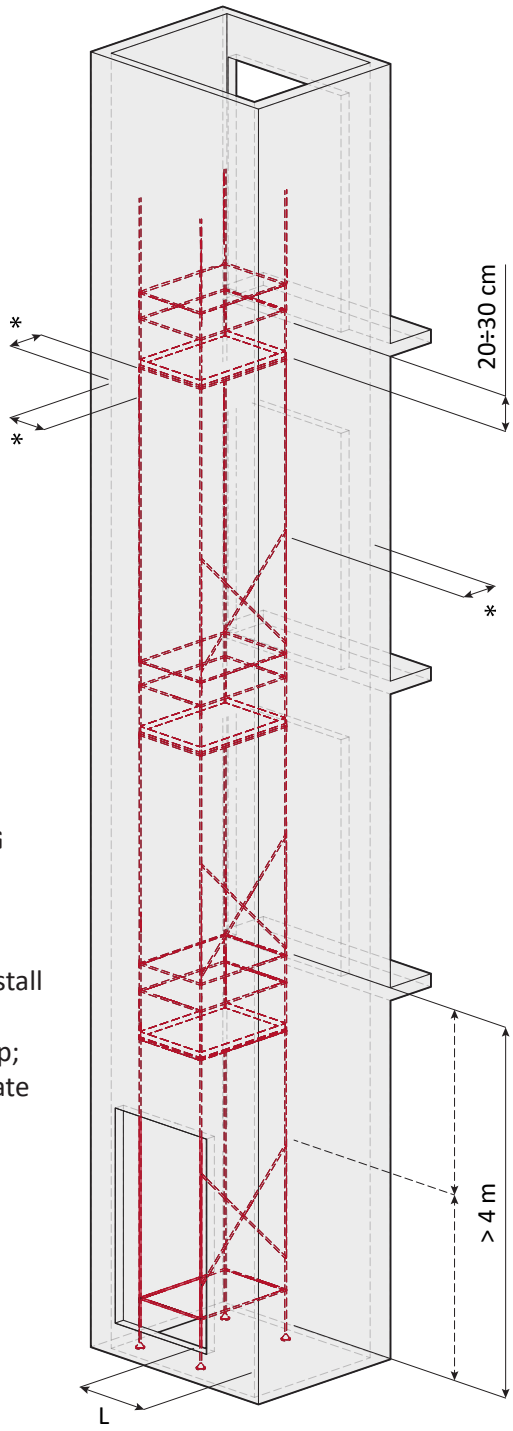
RISK OF FALLING DUE TO A DROP:
In order to minimize the risk of falling, the scaffold must **ALWAYS** be installed by qualified personnel, in compliance with the regulations in force.

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

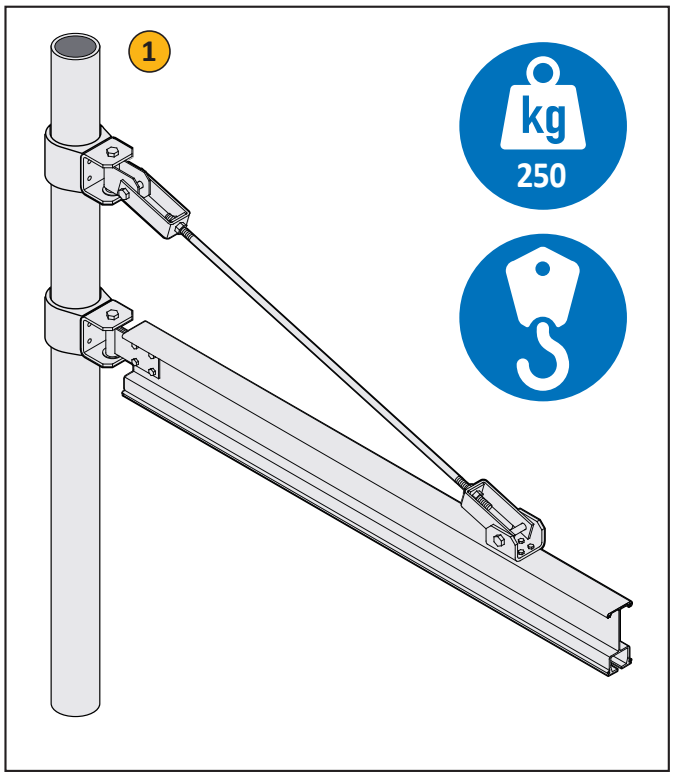
∗ = indicated on the project drawing
L = machine width

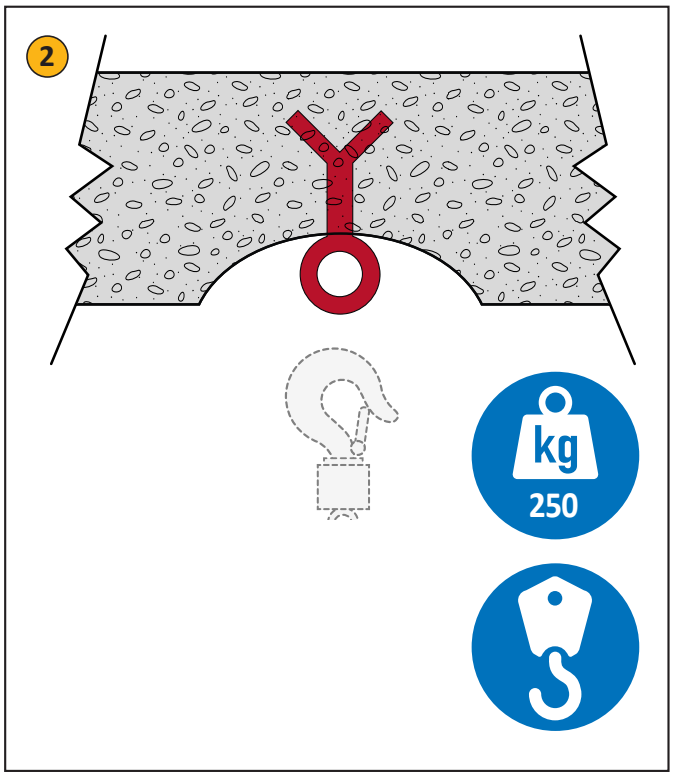
9. Load lifting devices

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)..





TIPS FOR LIFTING LOADS INSIDE THE SHAFT:

WINCH AT HEIGHT

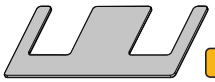
- Check the compatibility of the forces applied with the requirements of the scaffold tower manufacturer and/or the manufacturer of the jib used..
- Install the jib (crane) (1) at the highest point of the scaffold.

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. Box content - screws kit

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

F353.23.0006



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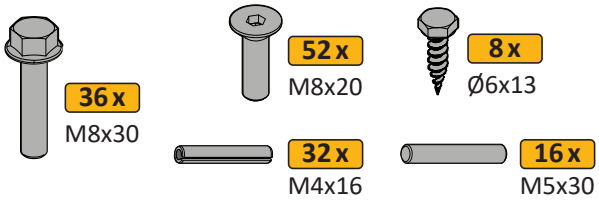

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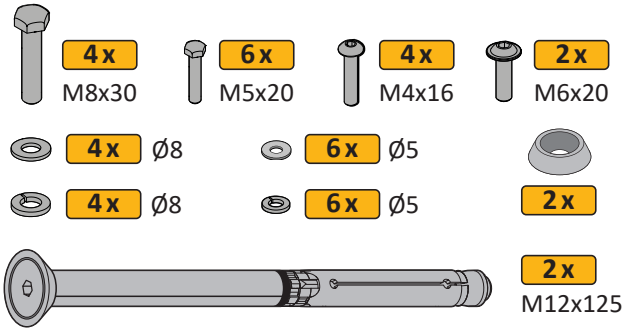

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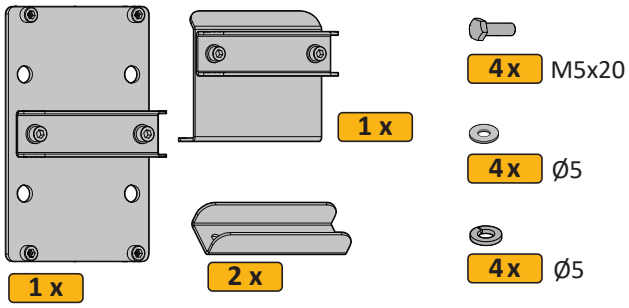

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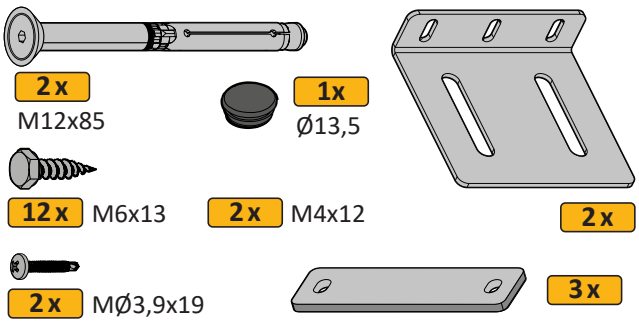
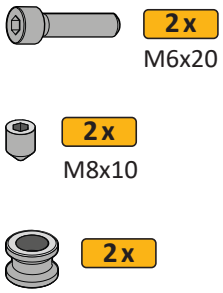


D003.23.0001



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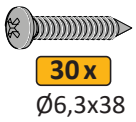

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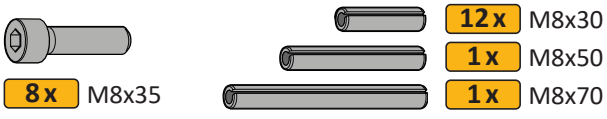
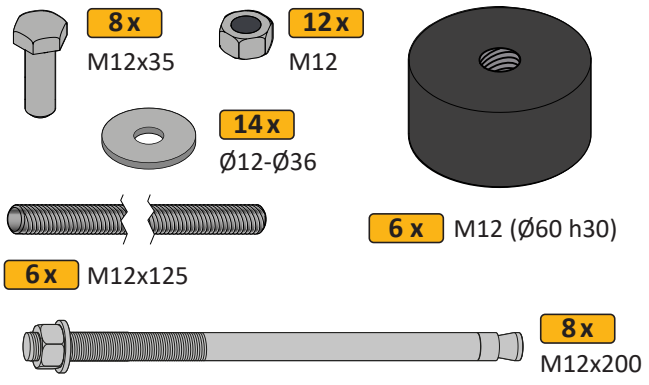
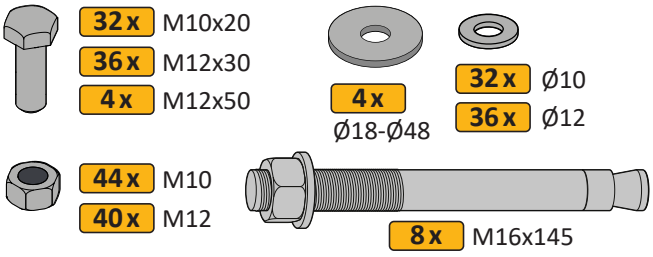


F353.23.0009

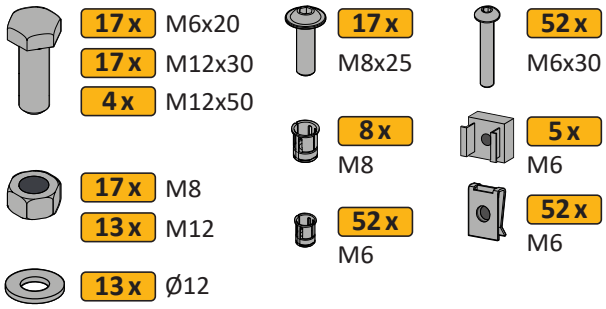


S001.23.0002



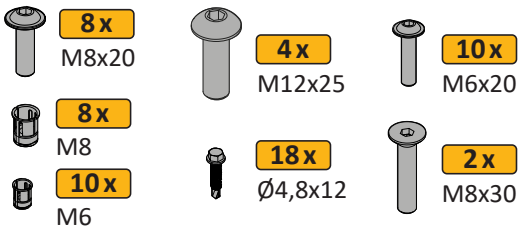
- 32 x M10x20
- 36 x M12x30
- 4 x M12x50
- 4 x Ø18-Ø48
- 32 x Ø10
- 36 x Ø12
- 44 x M10
- 40 x M12
- 8 x M16x145

S001.23.0001



- 17 x M6x20
- 17 x M12x30
- 4 x M12x50
- 17 x M8x25
- 52 x M6x30
- 8 x M8
- 5 x M6
- 17 x M8
- 13 x M12
- 52 x M6
- 52 x M6
- 13 x Ø12

F353.23.0011

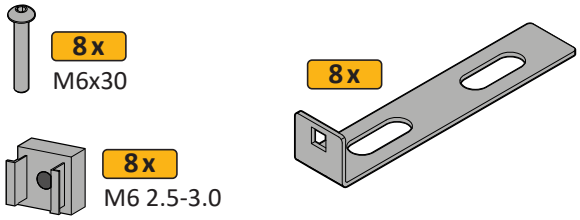


- 8 x M8x20
- 4 x M12x25
- 10 x M6x20
- 8 x M8
- 18 x Ø4,8x12
- 2 x M8x30
- 10 x M6

S001.23.0004

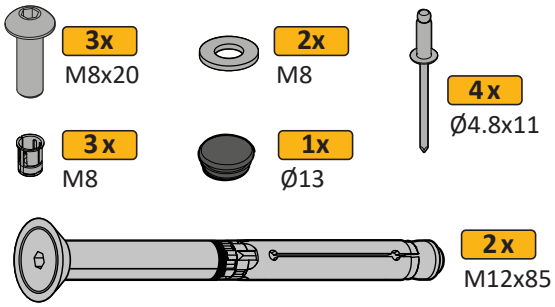
- 40 x Ø4.8x11
- 20 x Ø4,8x13
- 4 x M6x20
- 4 x M6

S001.23.0010



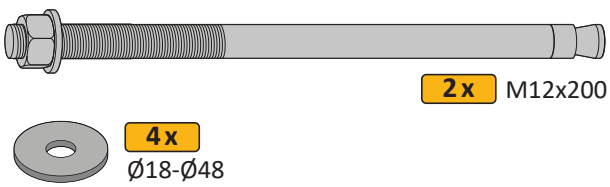
- 8 x M6x30
- 8 x
- 8 x M6 2.5-3.0

F353.23.0012



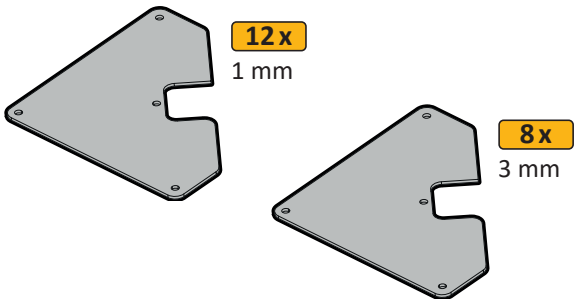
- 3x M8x20
- 2x M8
- 4x Ø4.8x11
- 3x M8
- 1x Ø13
- 2x M12x85

S000.23.0012



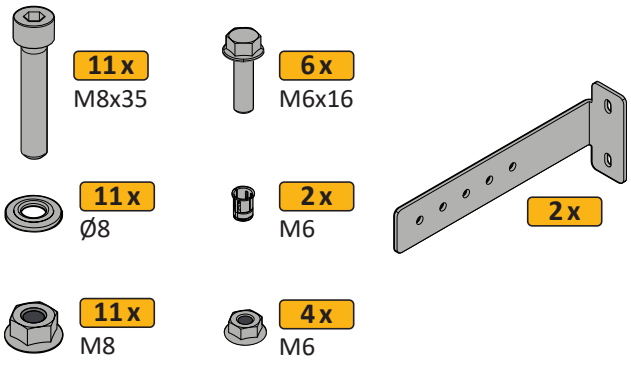
- 2 x M12x200
- 4 x Ø18-Ø48

S000.05.5006



- 12 x 1 mm
- 8 x 3 mm

F355.23.0001



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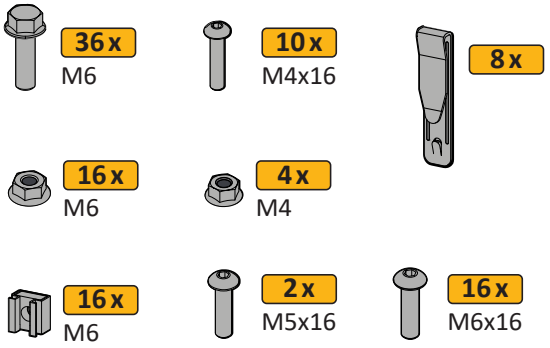

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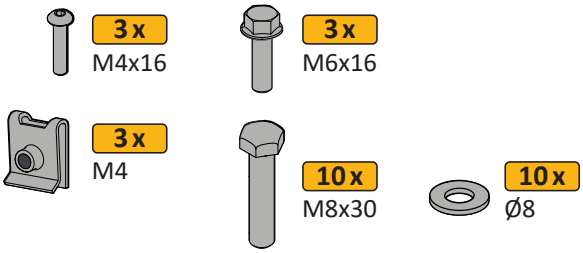

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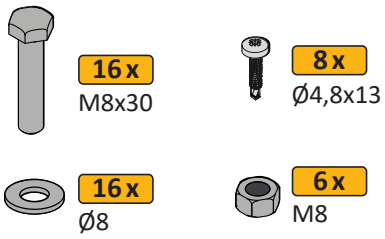

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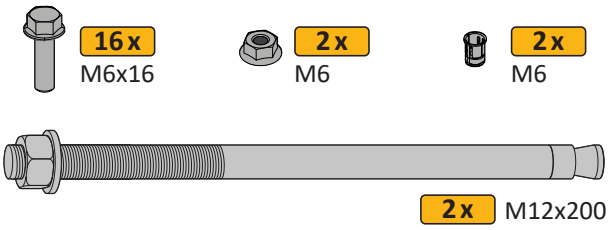

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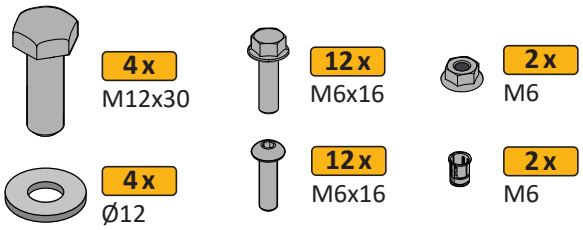

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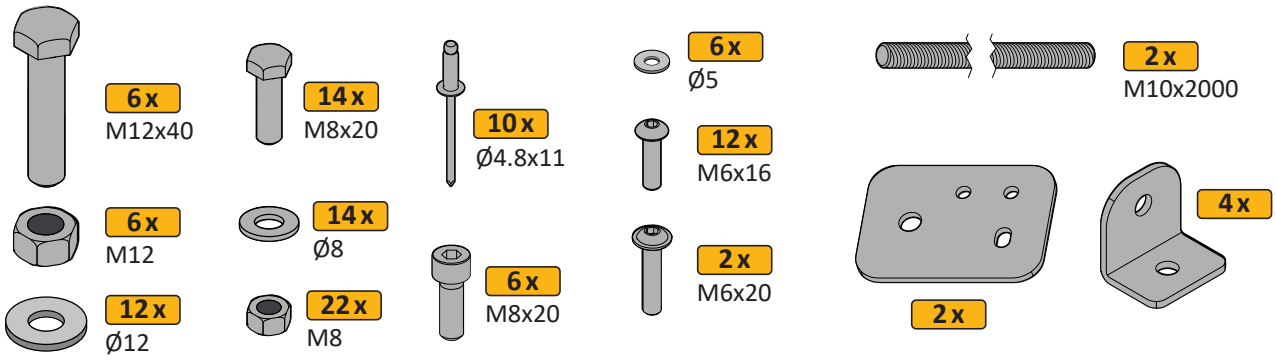


NOTICE

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.

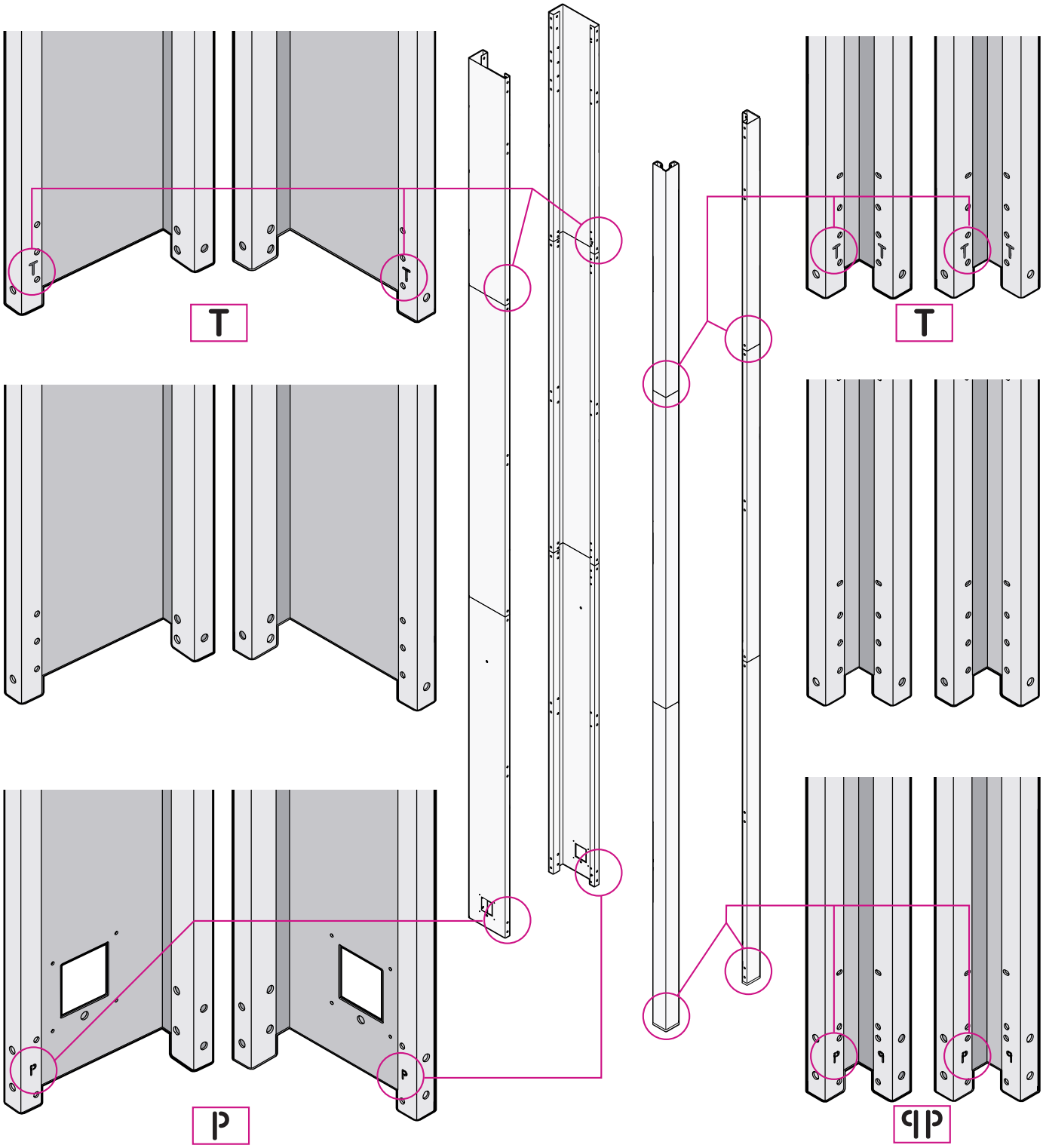
TIGHTENING TORQUE GUIDE		
SCREW	COUPLE MAX (Nm)	COUPLE MIN (Nm)
M3	1.2	1.0
M4	2.6	2.1
M5	5.1	4.1
M6	9.0	7.0
M8	21.0	17.0
M10	42.0	34.0
M12	71.0	57.0
M16	175.0	145.0

11. Steel structure

11.01. 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.

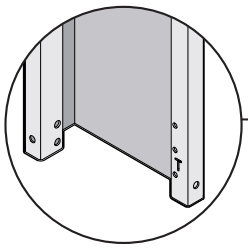


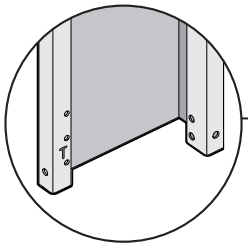
NOTICE

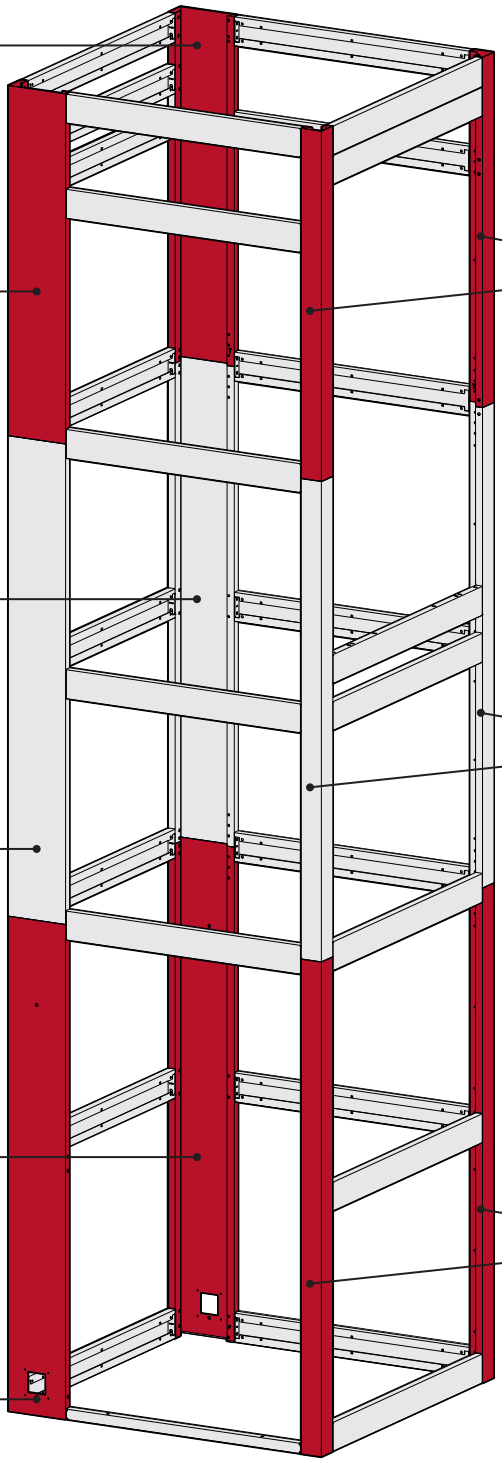
ALWAYS ADHERE TO THE INSTALLATION DIAGRAM AS SHOWN ON PROJECT DRAWING.
NOTE: Pit and header uprights have a fixed position, while intermediates are symmetrical.

MACHINE SIDE	OPPOSITE SIDE OF THE MACHINE

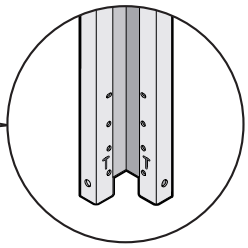
HEADROOM JAMBS



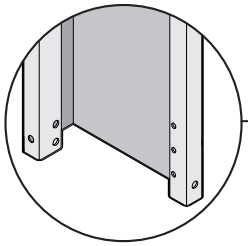


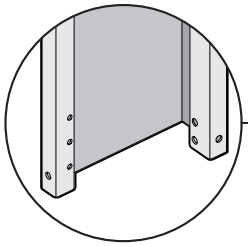


HEADROOM JAMBS

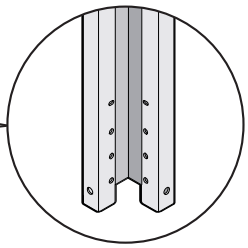


INTERMEDIATE JAMBS

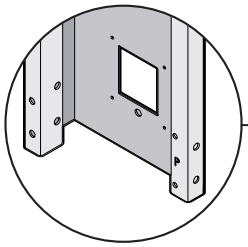


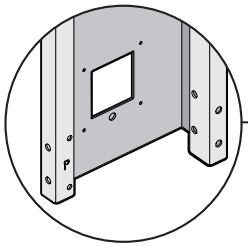


INTERMEDIATE JAMBS

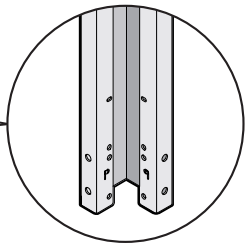


PIT JAMBS





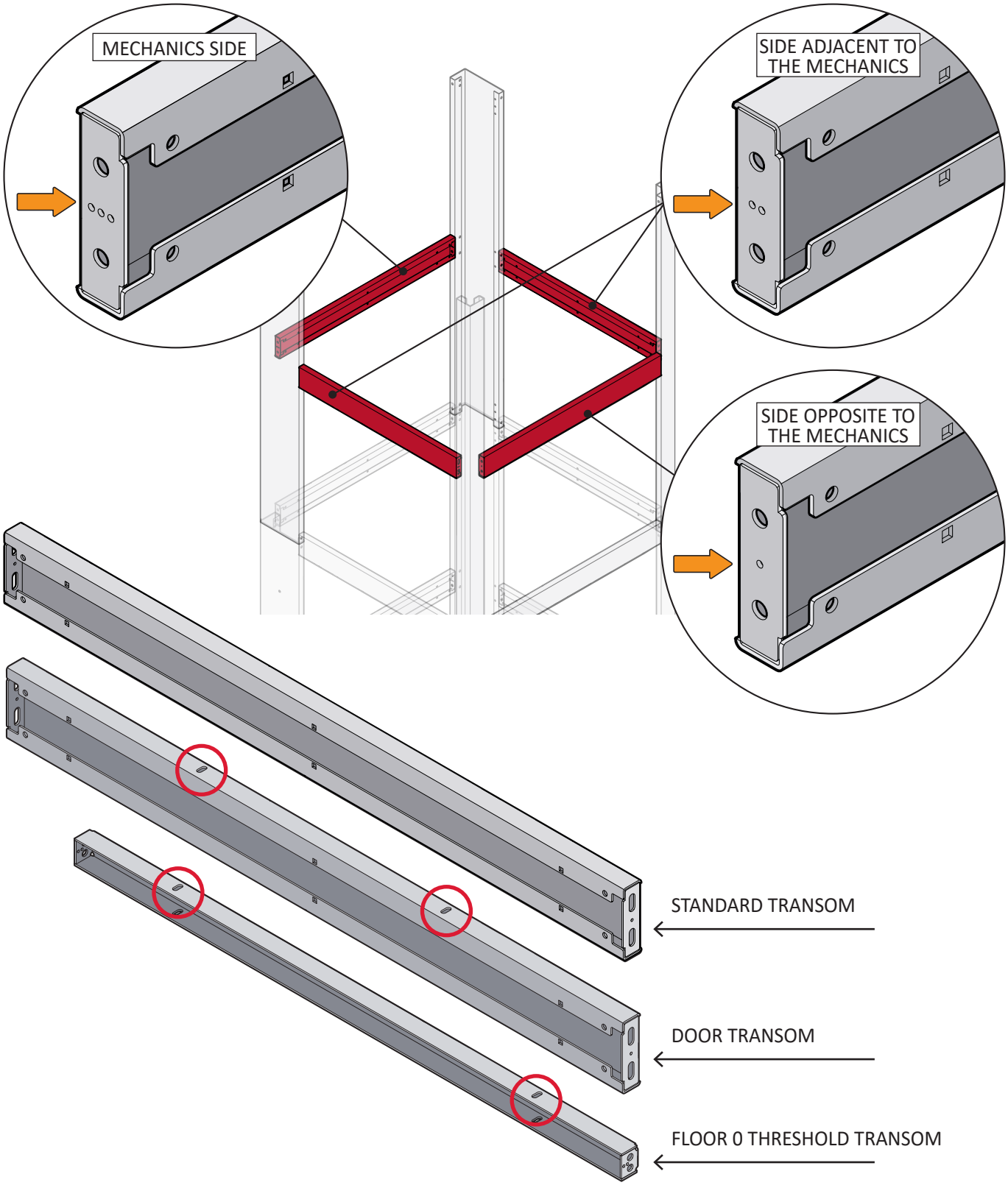
PIT JAMBS



11.02. 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.



11.03. Shell - installation

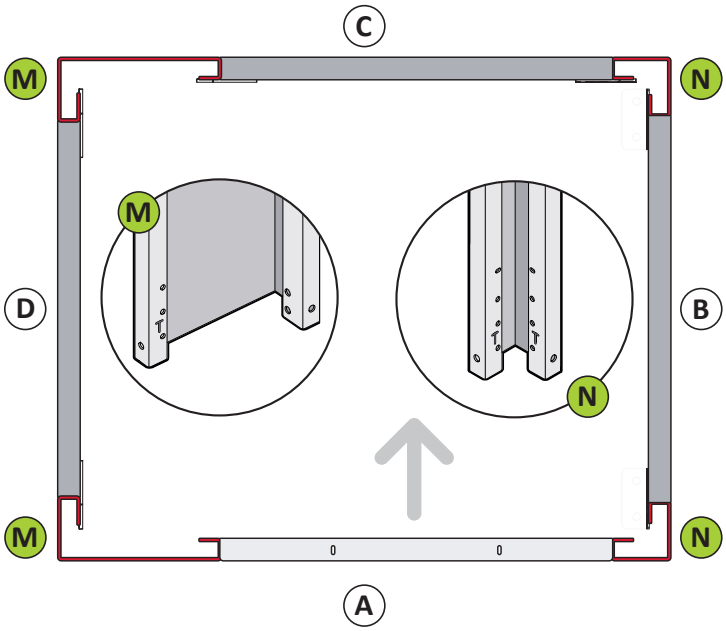
11.03.01 SHELL - ELEMENT IDENTIFICATION

EXAMPLE CONFIGURATION:

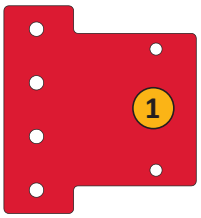
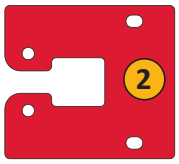
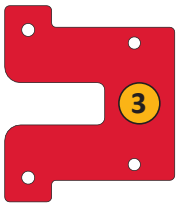
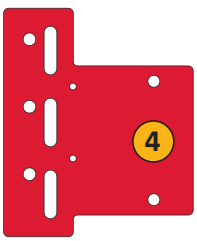
(A) FLOOR 0 ACCESS SIDE
(B) SIDE OPPOSITE TO THE MECHANICS
(C) SIDE ADJACENT TO THE MECHANICS
(D) MECHANICS SIDE

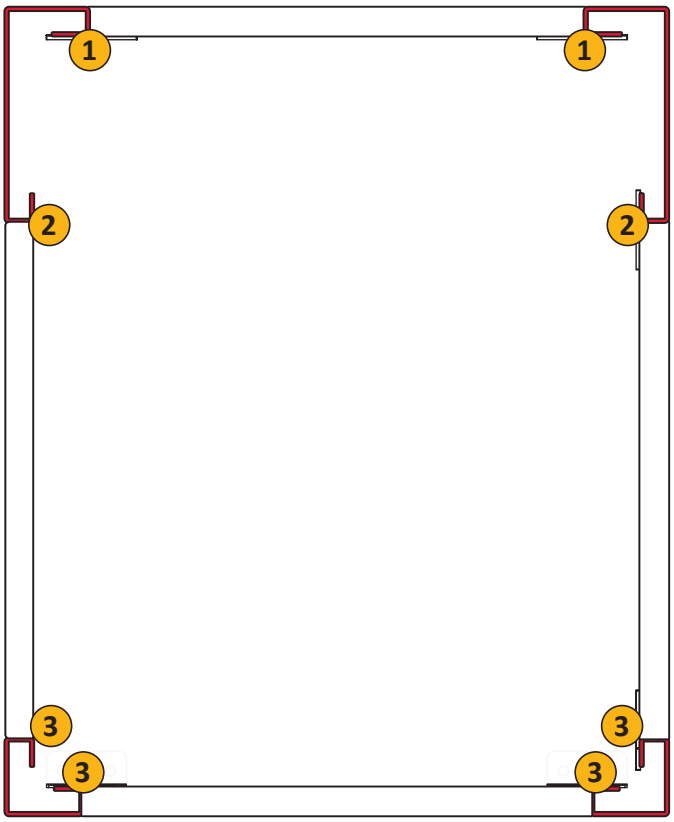
NOTE: The mechanics can be installed in the (B), (C) and (D) sides.

(M) JAMBS - MECHANICS SIDE
(N) JAMBS - SIDE OPPOSITE TO THE MECHANICS



11.03.02 SHELL - FASTENER IDENTIFICATION

	GUIDE RAIL TRANSOM PLATE
	SIDE TRANSOM PLATE
	TRANSOM PLATE
	DOOR PLATE (not shown in the diagram to the side, see § 10.03.07)

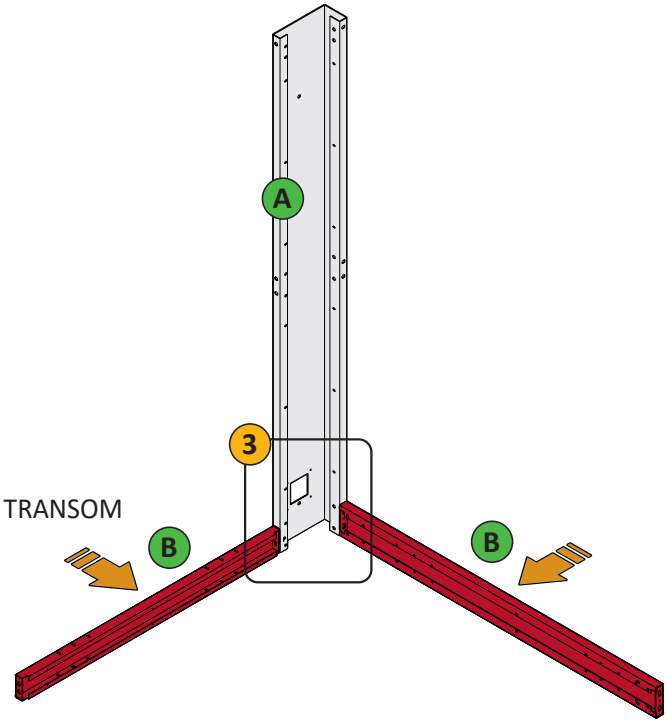


11.03.03 BASEMENT PERIMETER ASSEMBLY - INSTALLATION AND ANCHORING

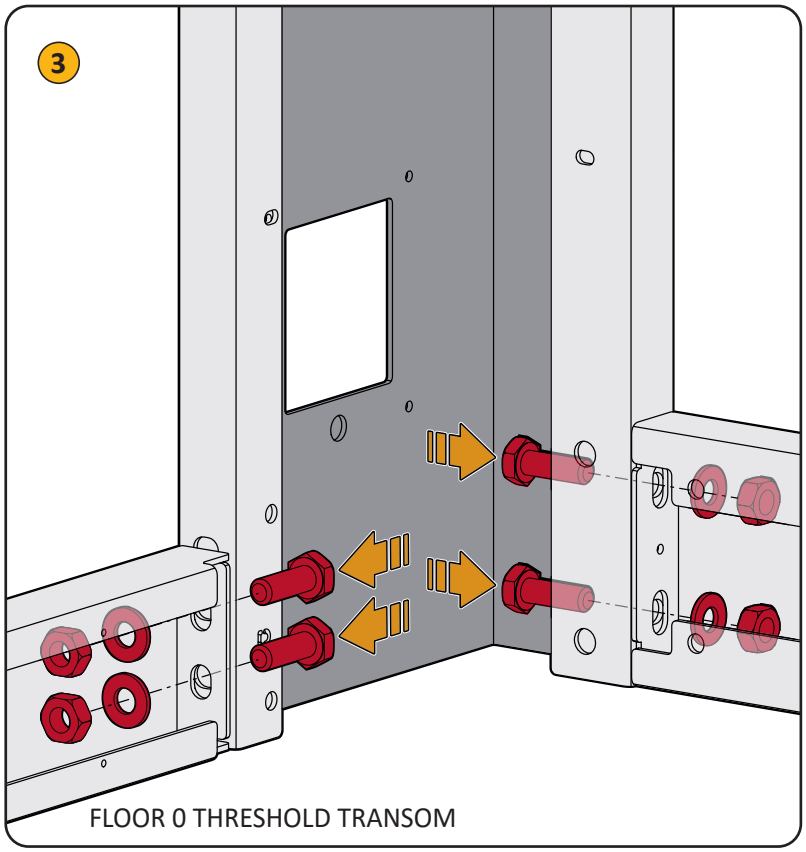
NOTICE

ALWAYS OBSERVE THE INSTALLATION DIAGRAM, AS SHOWN IN THE DESIGN DRAWING.
NOTE: The pit and headroom jambs have a fixed position, while the intermediate ones are symmetrical.

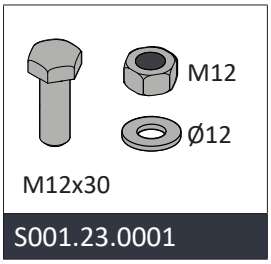
1. Lay the first basement perimeter assembly as shown in the design drawing.
2. We recommend that you start by laying the first pit jamb on the guide rail side (A) and the two adjacent jambs (B)
3. Fasten the transoms to the jambs using the relevant KITS.



FLOOR 0 THRESHOLD TRANSOM



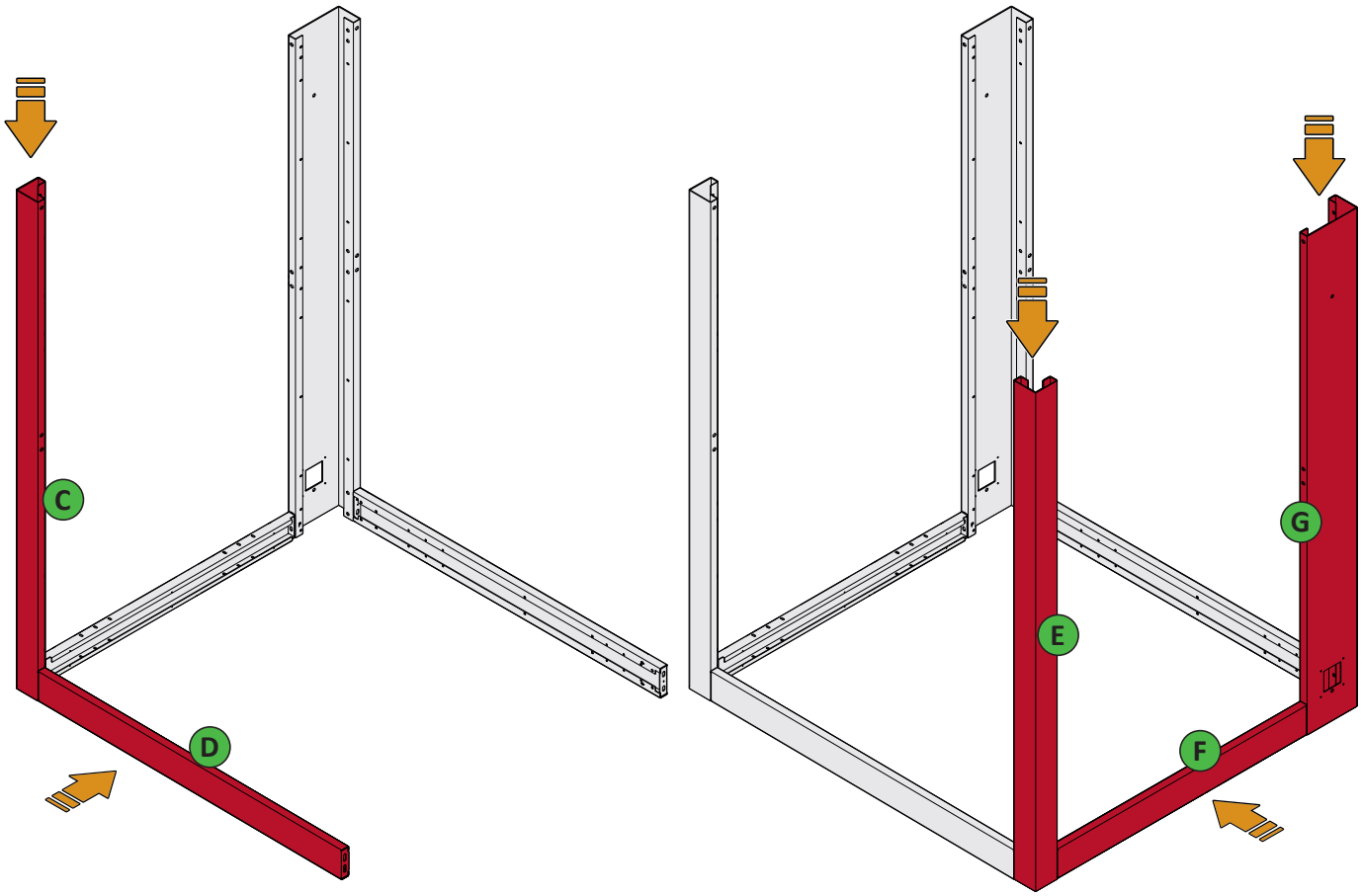
FLOOR 0 THRESHOLD TRANSOM



S001.23.0001

5 Install the jamb opposite to the guide rail side C and the subsequent transom D.

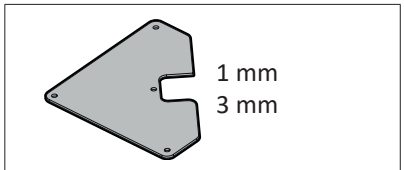
6 As mentioned above, fasten the transoms and jambs using the relevant KITS.



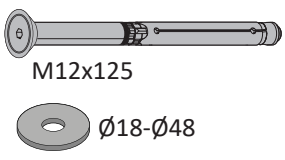
7 Install the subsequent jambs and transoms E F G.

8 Level the assembly using the supplied spacers, if necessary.

9 Anchor the jambs to the wall.

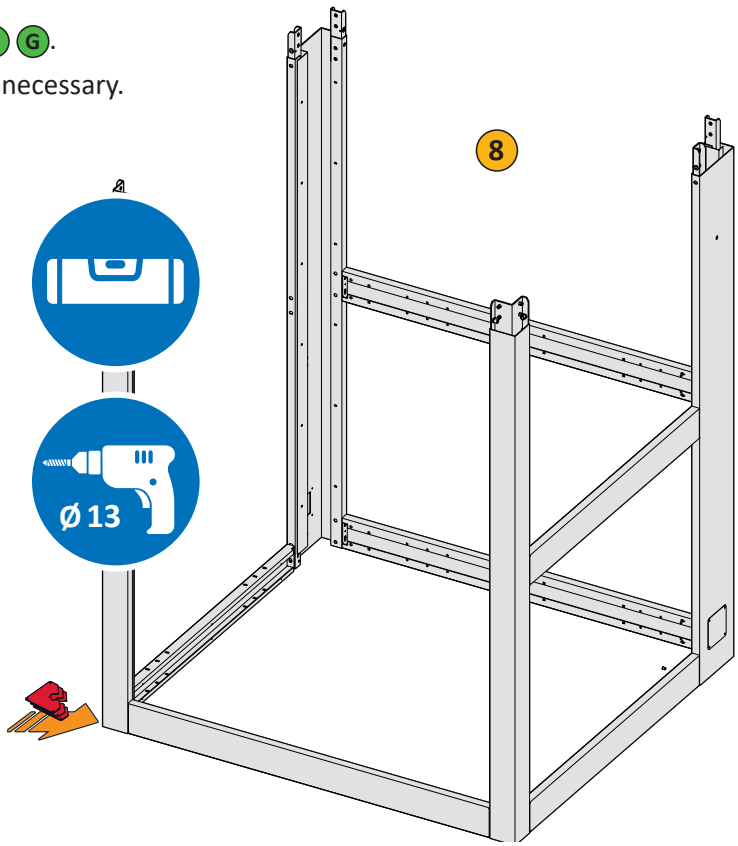


S000.05.5006

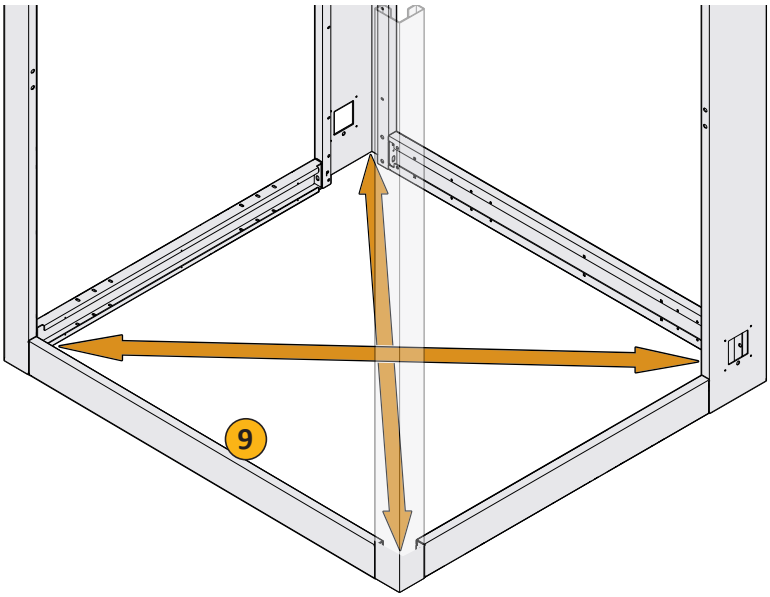


S000.23.0012

Also follow the same procedure for the subsequent transoms.

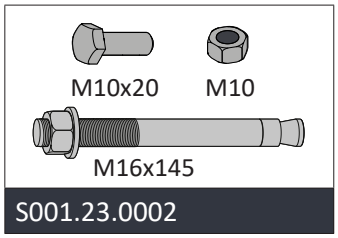


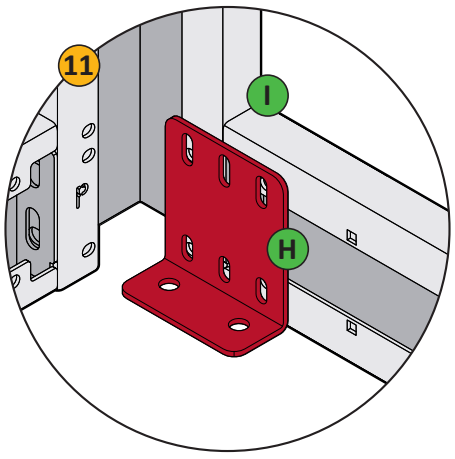
10 Accurately measure the diagonals to verify that the shell is level.

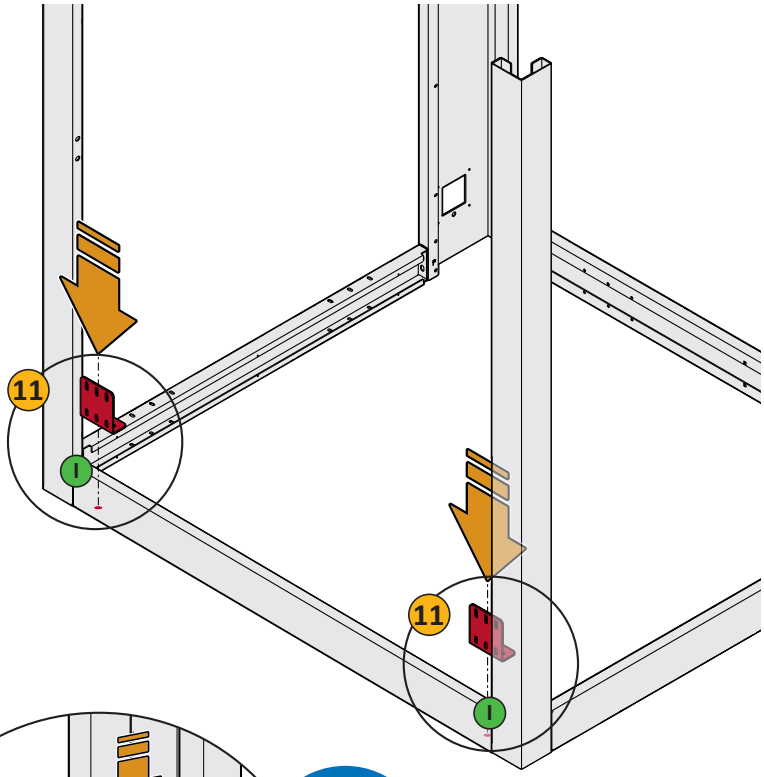


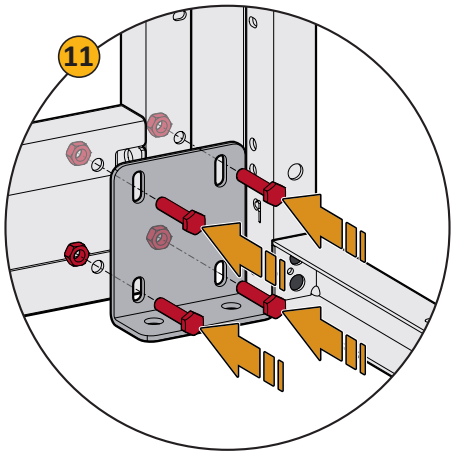
11 Fasten the L-brackets H to the pit jamb and transom opposite to the mechanics I using the supplied screws.

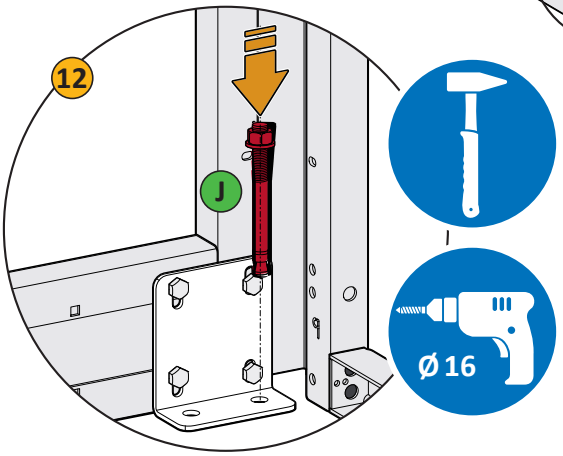
12 Anchor the assembly to the ground using the supplied plugs J .

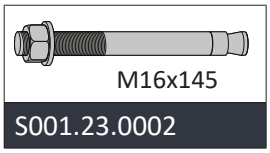






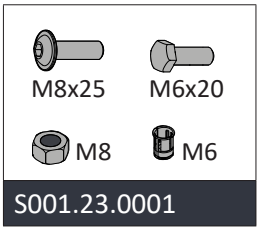


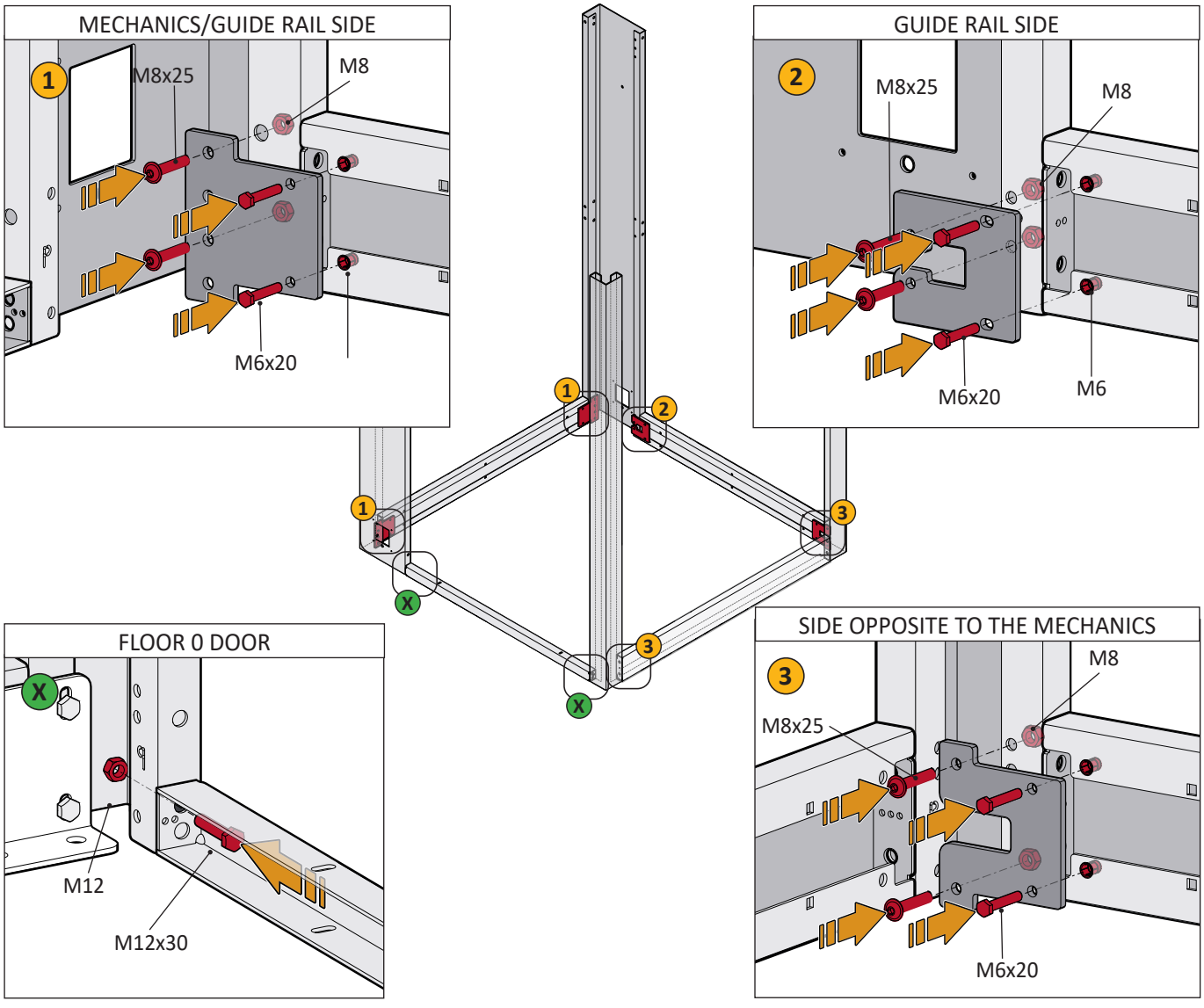




11.03.04 REINFORCEMENT PLATES - INSTALLATION

Install the reinforcement plates as indicated.

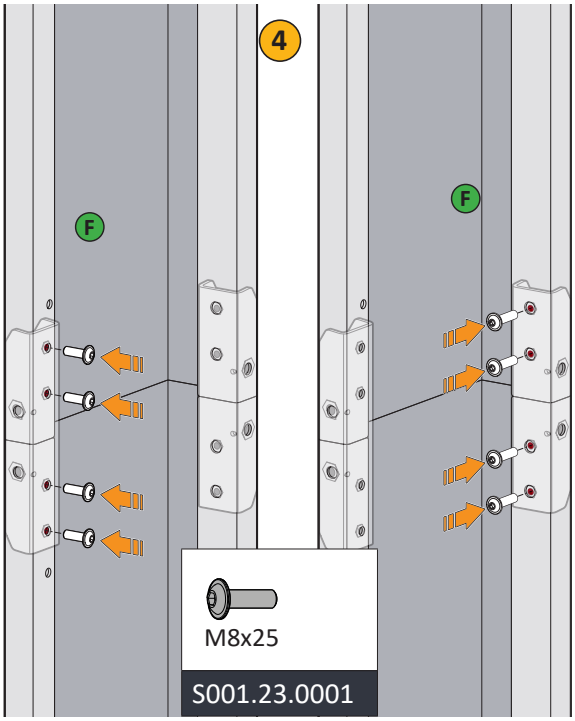


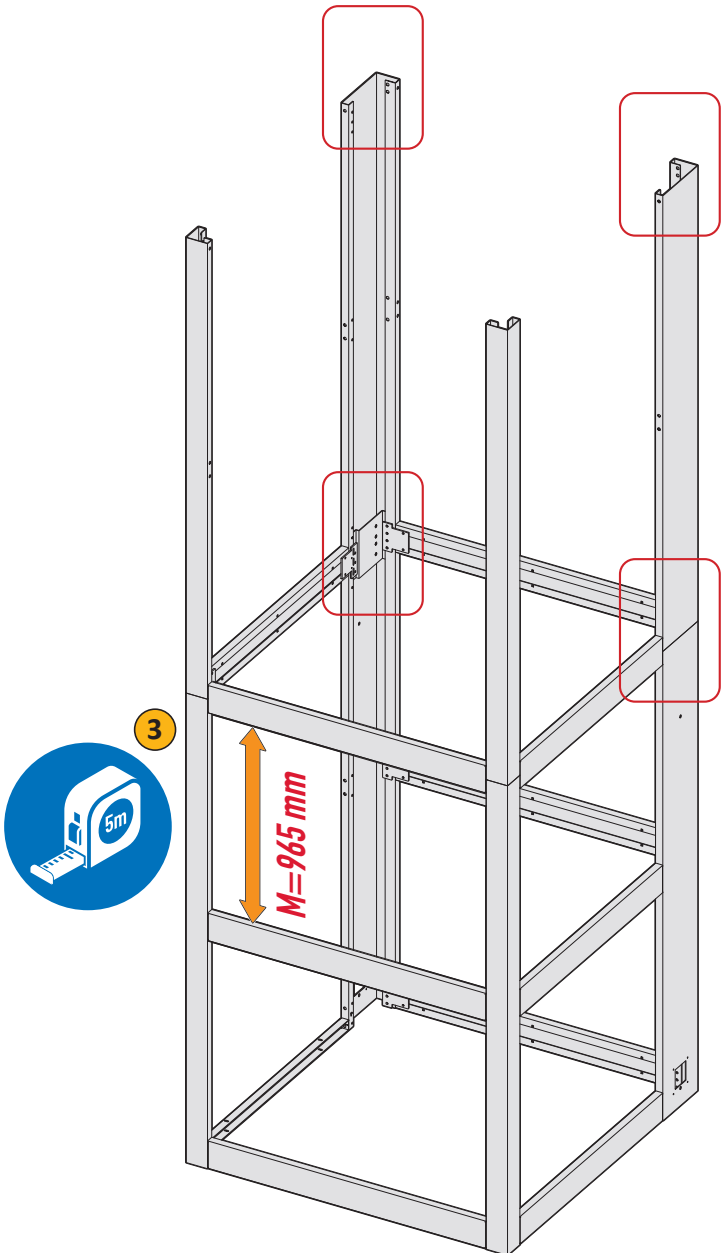


11.03.05 SHELL - INSTALLATION (GUIDE RAIL SIDE)

1. Insert the jamb joint plate into the jamb (A), temporarily fasten it with a kit screw (B), then insert the next jamb segment (C).
2. Fasten the transoms to the jambs using the supplied screws, inserting them into the rivet nuts that are present in the jamb (E) joint plate.
3. Check that the distance between the transoms is **965 mm**
4. If the jamb joint does not correspond to the presence of transoms (presence of a floor door), fasten the jamb joint plate using the flanged 8x25 hex socket screws included in the KIT (F).

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



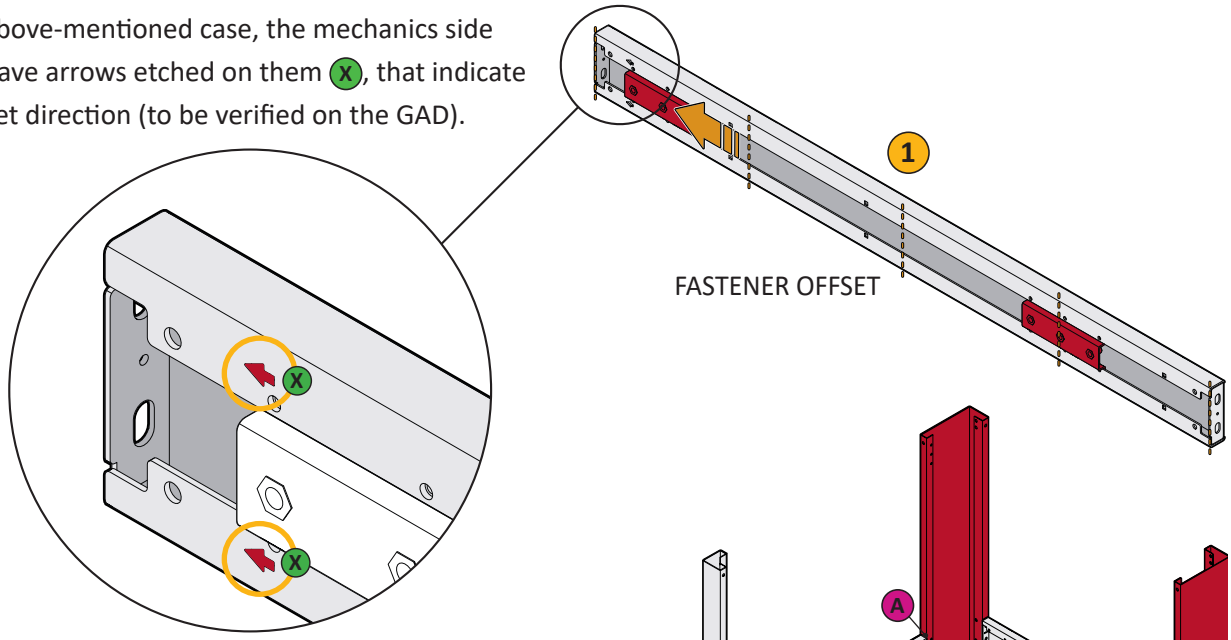


11.03.06 SHELL - IDENTIFICATION OF THE GUIDE RAIL SIDE TRANSOMS

IMPORTANT!

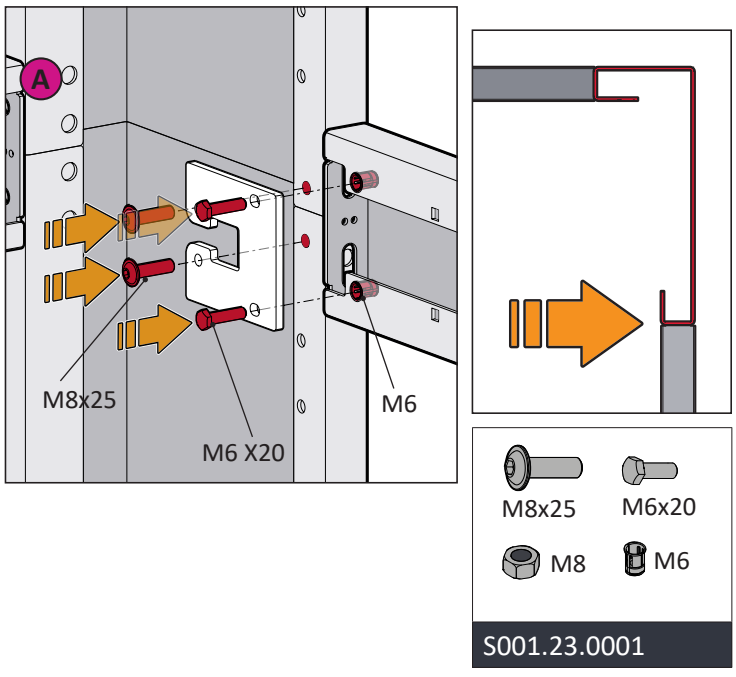
CHECK THAT THE TRANSOM INSTALLATION DIRECTION IS CORRECT
In a single access system with automatic doors, the guide rails are offset, and the relevant fasteners on the **mechanics side transoms** are correspondingly offset. For this reason, they must be installed in the right direction, which is indicated by the arrows as shown below (**REFER TO THE GAD**).

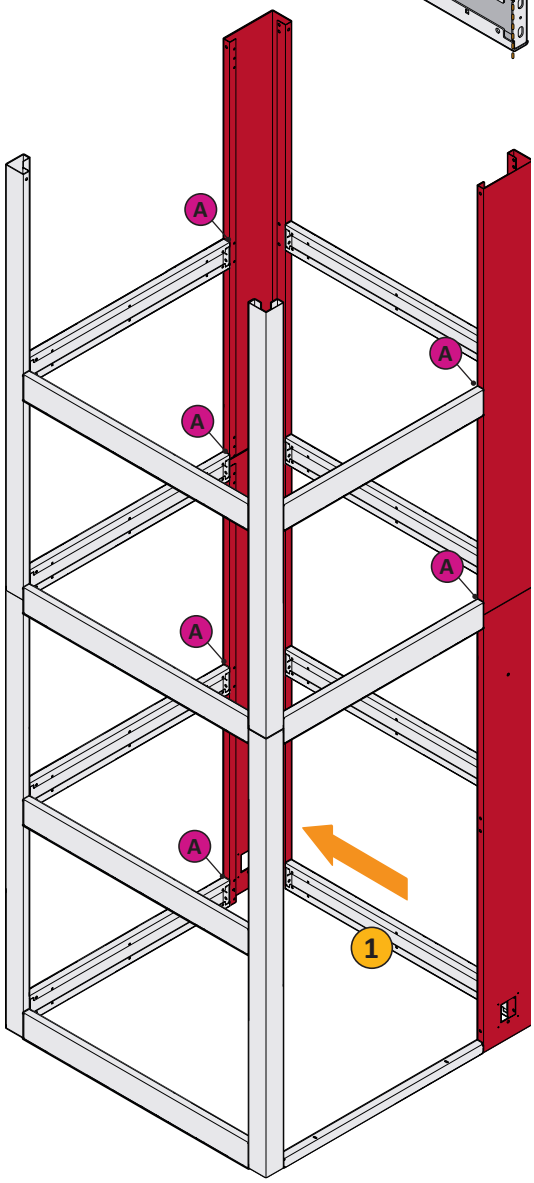
(1) In the above-mentioned case, the mechanics side jambs have arrows etched on them (X), that indicate the offset direction (to be verified on the GAD).



To join jambs and transoms, use the supplied joint brackets, following the instructions provided below.

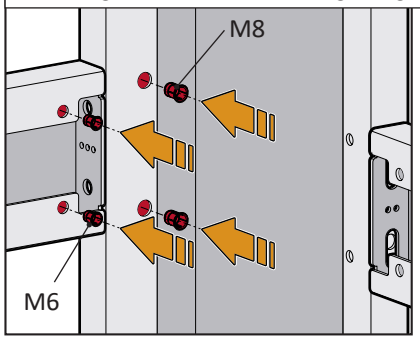
SIDE ADJACENT TO THE MECHANICS

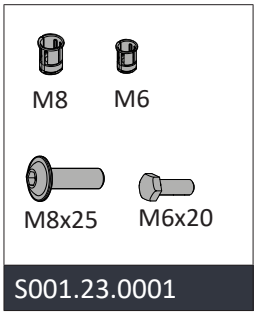




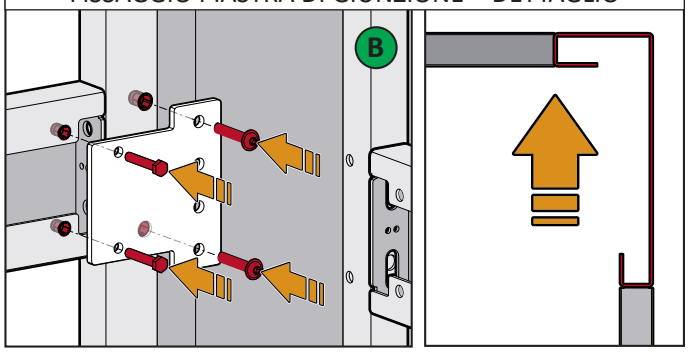
MECHANICS SIDE - STANDARD JAMBS

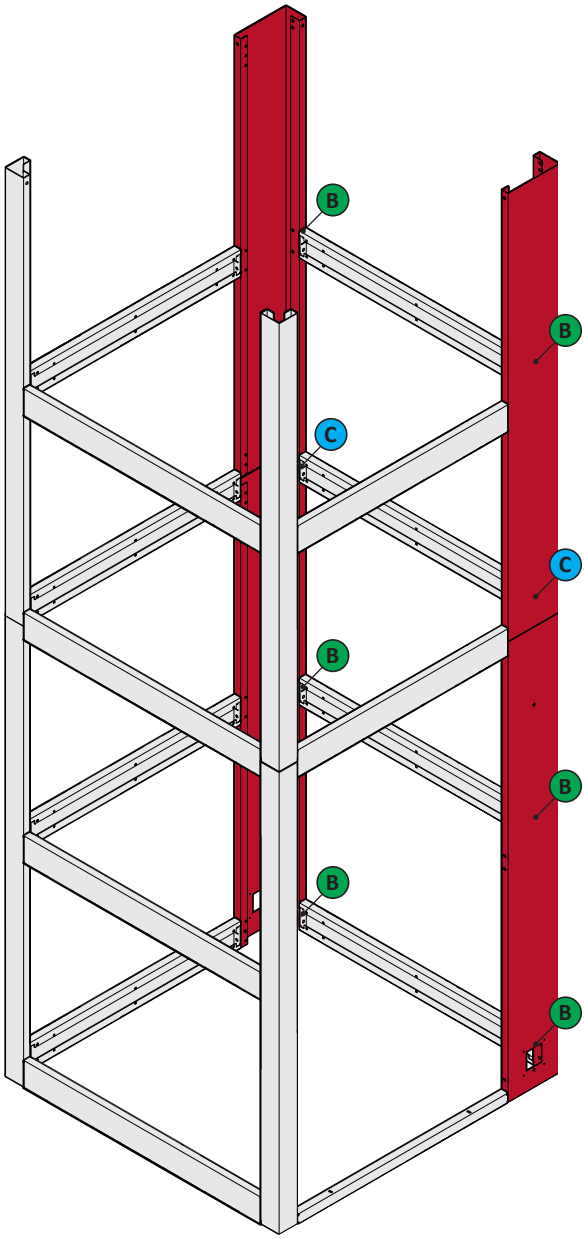
INSERTI FILETTATI AD ESPANSIONE - DETTAGLIO





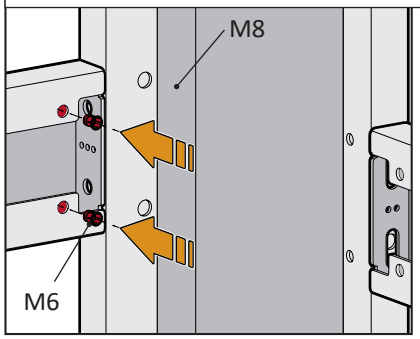
FISSAGGIO PIASTRA DI GIUNZIONE - DETTAGLIO

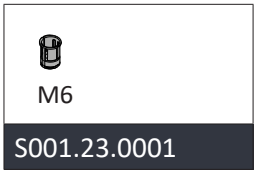




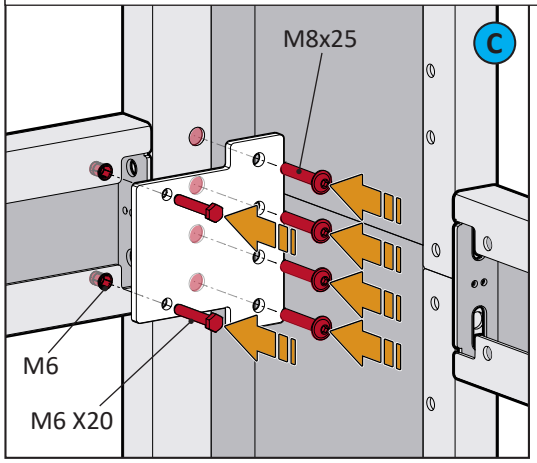
MECHANICS SIDE - JAMB JOINT

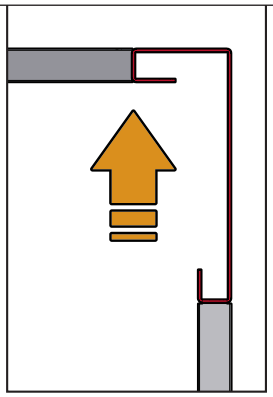
INSERTI FILETTATI AD ESPANSIONE - DETTAGLIO

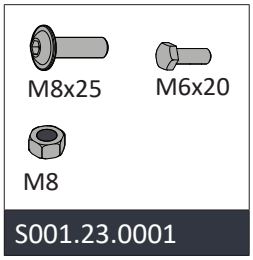




FISSAGGIO PIASTRA DI GIUNZIONE - DETTAGLIO

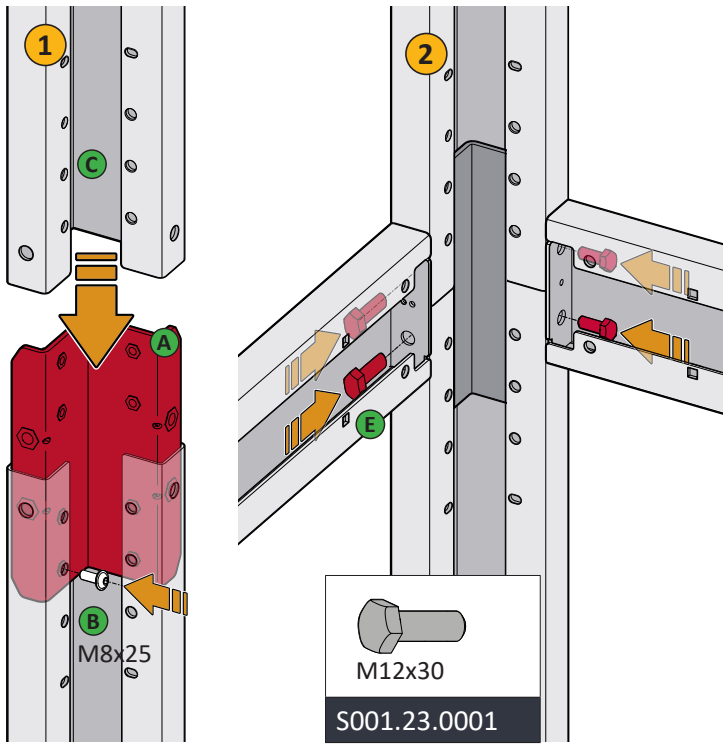


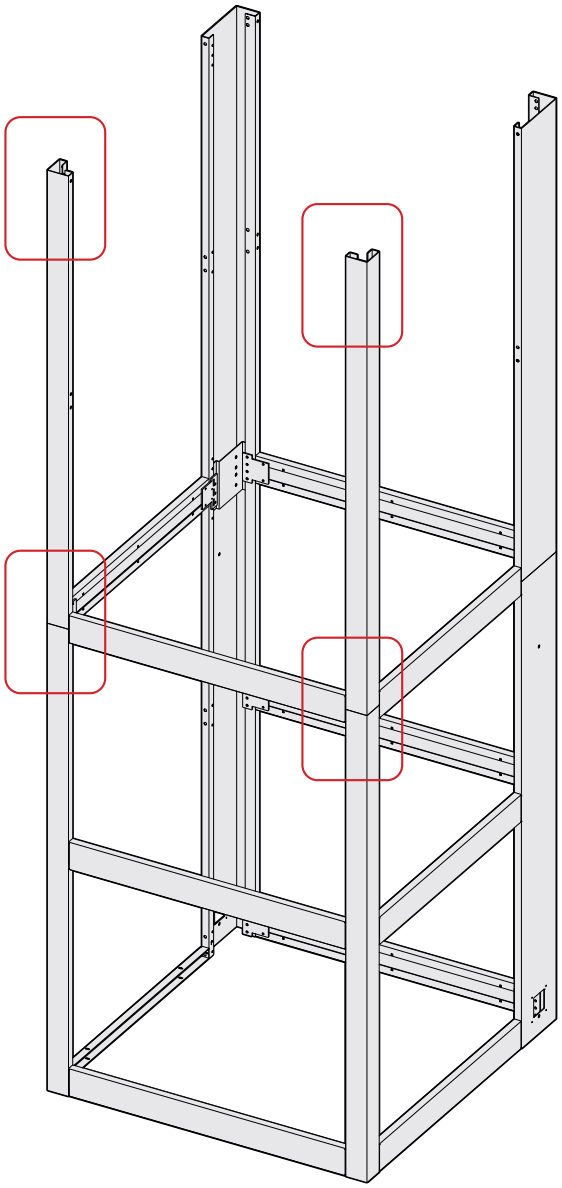


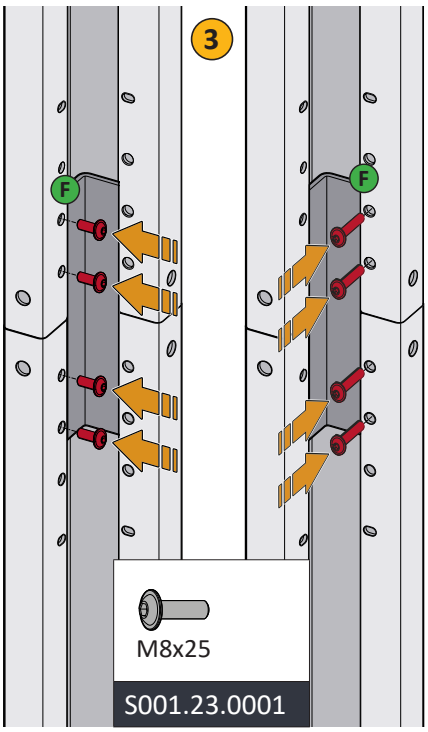


11.03.07 SHELL - INSTALLATION (SIDE OPPOSITE TO THE GUIDE RAILS)

1. Insert the jamb joint plate into the jamb (A), temporarily fasten it with a kit screw (B), then insert the next jamb segment (C).
2. Fasten the transoms to the jambs using the supplied screws, inserting them into the rivet nuts that are present in the jamb joint plate (E).
3. If the jamb joint does not correspond to the presence of transoms (presence of a floor door), fasten the jamb joint plate using the flanged 8x25 hex socket screws included in the KIT (F).
   For the installation of the door transoms, refer to § 10.03.09.

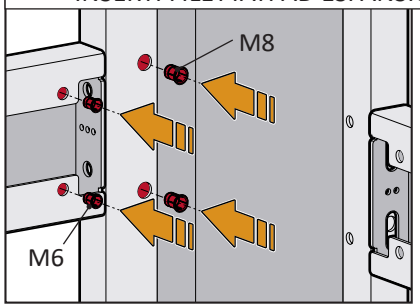


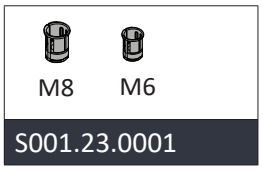


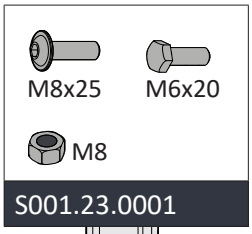


To join jambs and transoms, use the supplied joint brackets, following the instructions provided below.

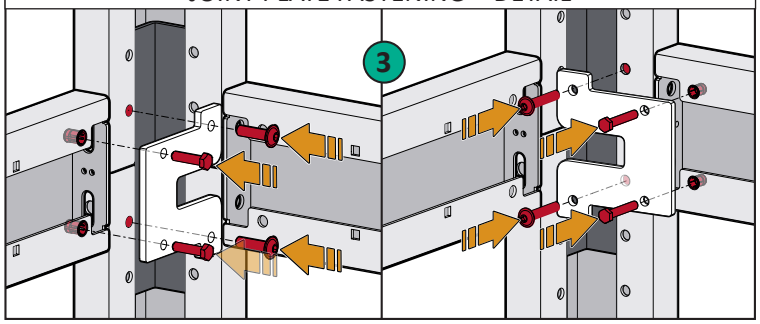
INSERTI FILETTATI AD ESPANSIONE - DETTAGLIO

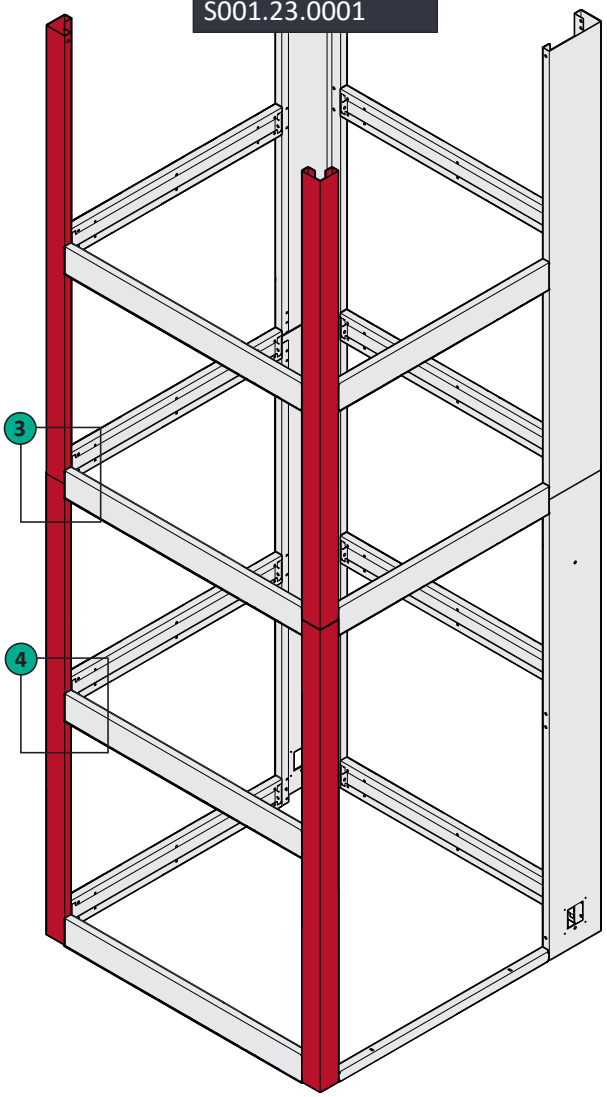






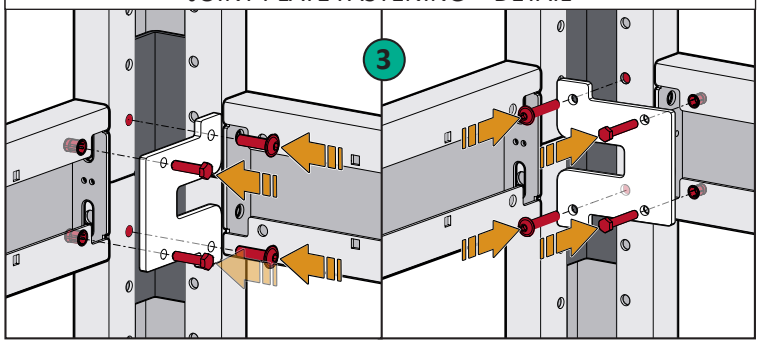
JOINT PLATE FASTENING - DETAIL





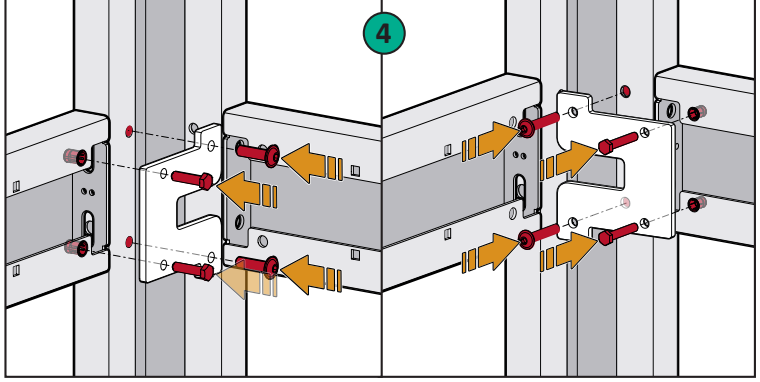
JAMB JOINT

JOINT PLATE FASTENING - DETAIL



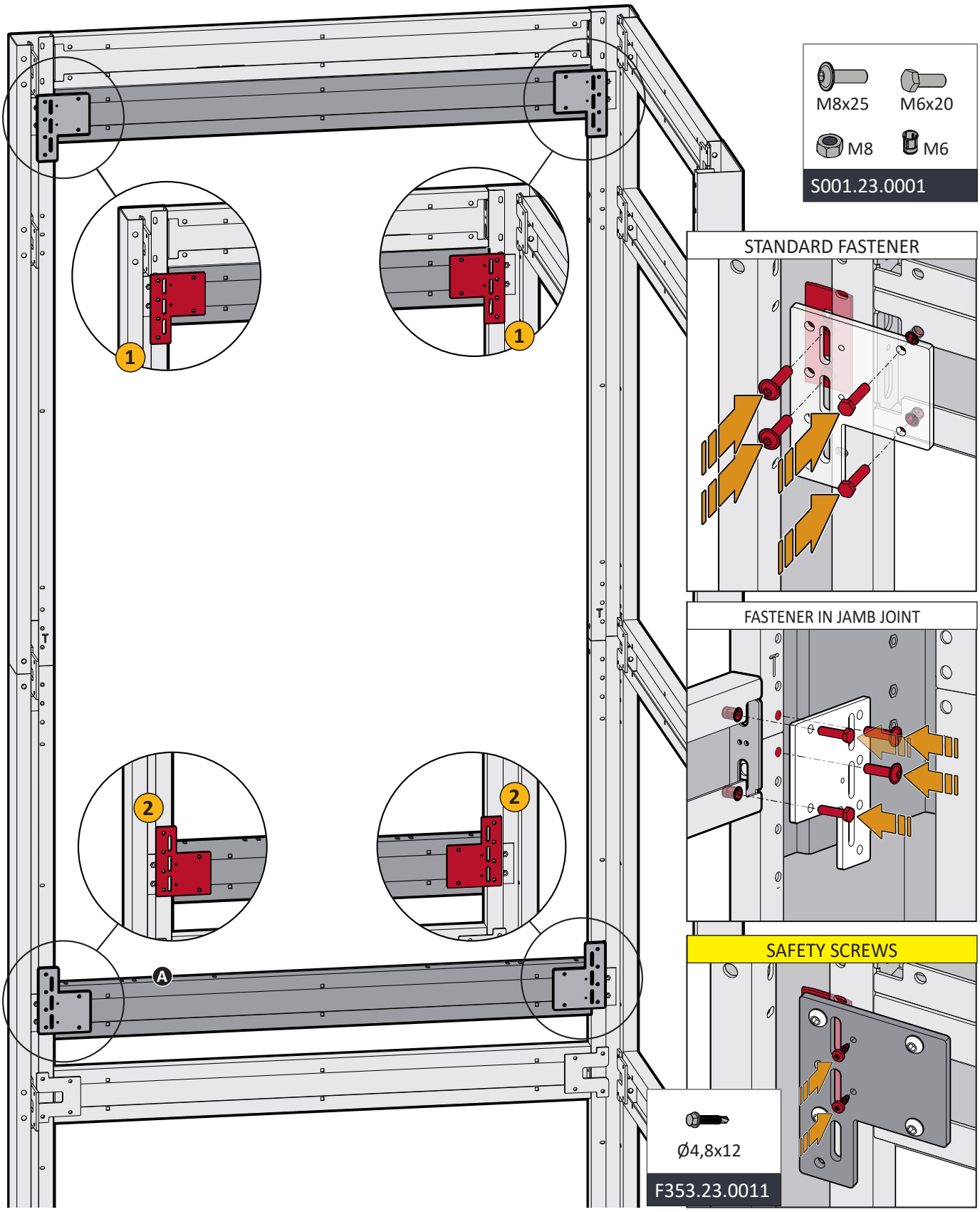
STANDARD JAMBS

JOINT PLATE FASTENING - DETAIL



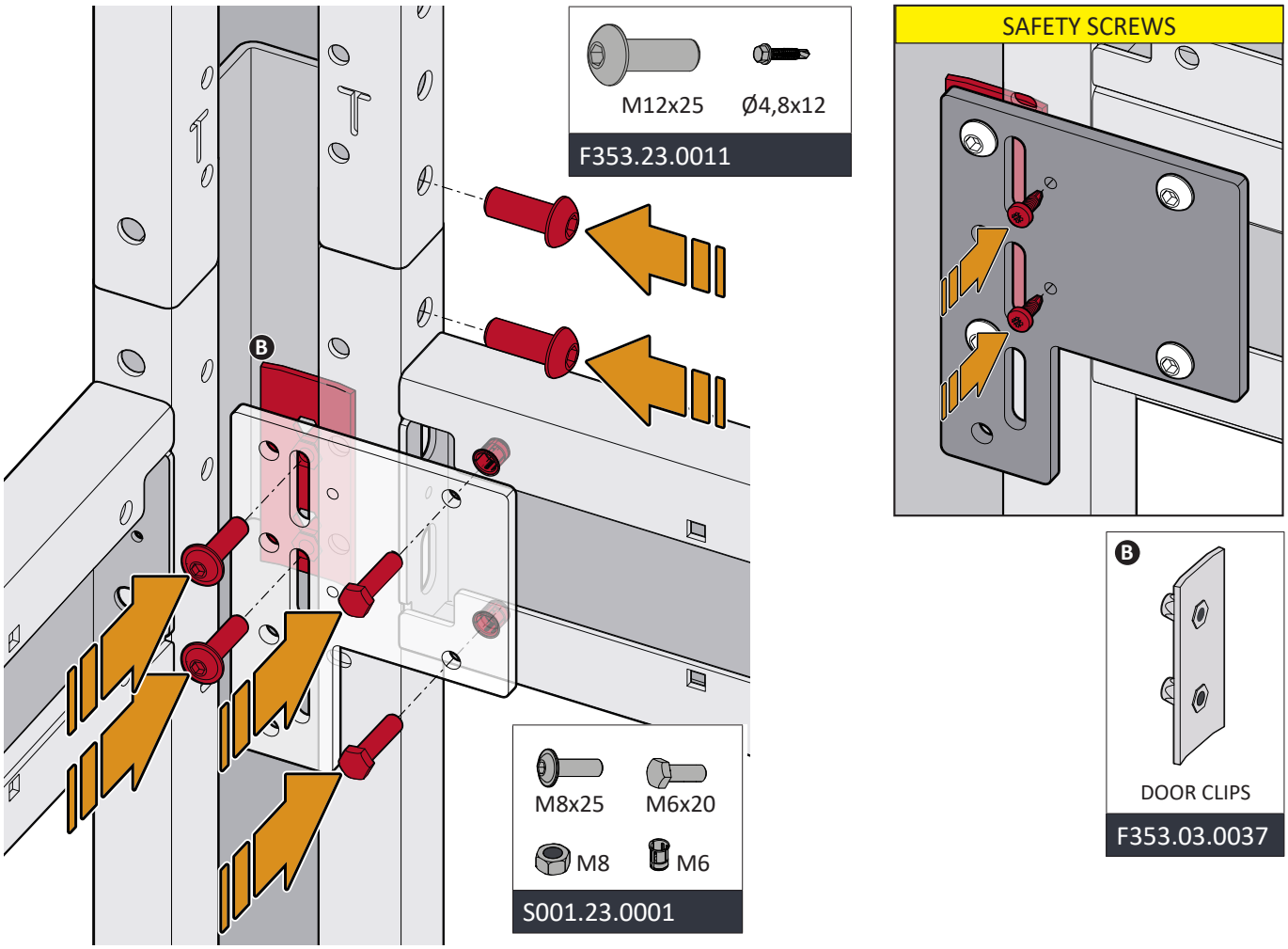
11.03.08 DOOR TRANSOM INSTALLATION

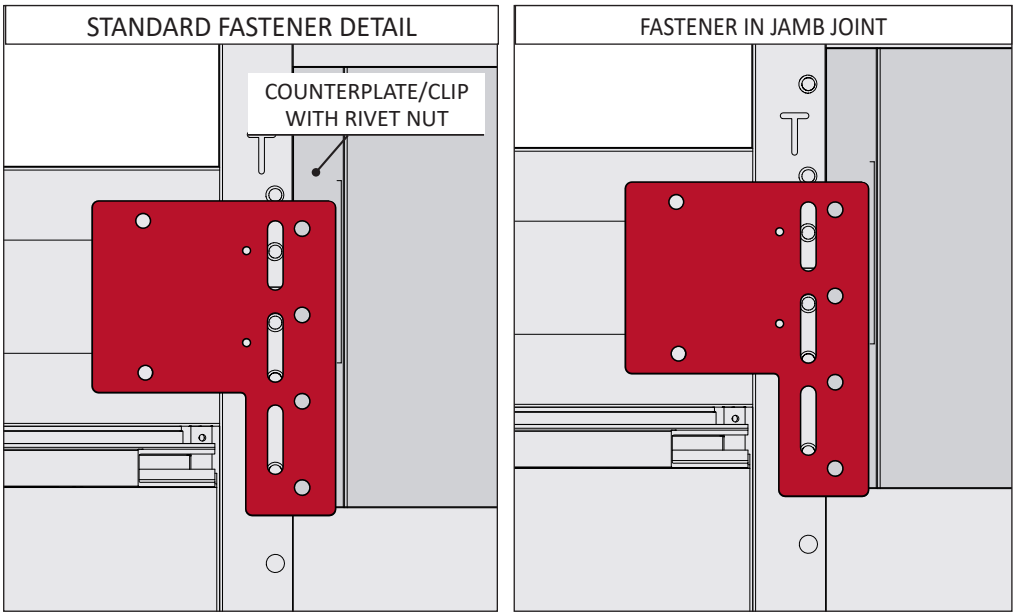
- In the top transom the slots must be oriented downwards (1)
- In the bottom transom the slots must be oriented upwards (2)



11.03.09 DOOR TRANSOM ON TOP OF JAMB JOINT - INSTALLATION

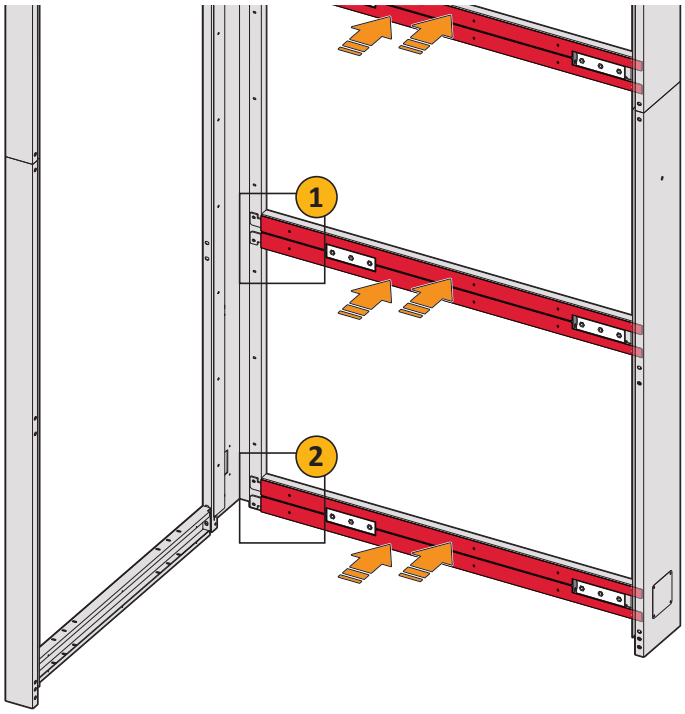
- In the top transom the slots must be oriented downwards
- In the bottom transom the slots must be oriented upwards

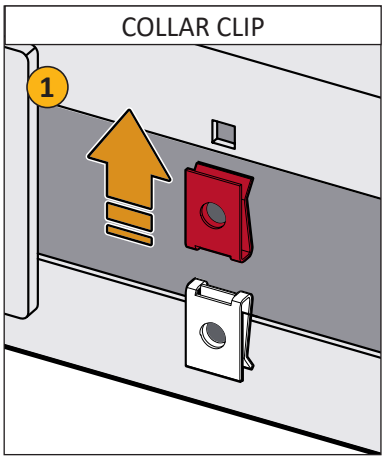


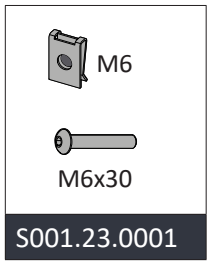


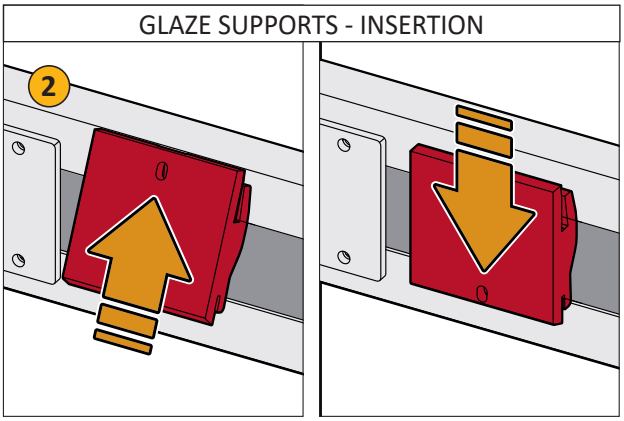
11.04. Mechanics infill rear panels - installation

- insert into the transoms the collar clips, aligning them with the relevant holes (1)
- Insert the glaze supports into the collar clips (2)

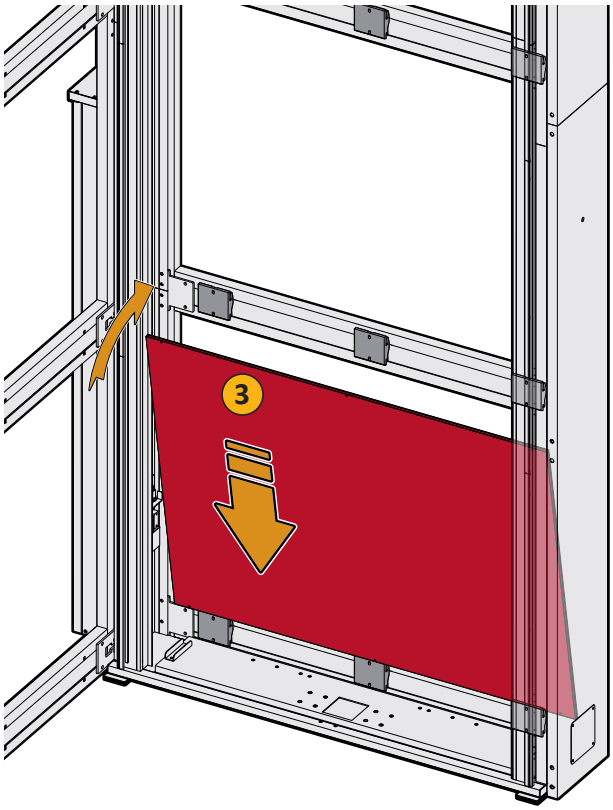


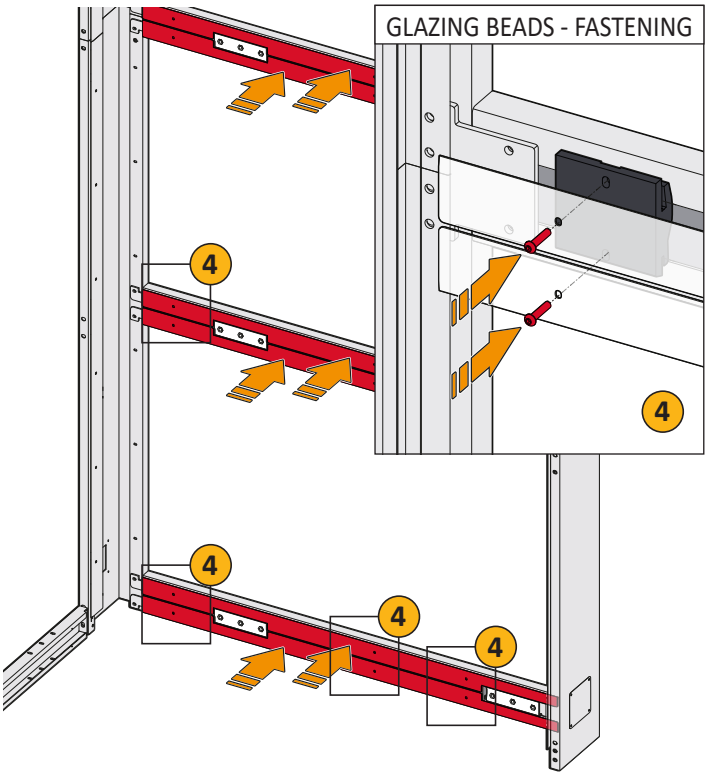






- Insert the rear infill panels (3)
- Fasten the glazing beads using the supplied screws (4).

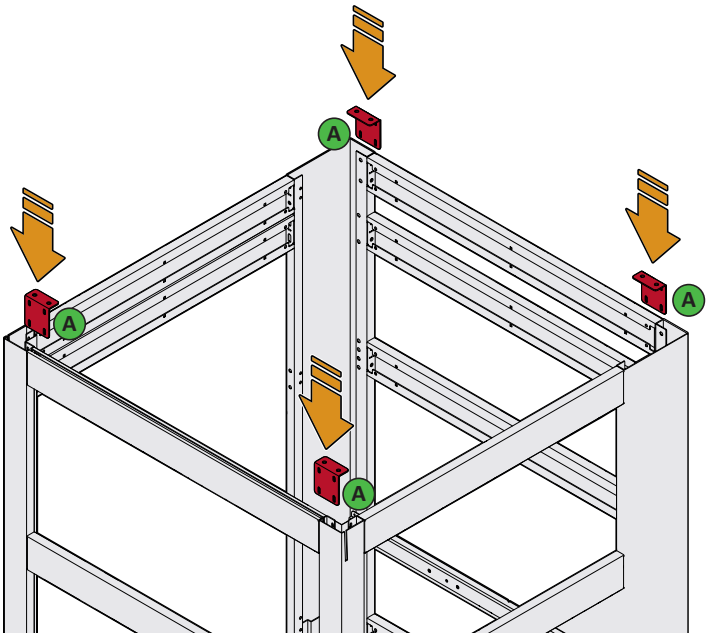


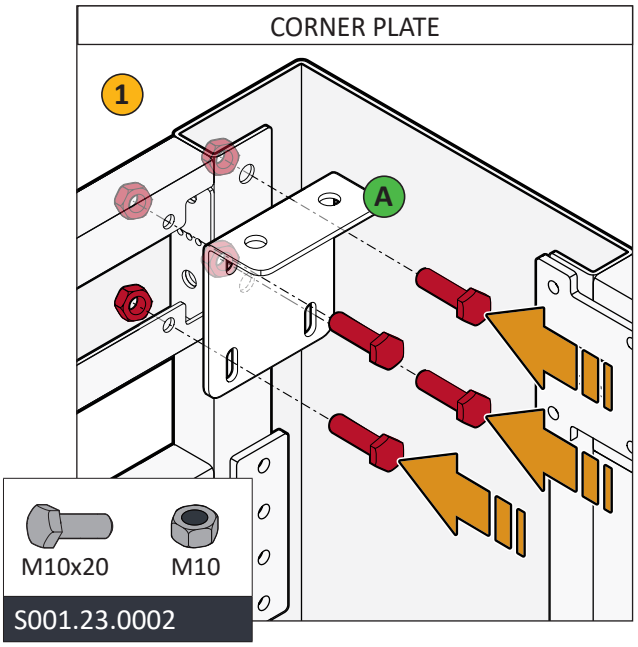


11.05. Shell roof - installation (flat / sloping roof)

11.05.01 SHELL ROOF - PRE-INSTALLATION OF CORNER PLATES

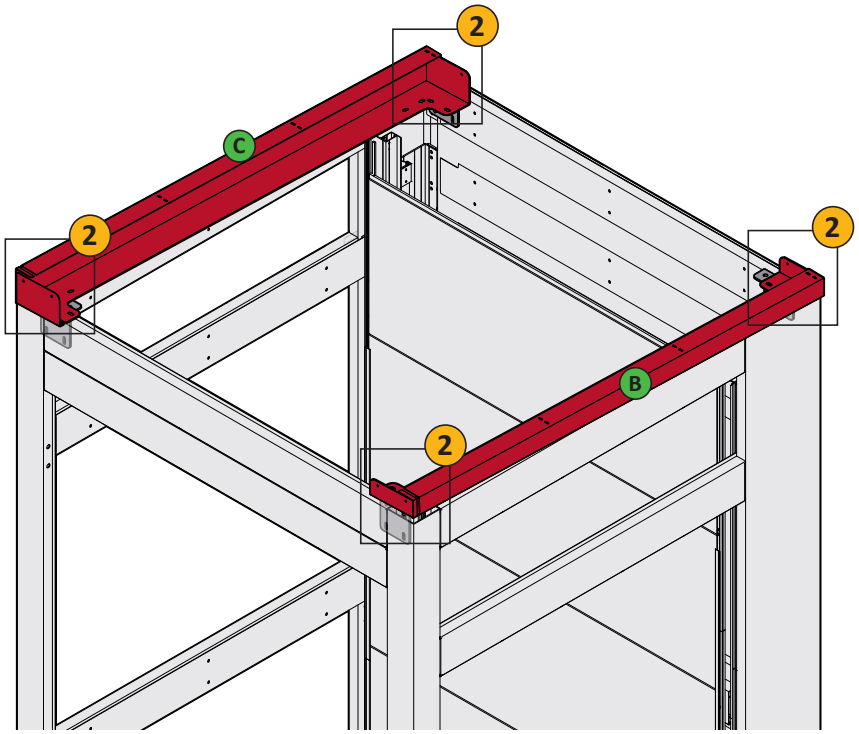
1 Put into place and fasten the corner plates, A using the supplied screws.

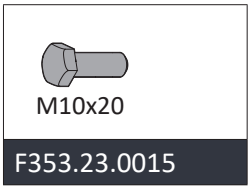


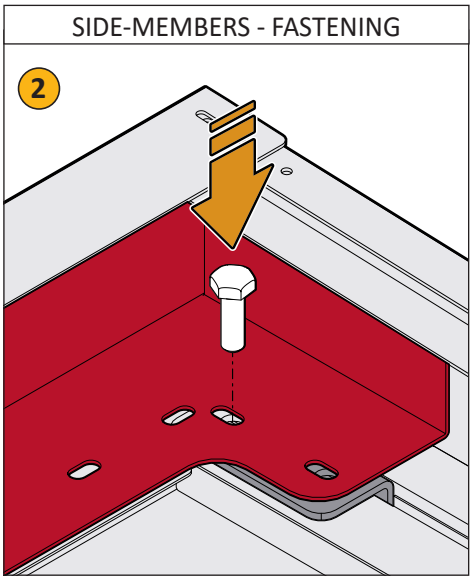


11.05.02 OUTDOOR ROOF - SIDE-MEMBER INSTALLATION

2 Put into place and fasten the support side-members for outdoor roof B + C, using the supplied screws.

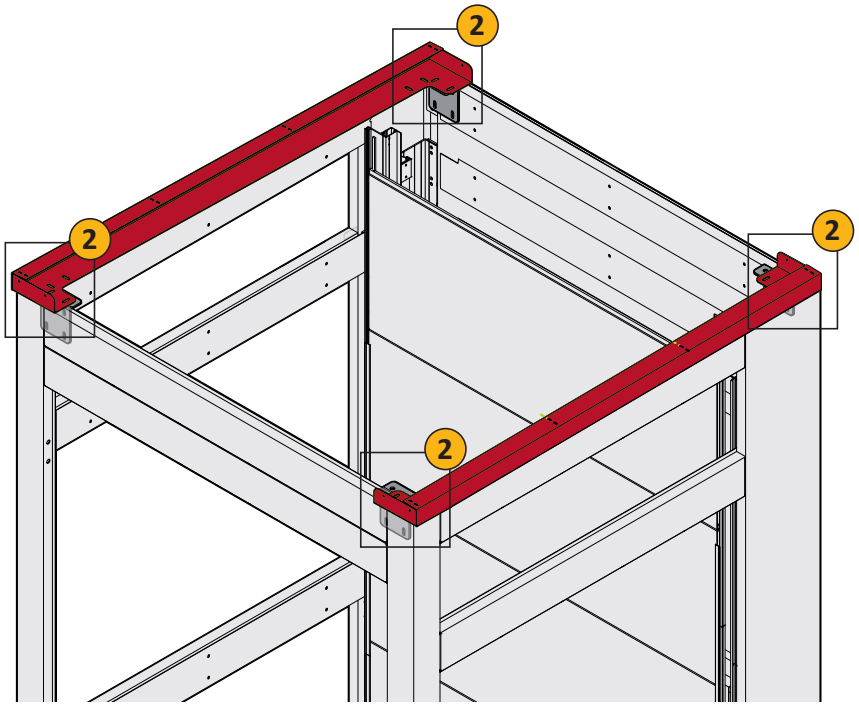


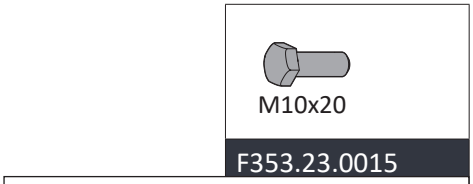




11.05.03 INDOOR ROOF - SIDE-MEMBER INSTALLATION

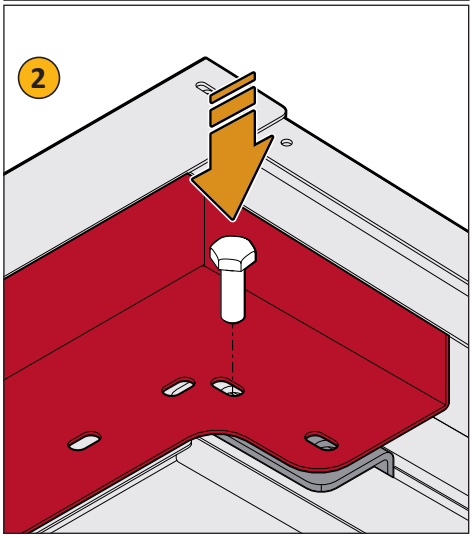
(2) Put into place and fasten the support side-members for outdoor roof (B), using the supplied screws.





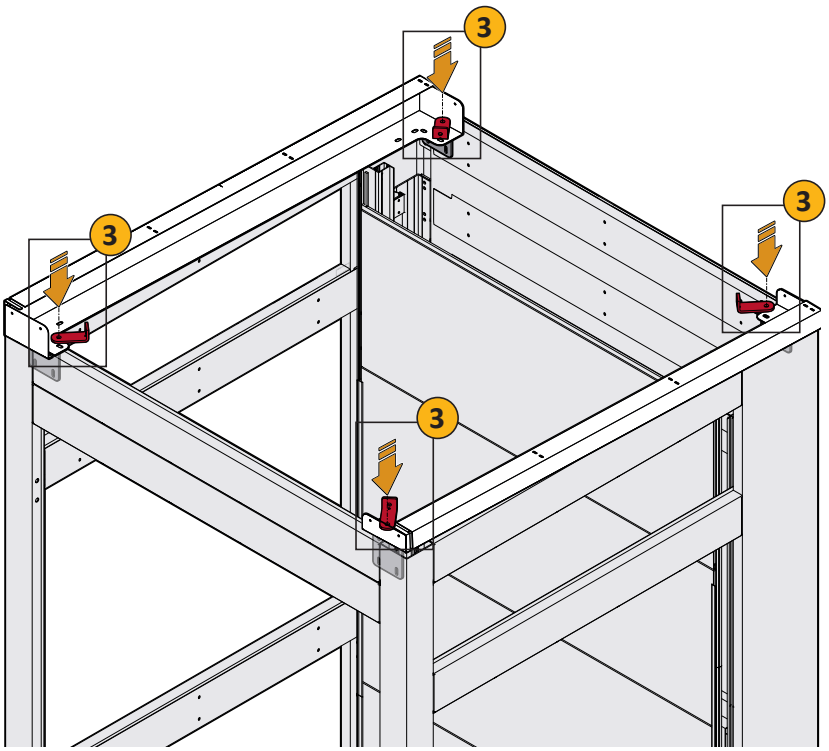
F353.23.0015

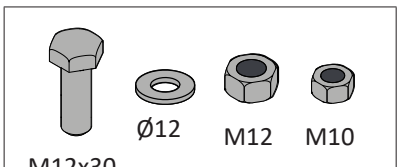
SIDE-MEMBERS - FASTENING



11.05.04 BRACKETS FOR SHELL TIE-RODS (SPIDERS) - INSTALLATION

(3) Put into place and fasten the L-brackets supporting the headroom tie-rods (D), using the supplied screws, as shown.





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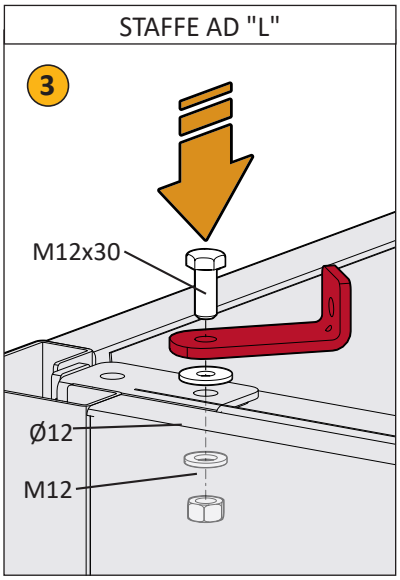
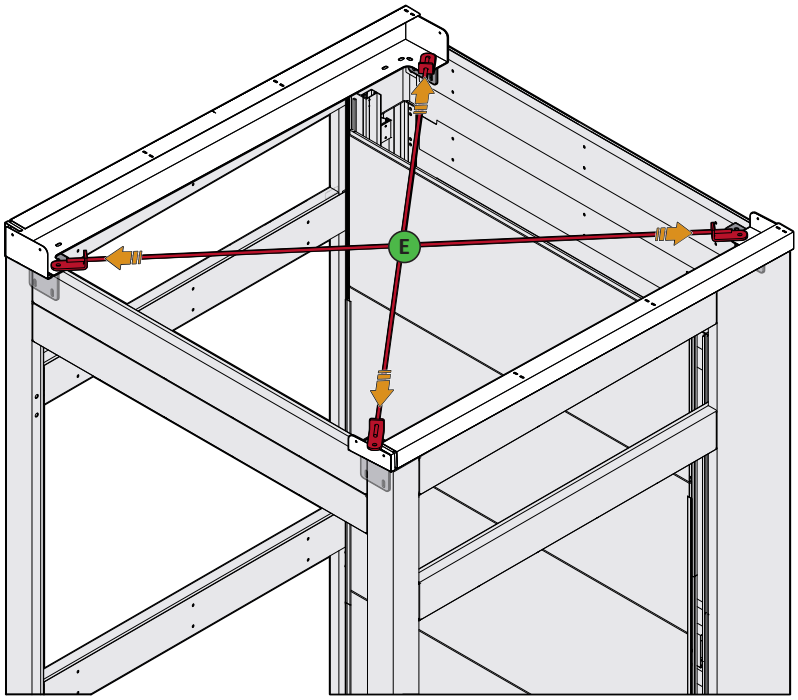
STAFFE AD "L"

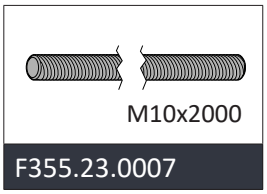


11.05.05 SHELL TIE-RODS (SPIDERS) - INSTALLATION

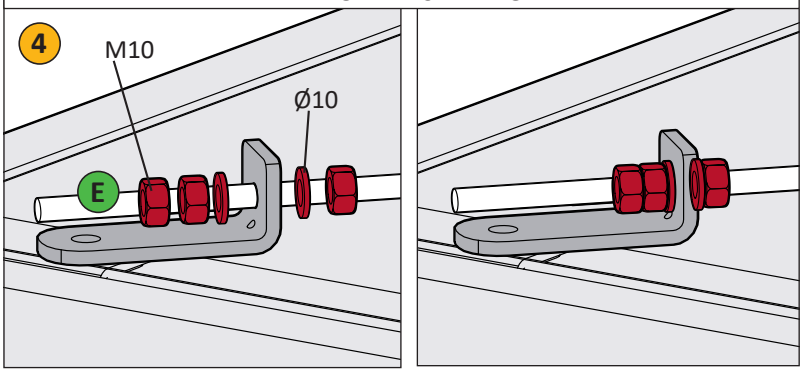
4 Insert the tie-rod (threaded bar) E and fasten it with the nuts, ensuring that it remains tensioned.

5 Should the bar E protrude from the bracket, cut off the excess segment.

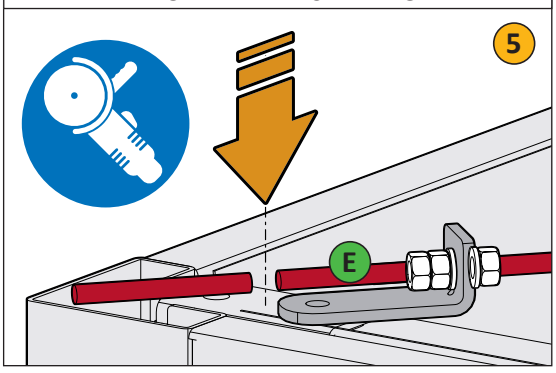




TIE-ROD - FASTENING

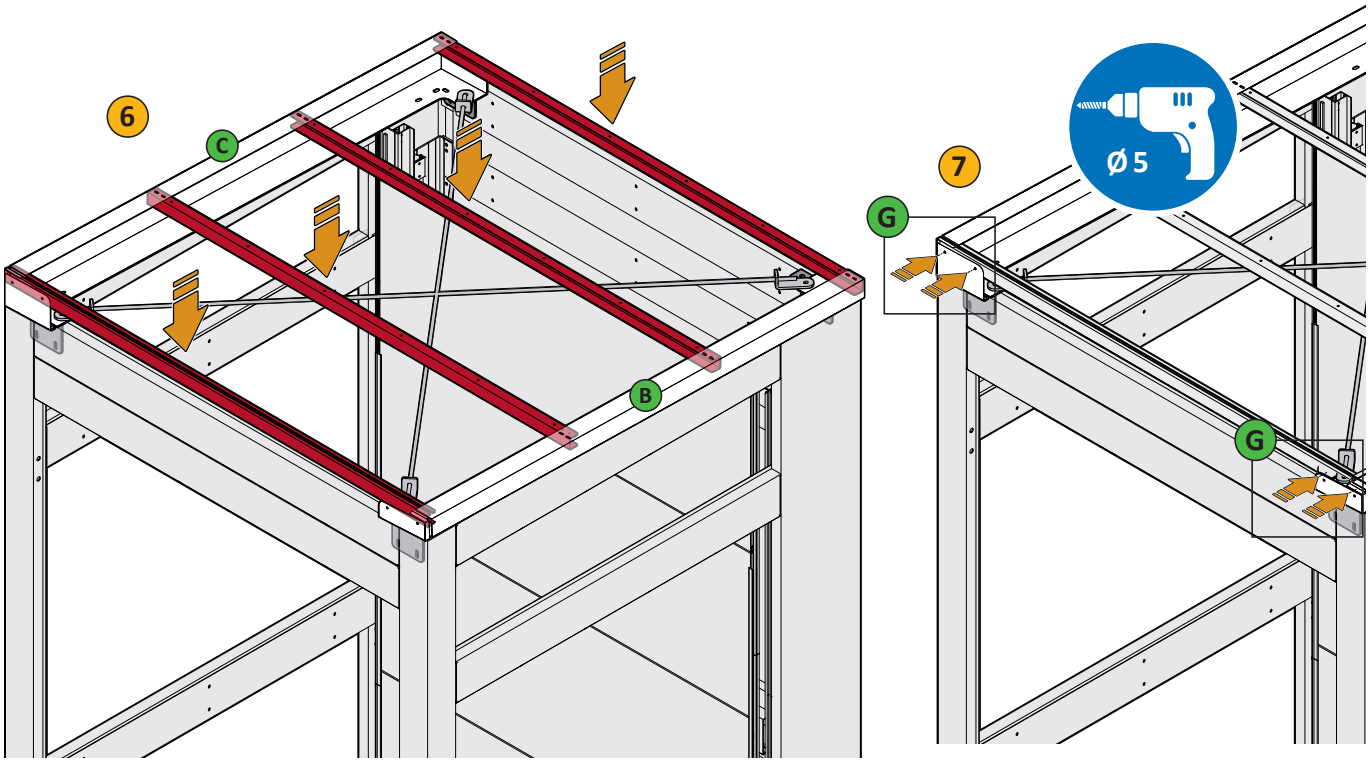


TIE-ROD - MAXIMUM LENGTH

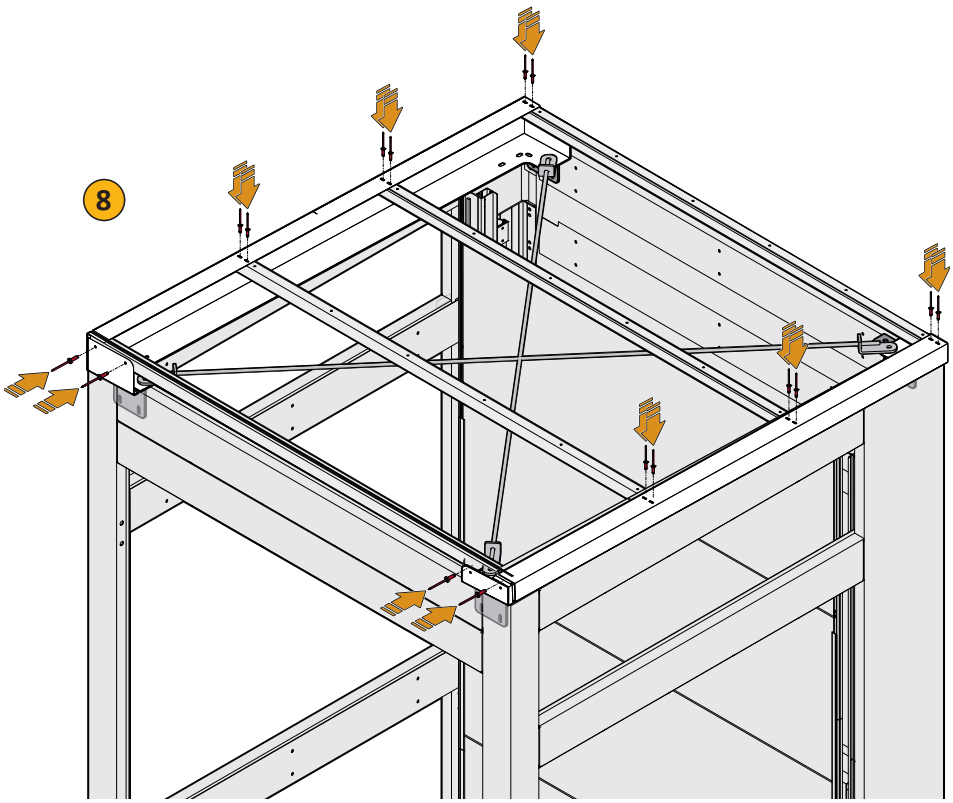


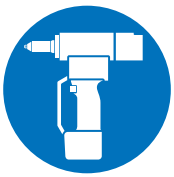
6 Insert into the side members (B+ B or B + C according to the roof type) the reinforcement bars F.

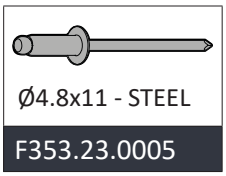
7 Drill the bar using the side holes of the side-members as a template G .



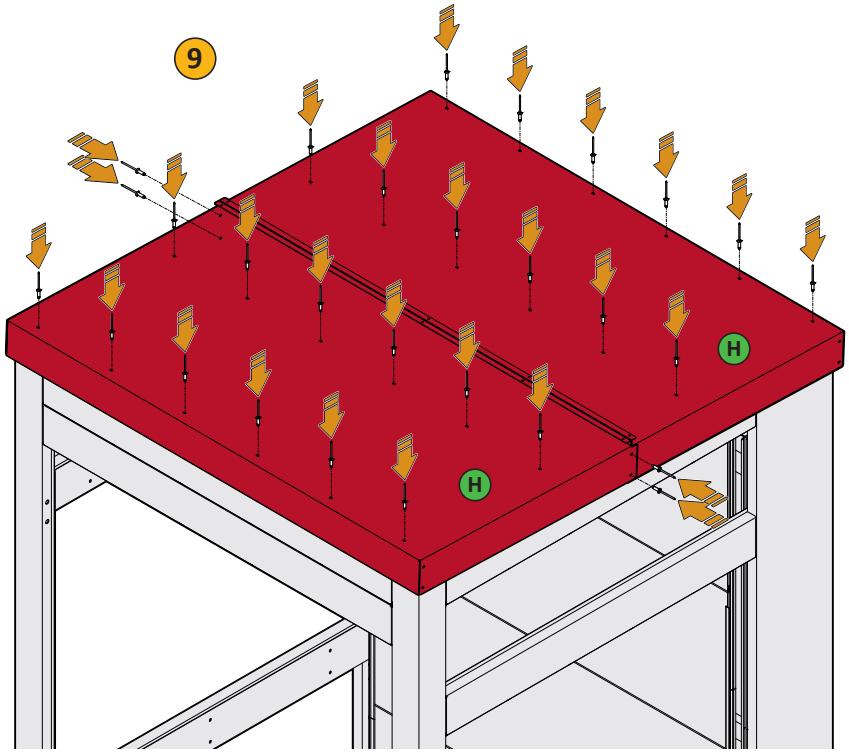
8 Rivet all the reinforcement bars to the side-members.

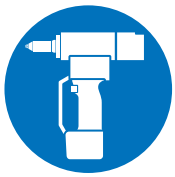


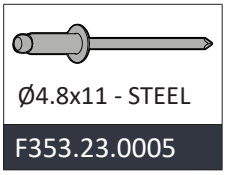




9 Put into place the outer covers H and rivet them to the reinforcement bars and to the side-members.

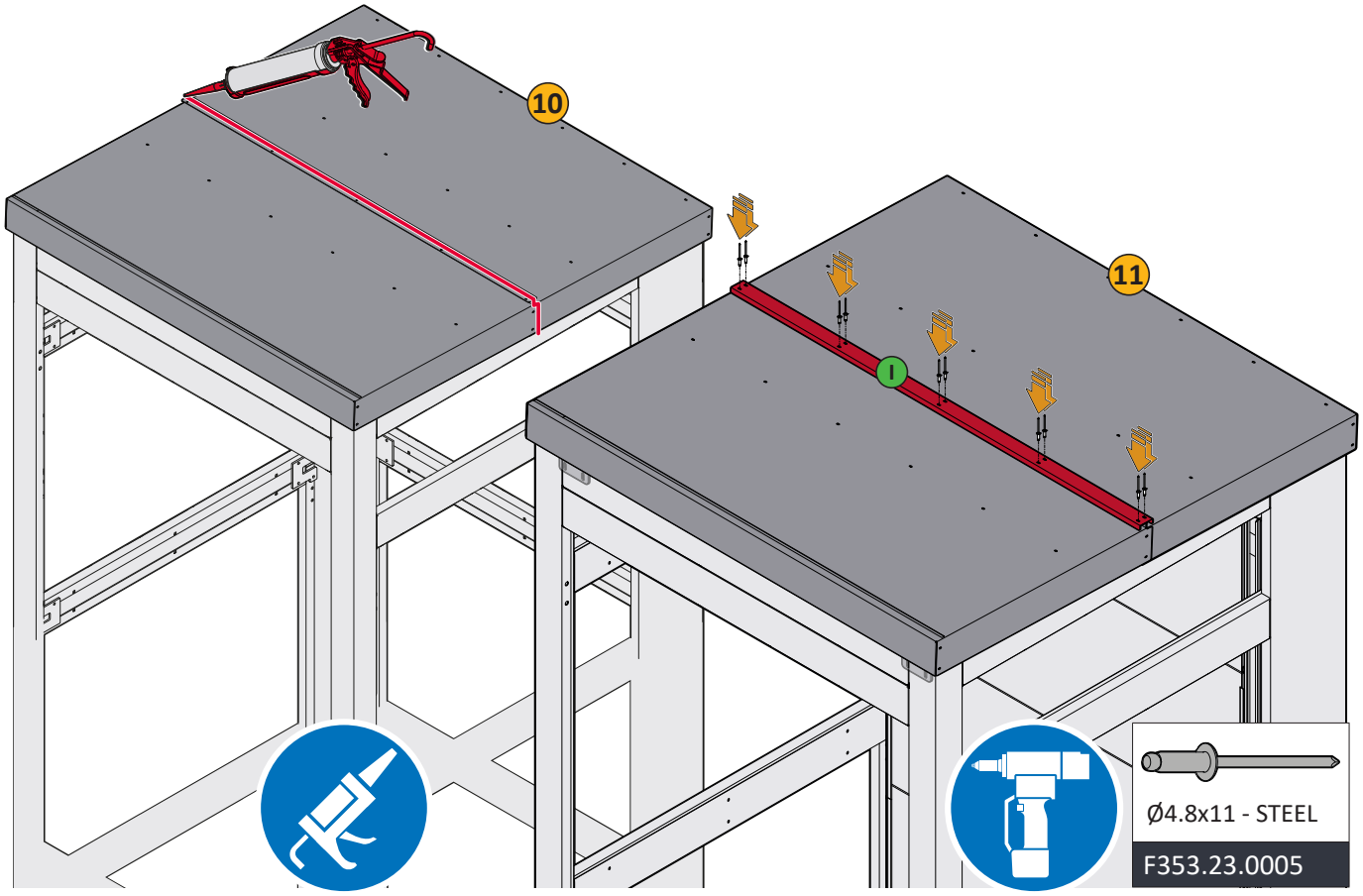






10 Carefully seal the joints with silicone, to prevent any leaks.

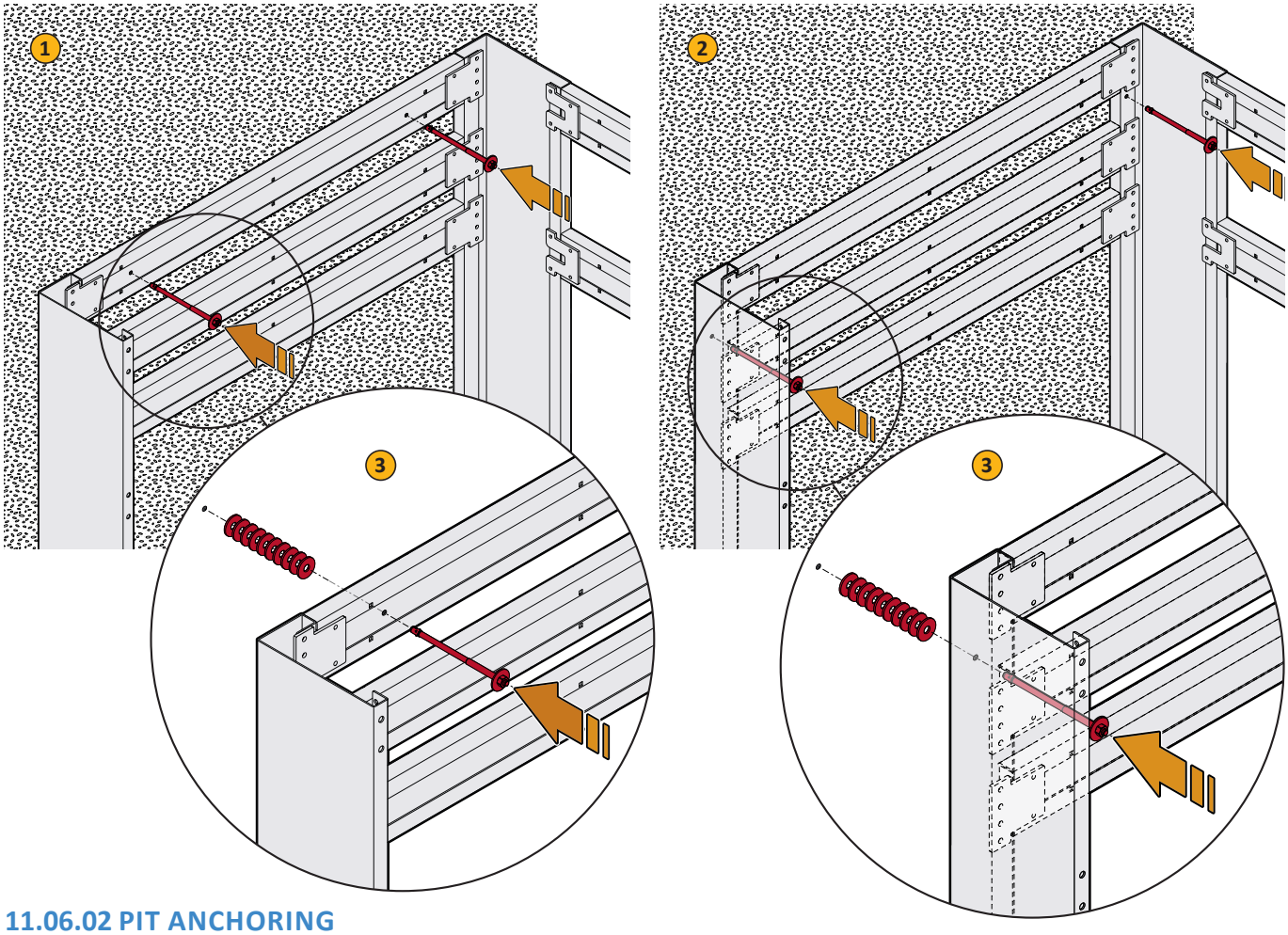
11 Put into place and rivet the cover joint profile I.



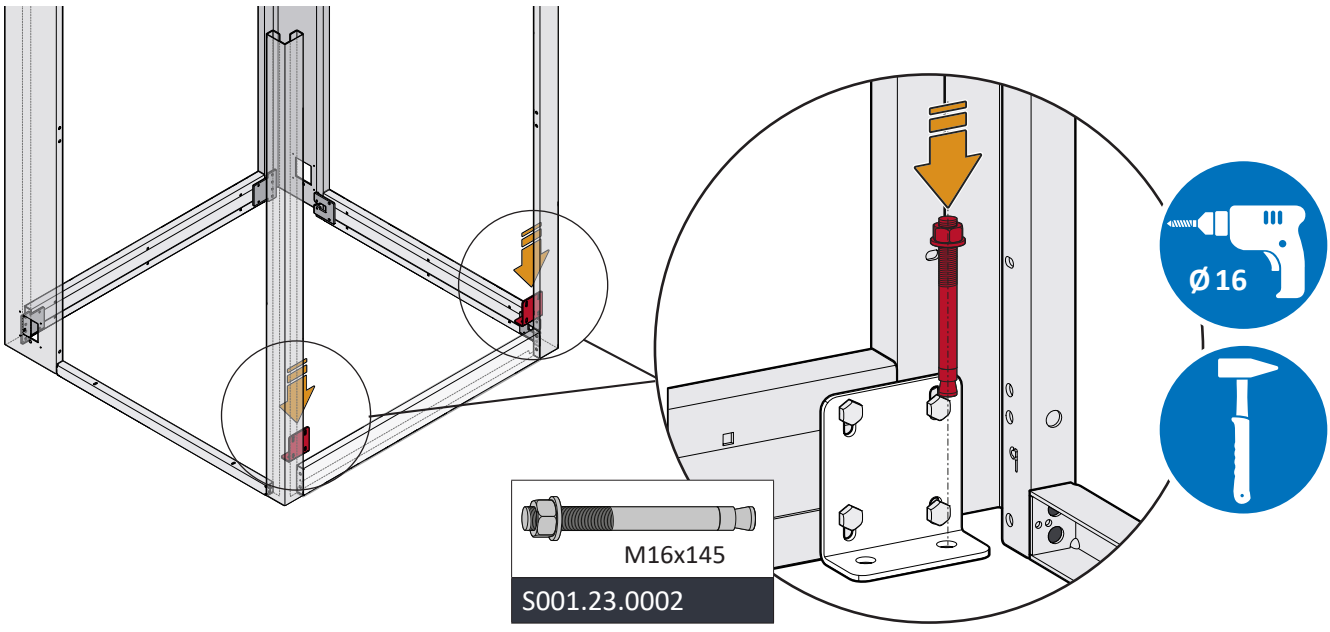
11.06. Shell - anchoring

11.06.01 WALL ANCHORING

- Carry out the anchoring operations in the transom (1) or in the jamb (2) as indicated in the design drawing
- If the wall is not perfectly straight, use spacers (3).



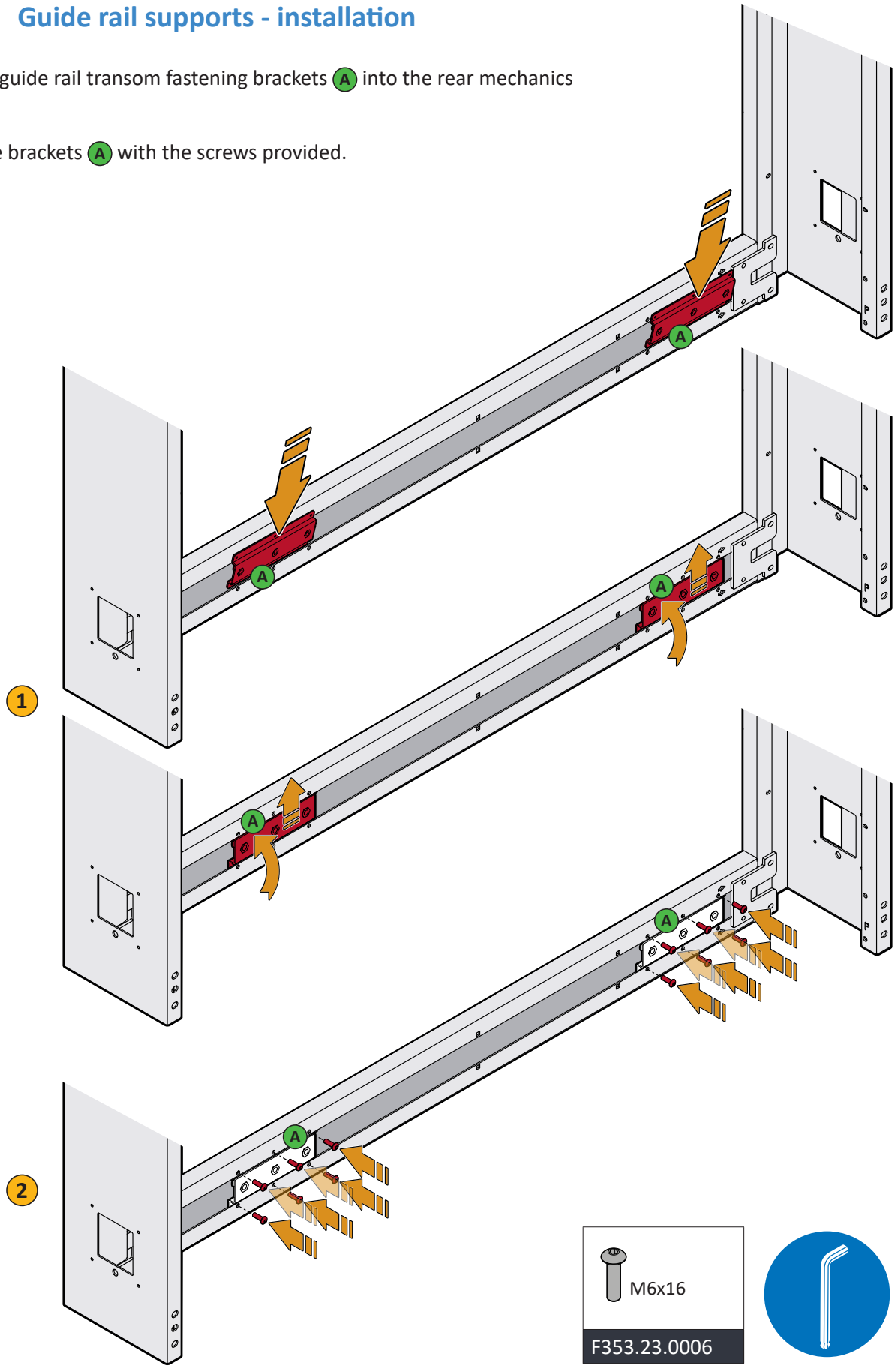
11.06.02 PIT ANCHORING



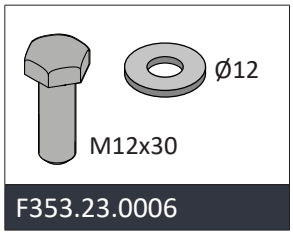
12. Mechanics - installation

12.01. Guide rail supports - installation

1. Insert the guide rail transom fastening brackets A into the rear mechanics transoms.
2. Secure the brackets A with the screws provided.



3 Put into place and fasten the guide rail support transom B, aligning it with the fastening threaded inserts, using the relevant brackets C .



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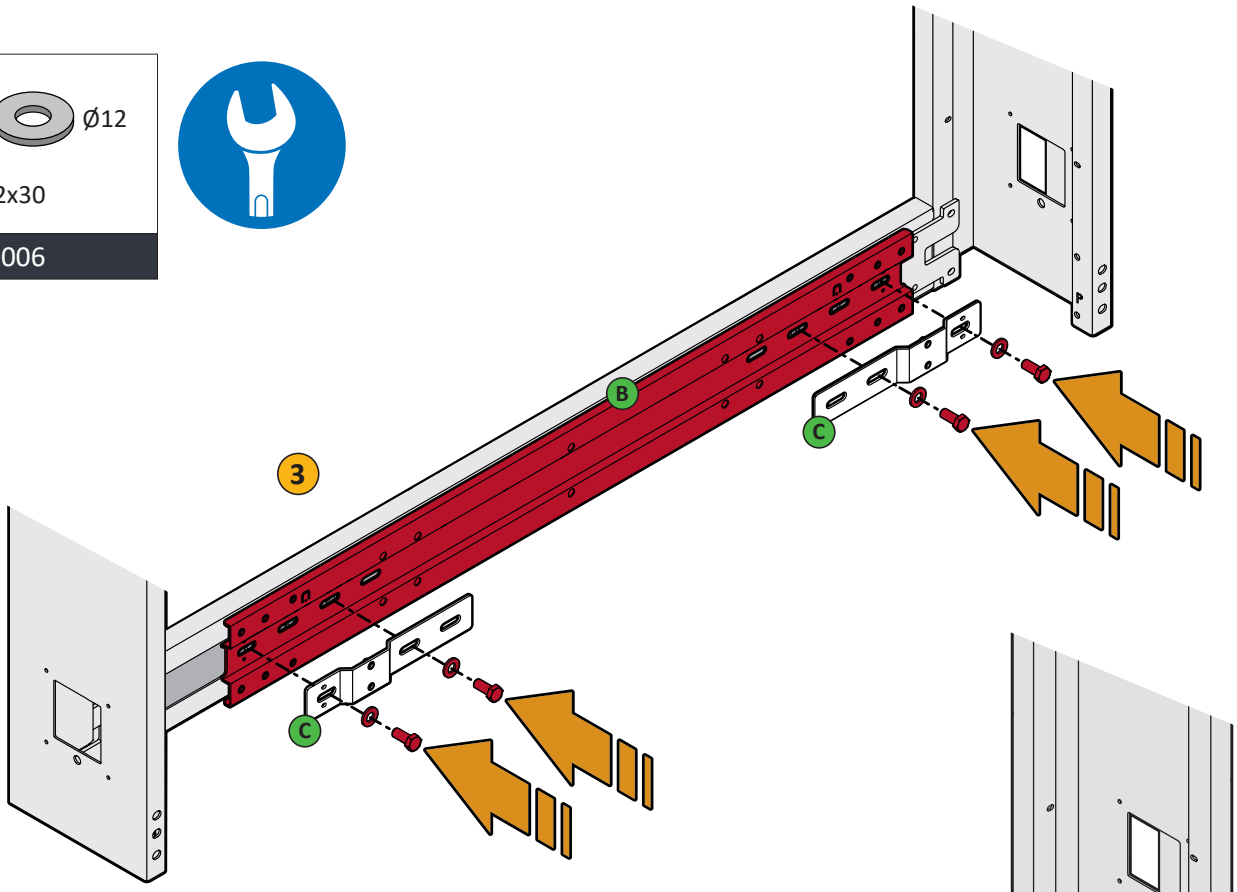
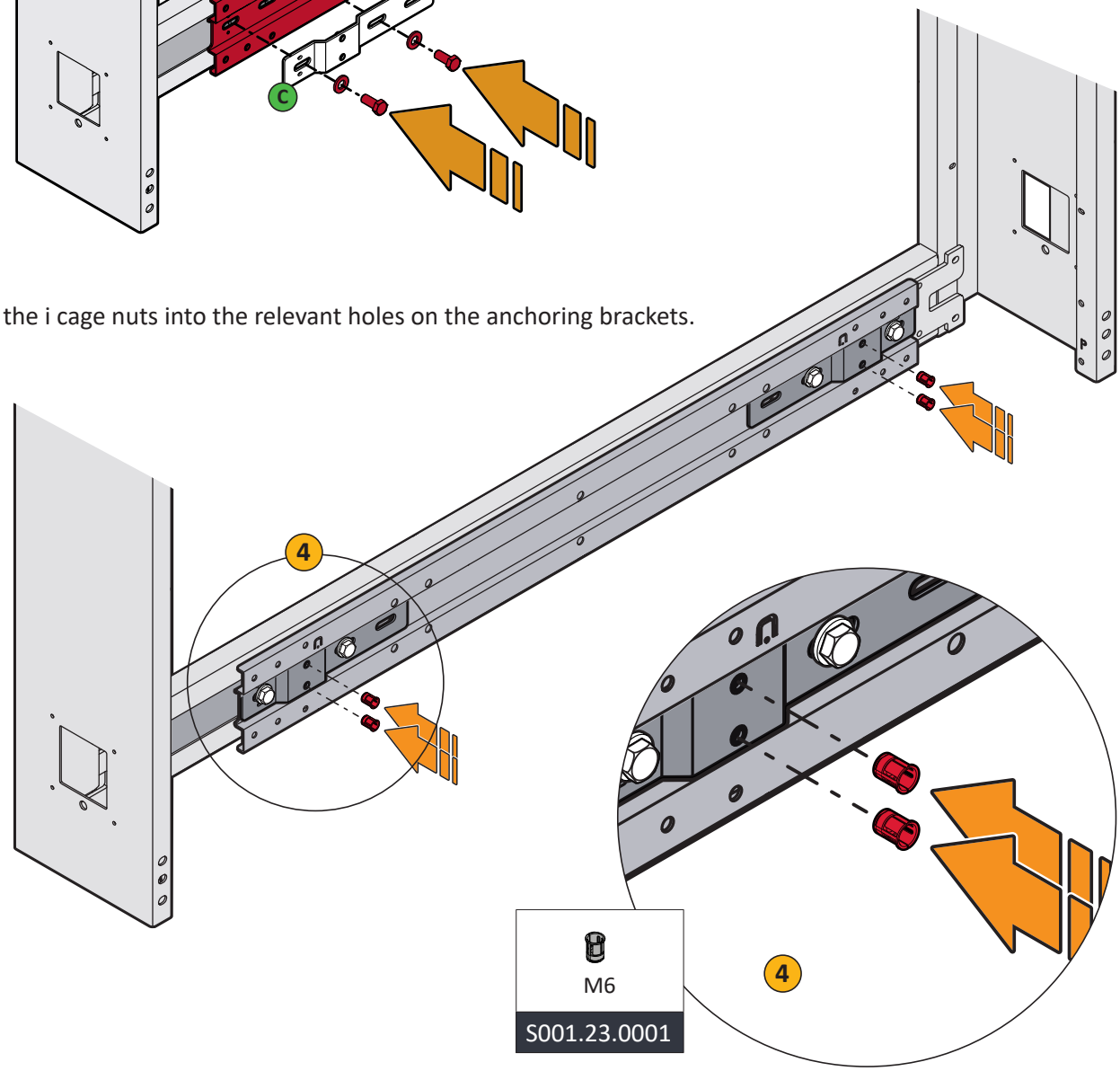


4 Insert the i cage nuts into the relevant holes on the anchoring brackets.



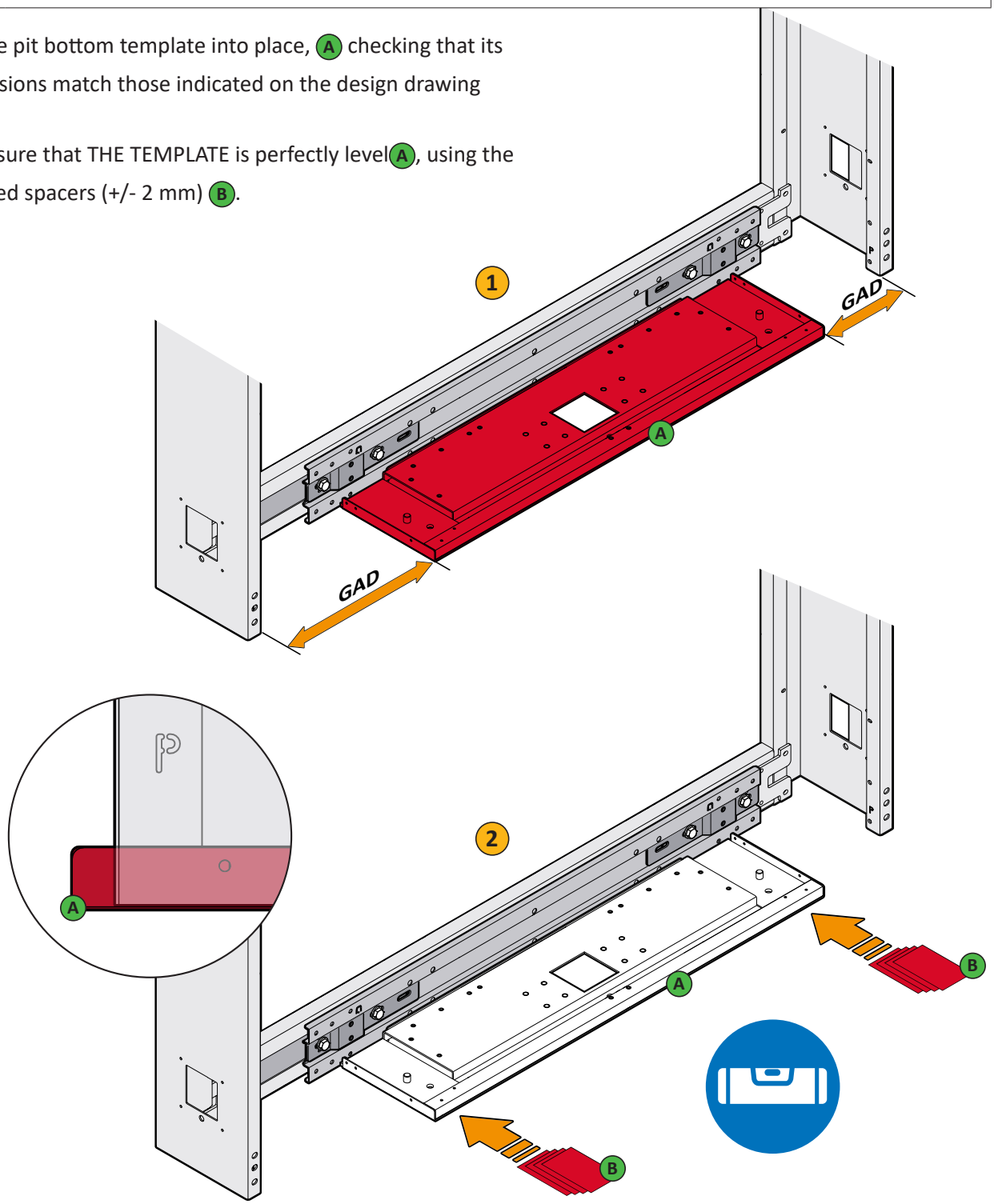
S001.23.0001

12.02. Pit bottom template - installation

IMPORTANT!

Refer to the GAD and to § 10.03.06 - SHELL - IDENTIFICATION OF THE GUIDE RAIL SIDE TRANSOMS, and check the proper installation direction of the transoms and of the pit bottom TEMPLATE.

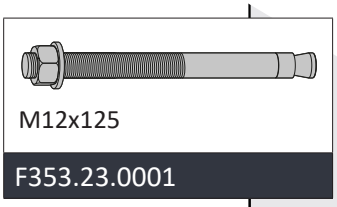
1. Put the pit bottom template into place, A checking that its dimensions match those indicated on the design drawing (GAD).
2. Make sure that THE TEMPLATE is perfectly level A, using the supplied spacers (+/- 2 mm) B.

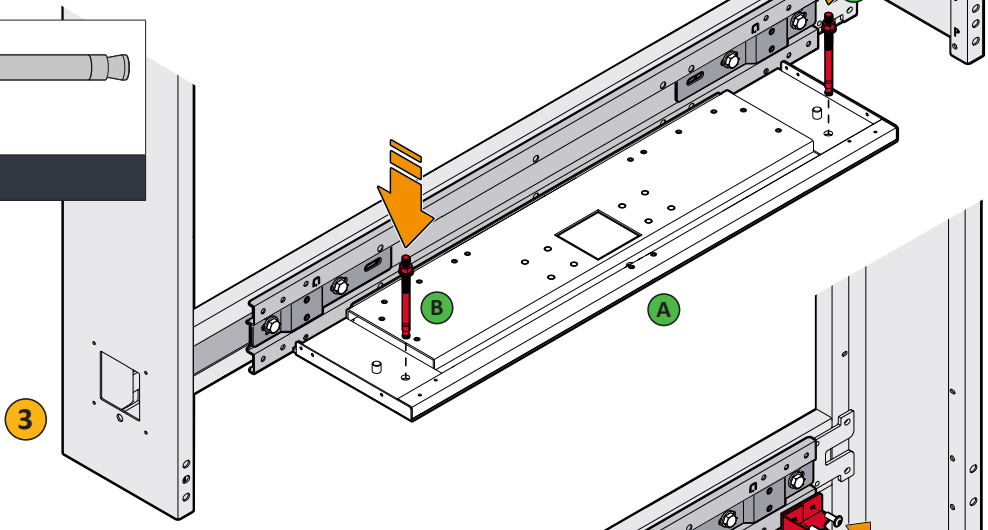


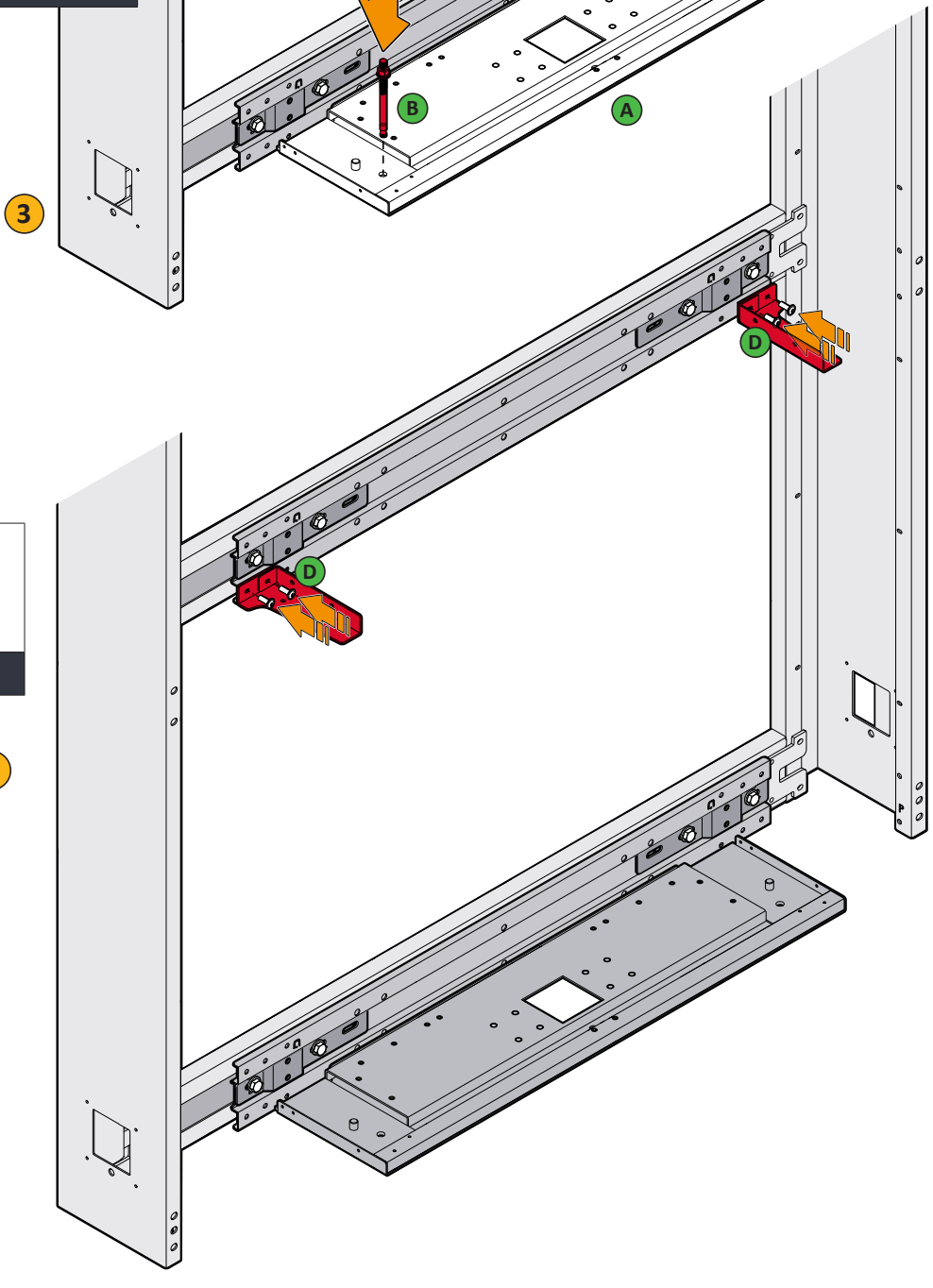
We recommend using the laser level to help you level the template correctly.

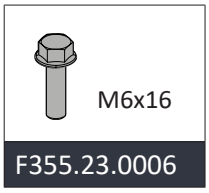
3 Anchor the TEMPLATE A through the existing holes, using the supplied expansion plugs C.

4 Anchor the guide rail support brackets D through the existing holes, using the supplied expansion plugs C.





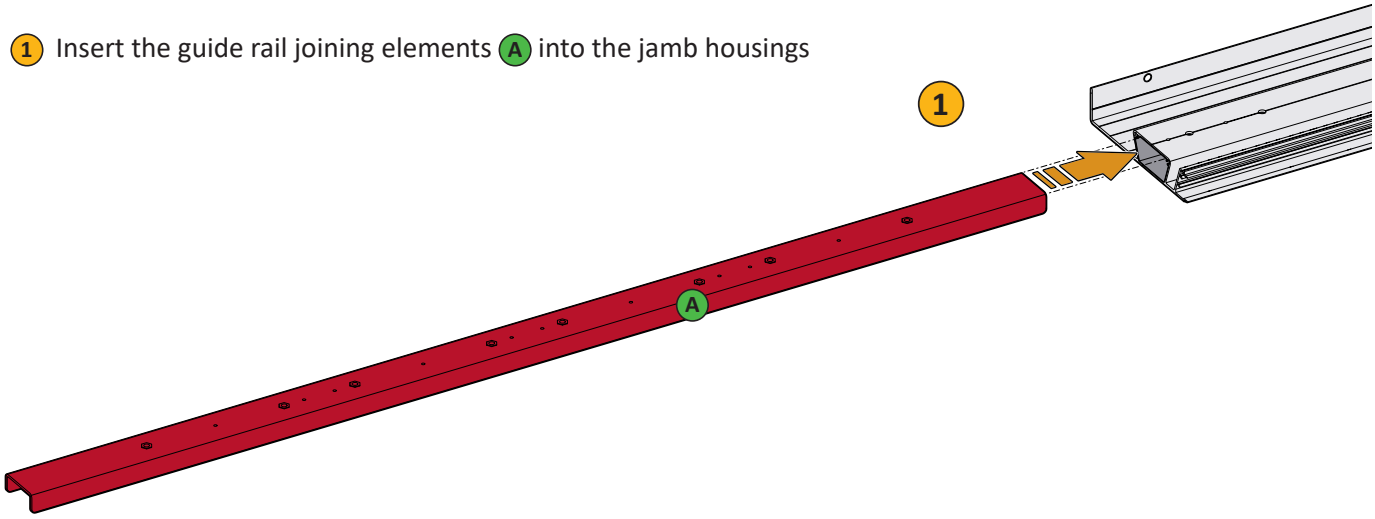




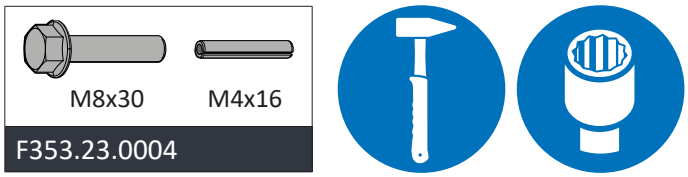
12.03. Guide rails

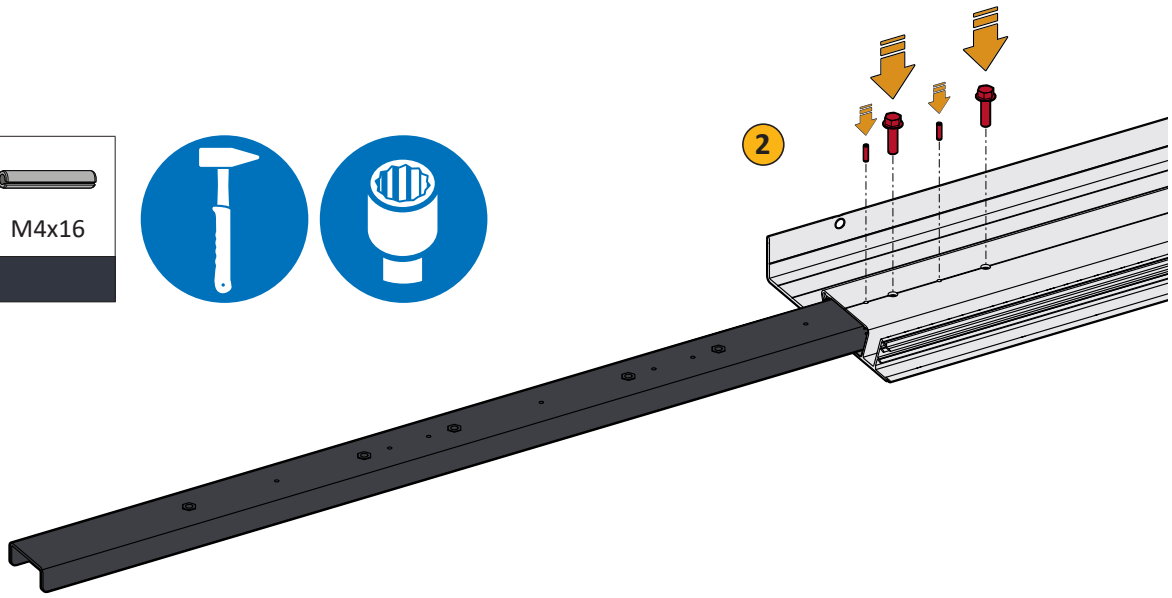
12.03.01 GUIDE RAILS - PRELIMINARY OPERATIONS

1 Insert the guide rail joining elements A into the jamb housings

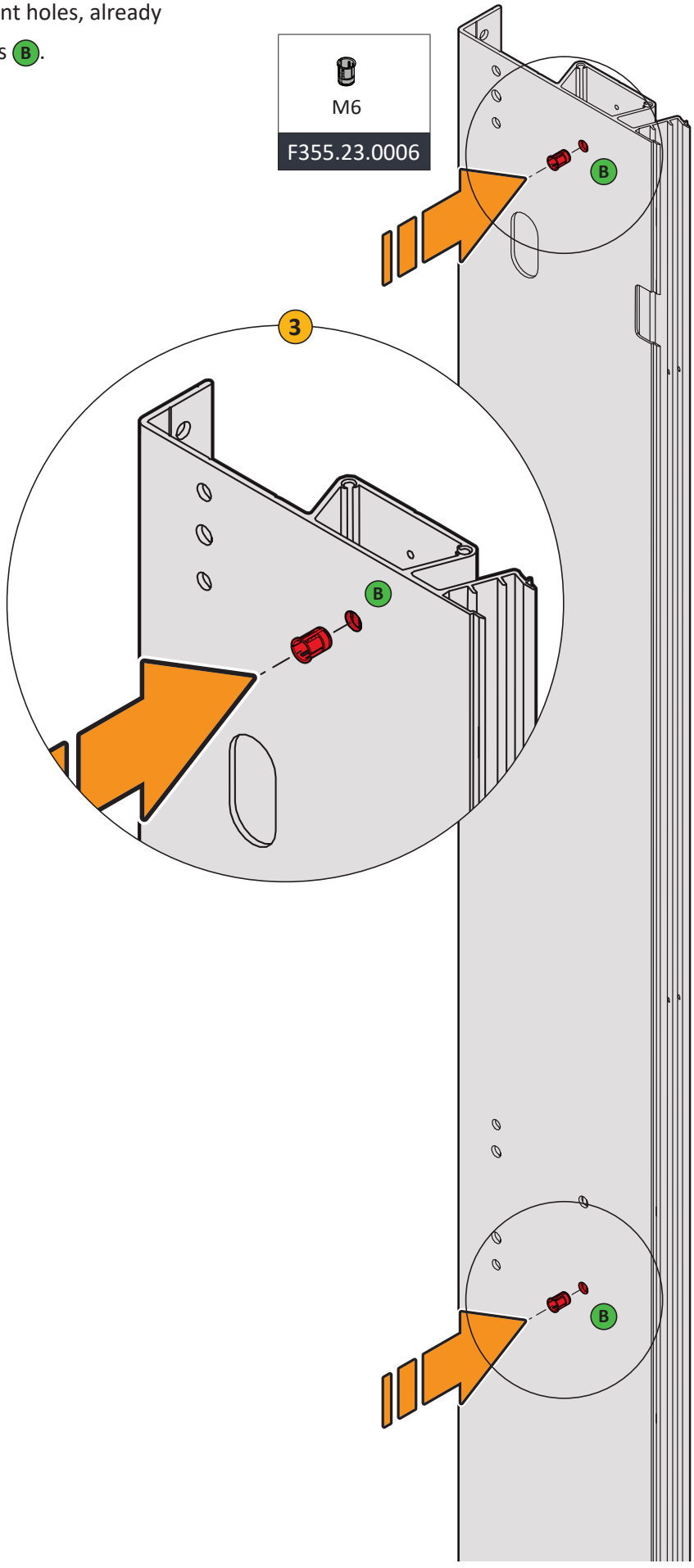


2 Secure with the spring pins and screws provided





3 Insert the cage nuts into the relevant holes, already drilled in all the guide rail segments B.



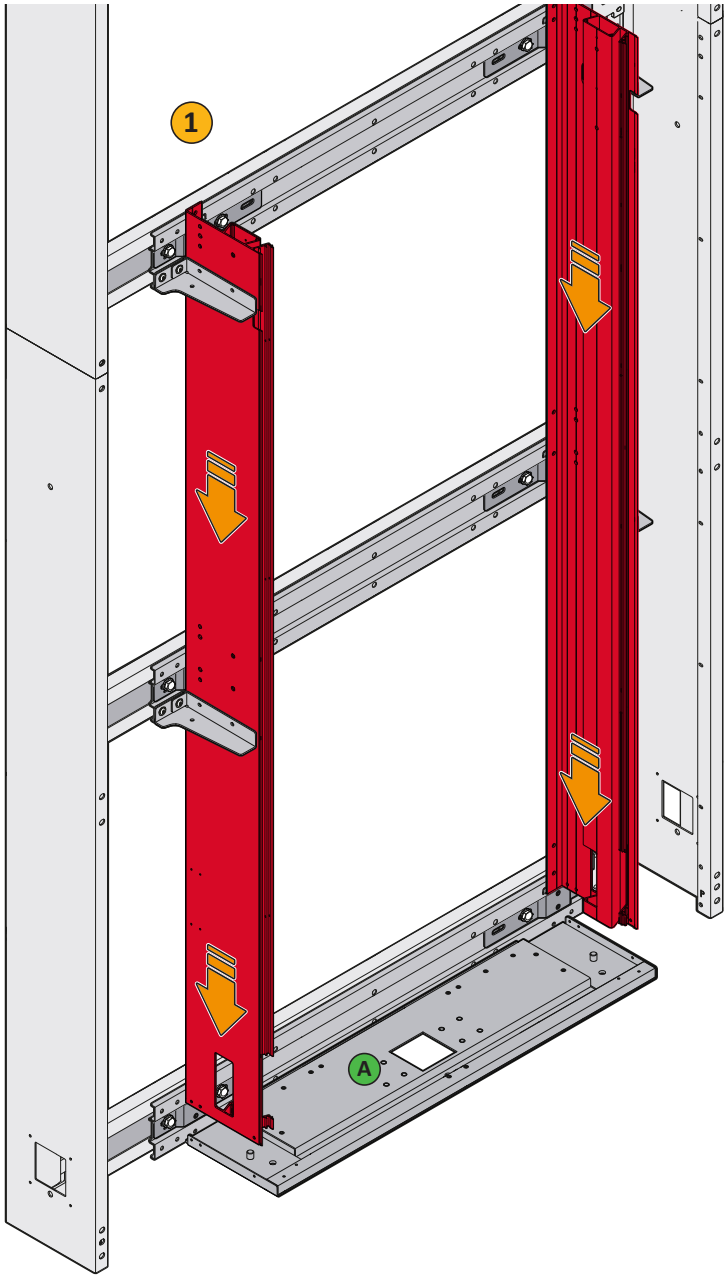
12.03.02 GUIDE RAILS - PUTTING INTO PLACE AND FASTENING

IMPORTANT!

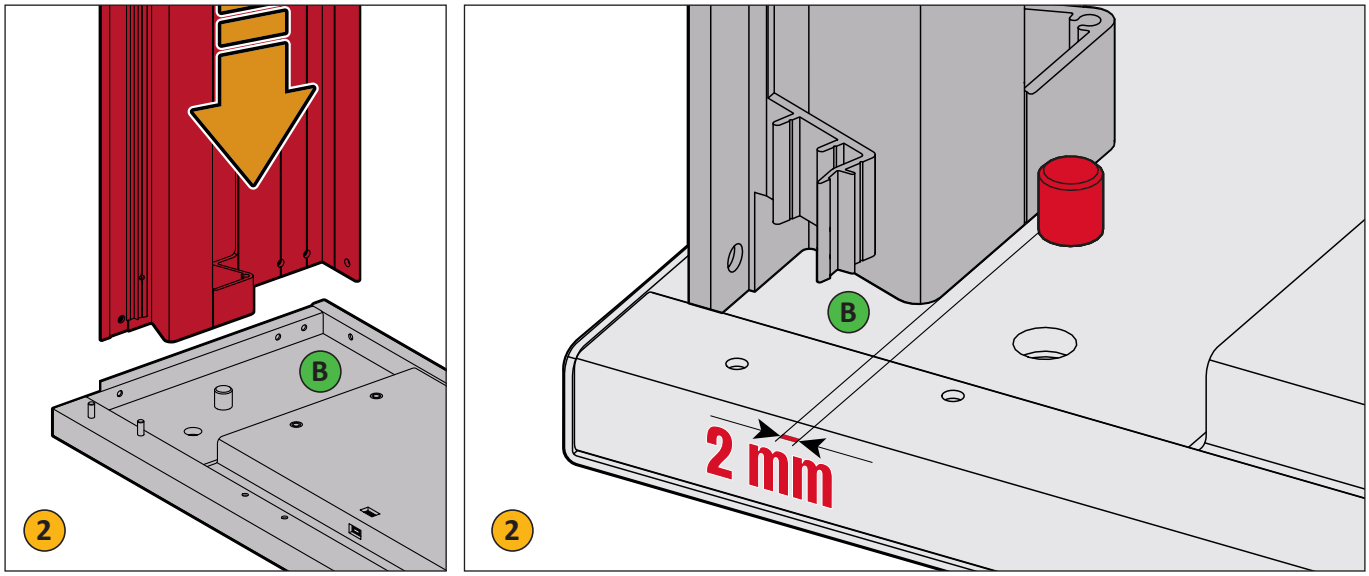
FOR PROPER INSTALLATION:

- **CHECK that the dimensions and the location match those indicated on the design drawing (GAD).**
- Install the guide rails, the screw and the platform with utmost precision, to prevent future malfunctions.
- Carry out the adjustments and alignments during the installation stage (they can only be performed on the machine at the installation site). *The accuracy of these adjustments ensures a smooth, quiet, vibration-free stroke.*
- The longer the travel, the more care must be taken when adjusting.
- For optimal results, follow all the instructions included in this manual.
- **CAREFULLY CHECK the alignment of guide rails, screws, pins, and platform shoes, as well as the lubrication of the screw and of the guide rails. These checks are particularly important to ensure that the platform will operate properly.**

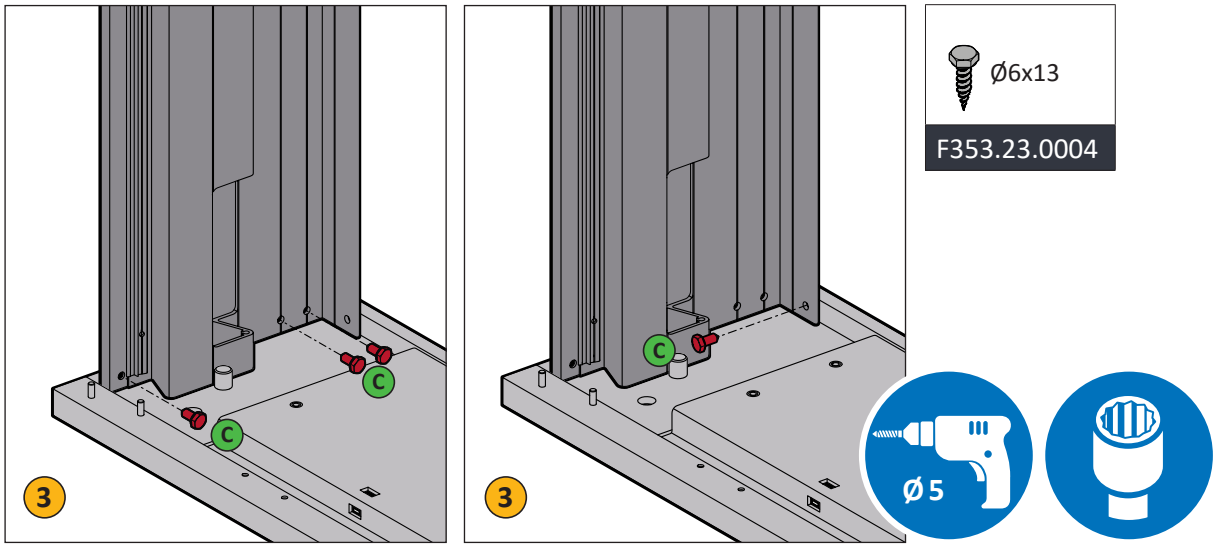
1 Put the pit bottom template into place, A checking that its dimensions match those indicated on the design drawing (GAD).



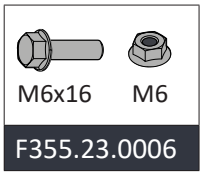
2 Put the guide rails into place in the template housing B, so that the holes are aligned with those on the template.

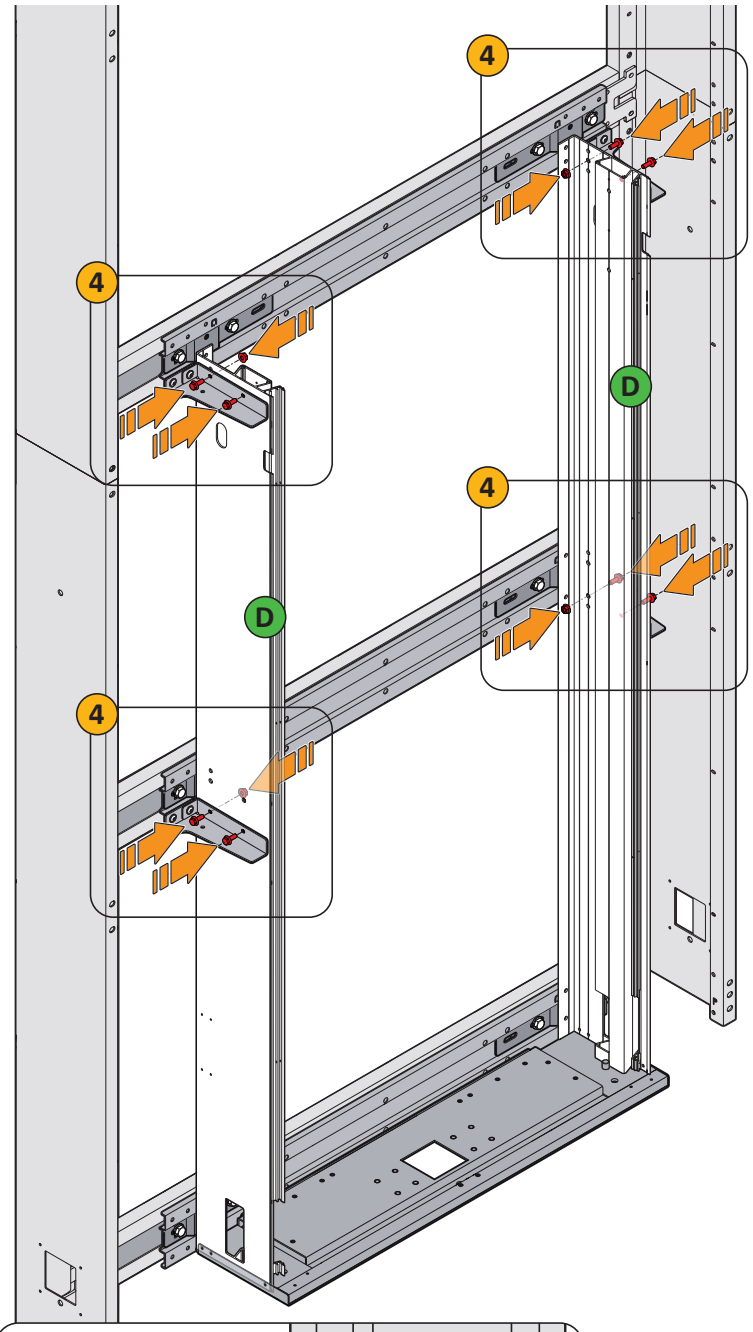


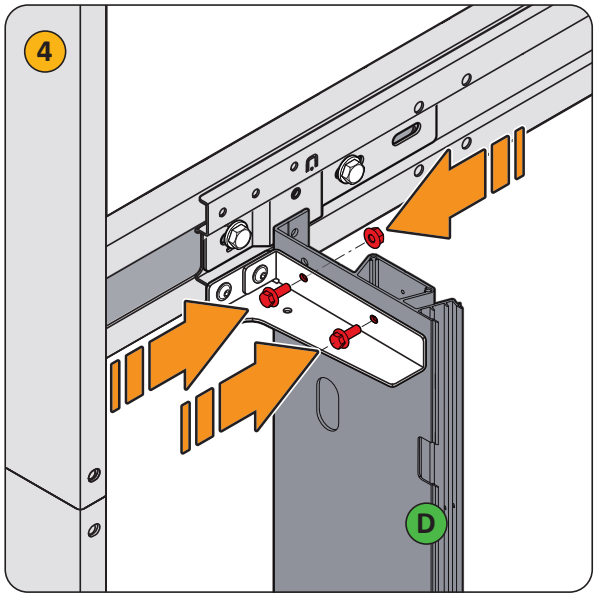
3 Fasten the guide rails to the template, using the supplied self-threading screws C.

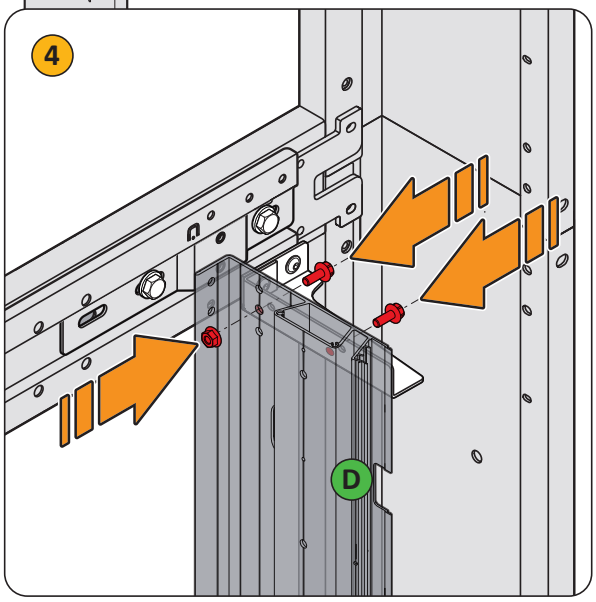


4 Fasten all the guide rail segments D using the supplied screws, checking that they are properly aligned.



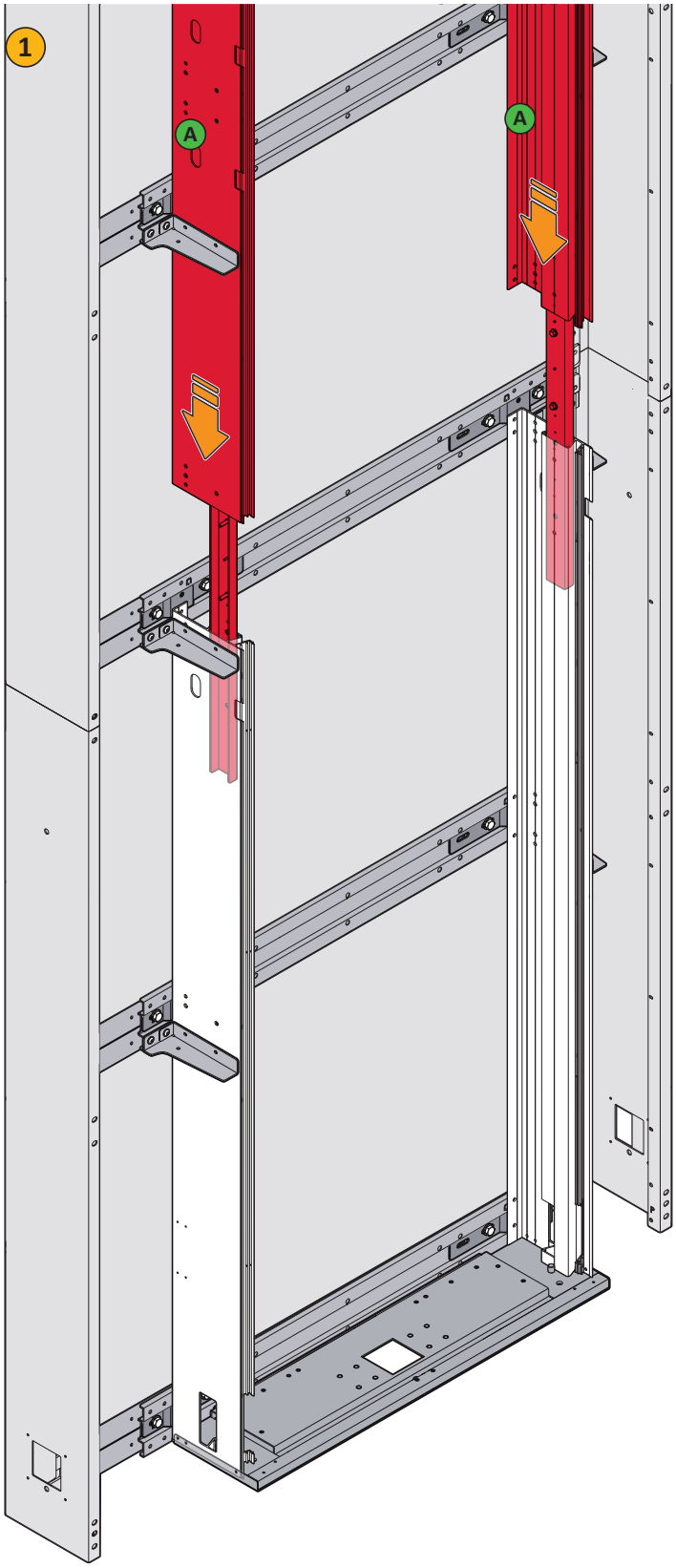


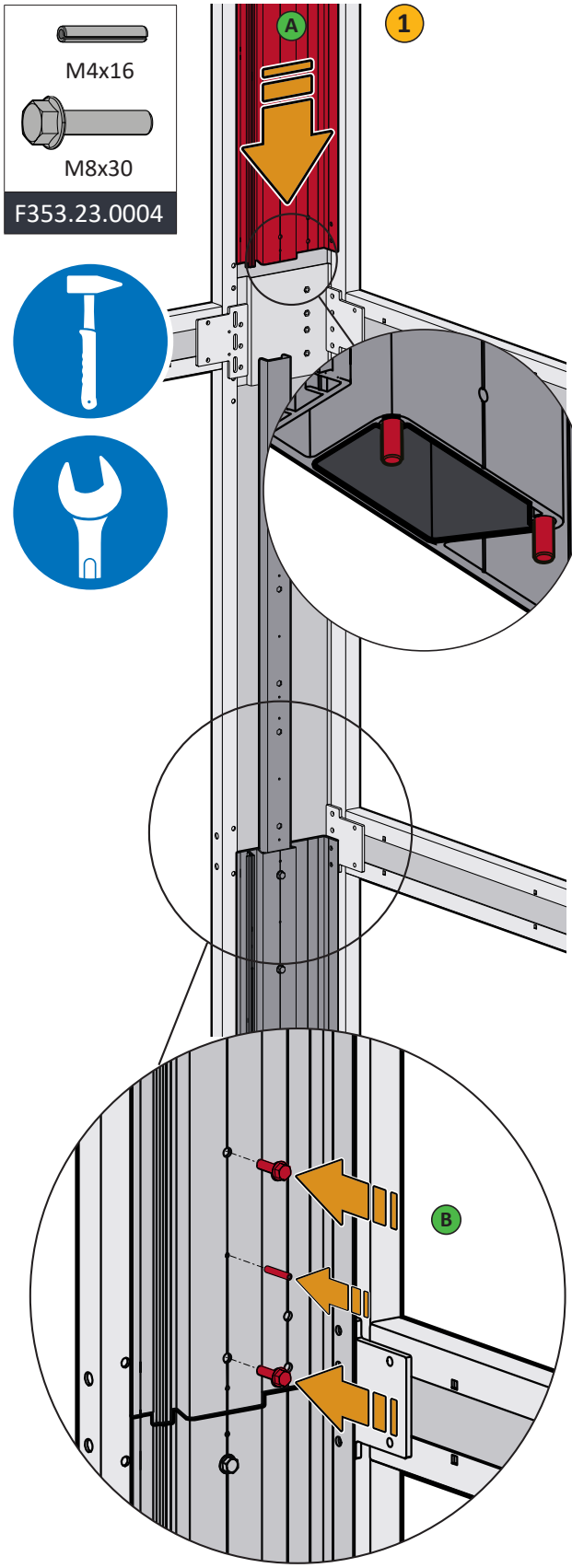




12.03.03 GUIDE RAILS - JOINT

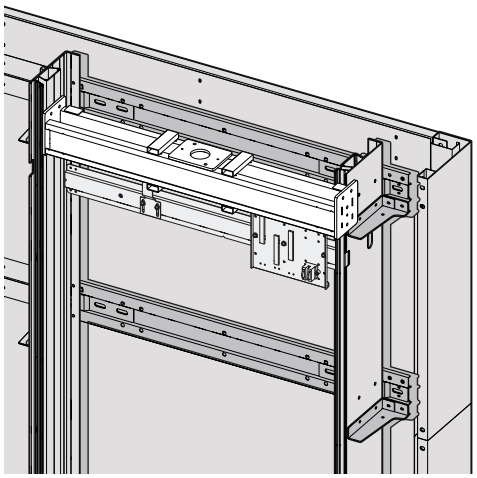
1 Insert the pre-assembled segments A (§ 11.03.01 GUIDE RAILS - PRELIMINARY OPERATIONS) as shown and fasten them using the supplied screws and spring pins B .

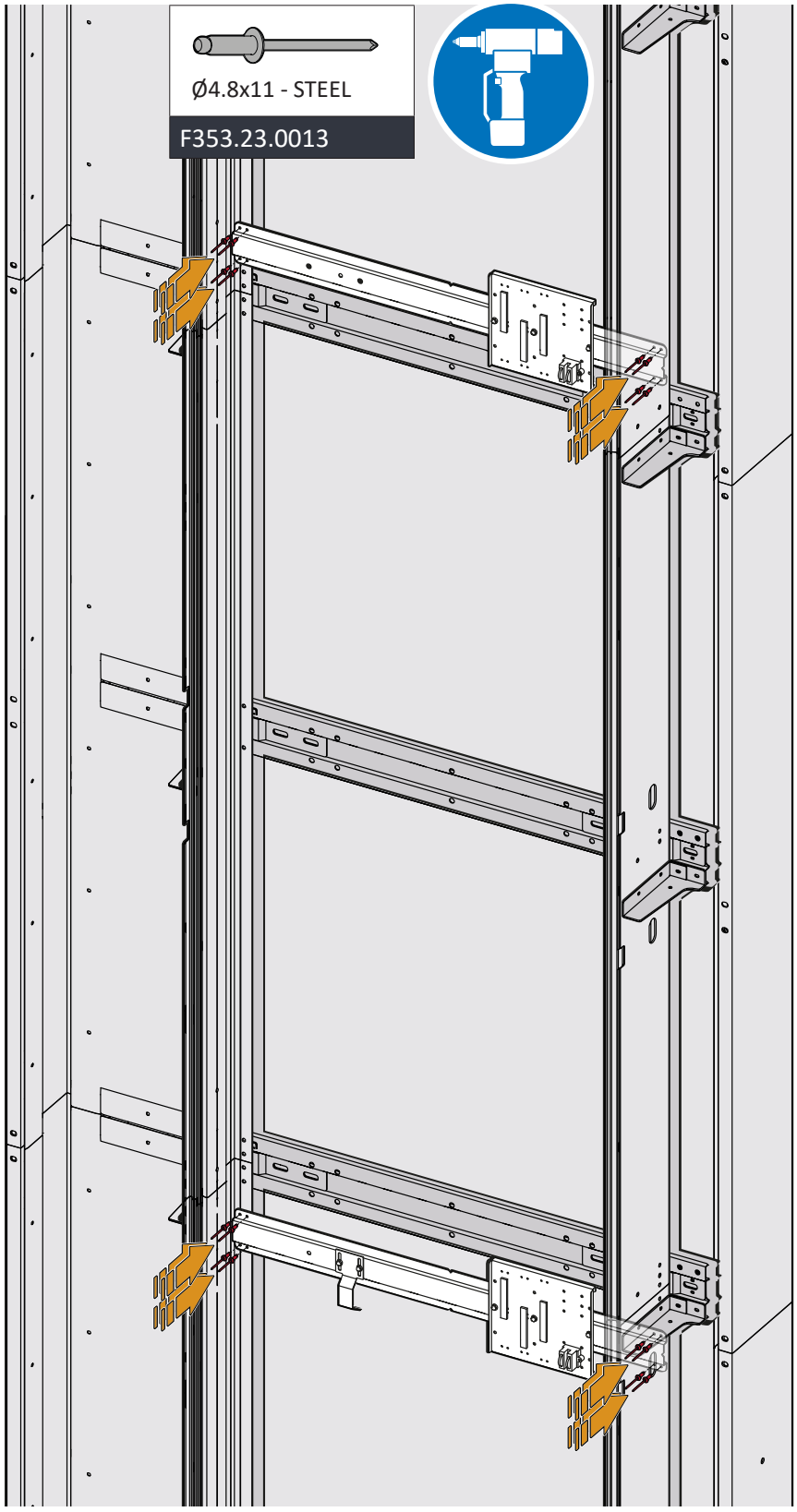


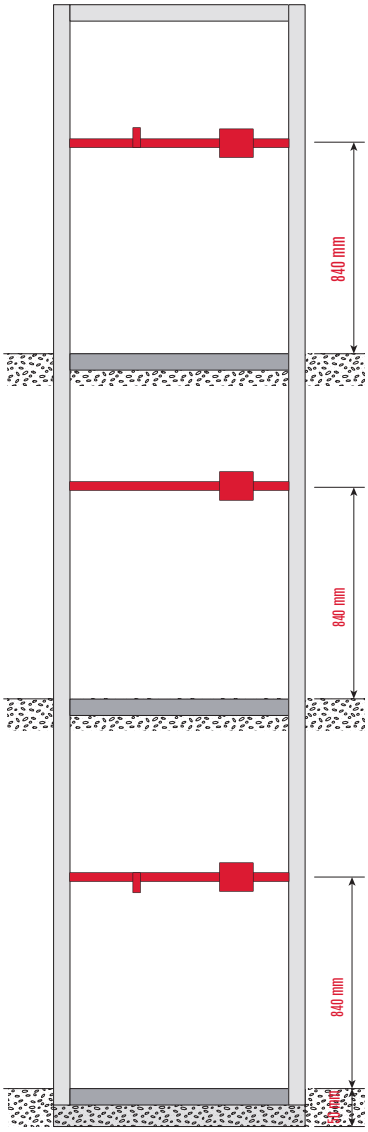


12.04. Sensor and flat cable support bars - installation

- Put the bars into place and fasten them using the relevant steel rivets.







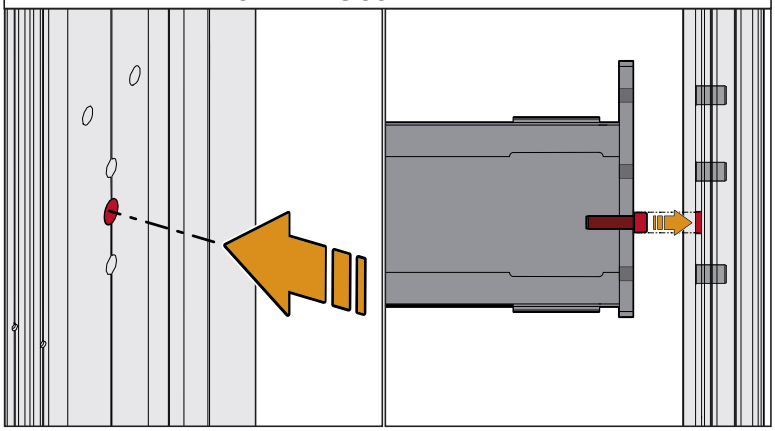
The sensor and flat cable support bars must be installed **840 mm** above the floor thresholds.

12.05. Headroom beam and transoms - installation

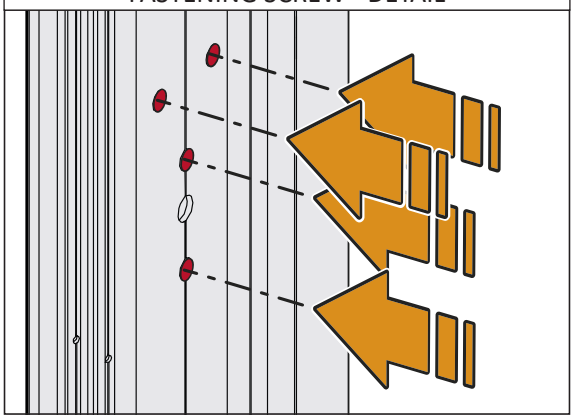
CAUTION			WEAR APPROPRIATE PPE
	**CRUSHING HAZARD** Handle the components using a suitable lifting equipment (see Chap. 9).		

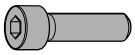
- Put into place the headroom beam in the position indicated by the holes, using a hoist, and secure it to the guide rails using the screws supplied in the KIT (1).

CENTRING SCREW - DETAIL



FASTENING SCREW - DETAIL





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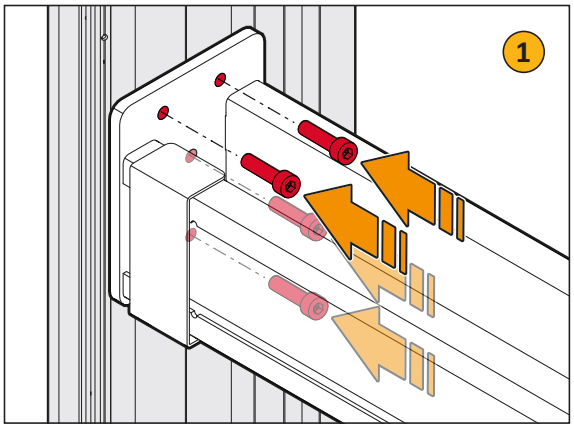
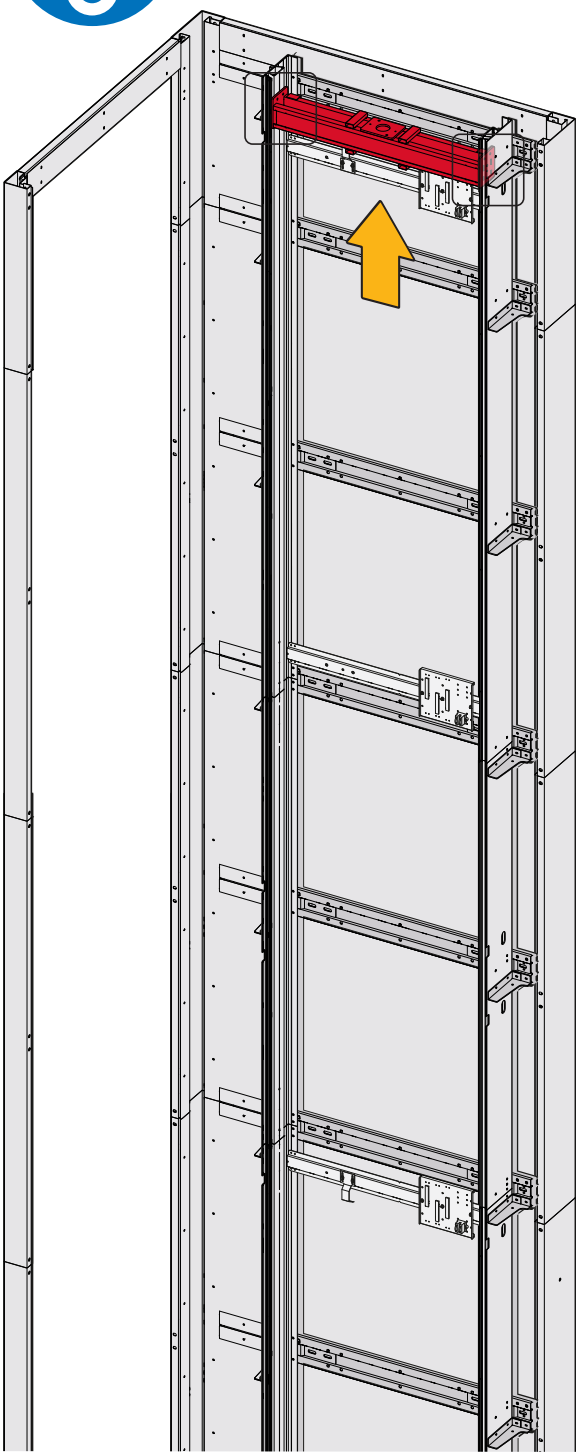
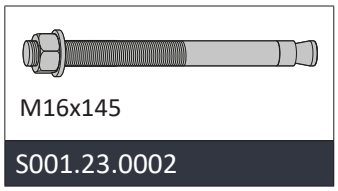


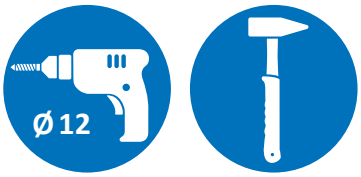


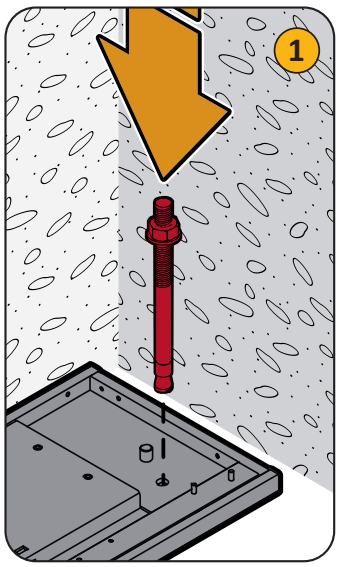
12.06. System installation in masonry shaft

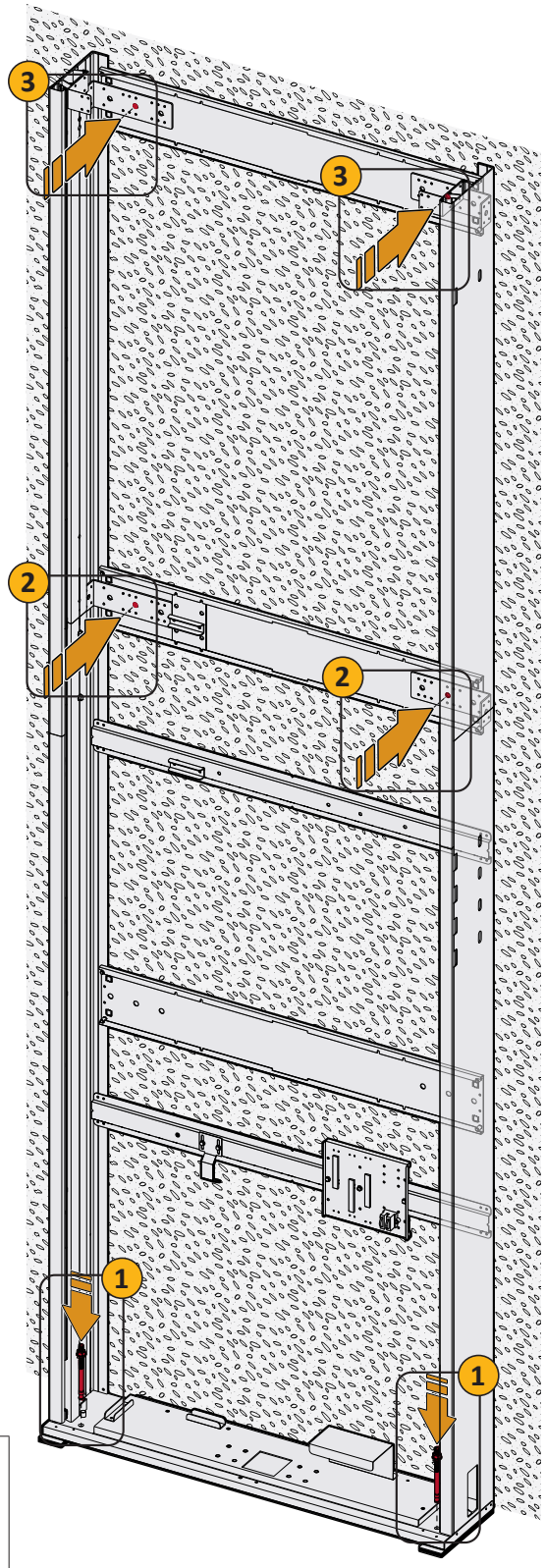
12.06.01 PIT BOTTOM TEMPLATE - GROUND ANCHORING

- Anchor the template to the floor, through the existing holes, using the supplied plugs (1).



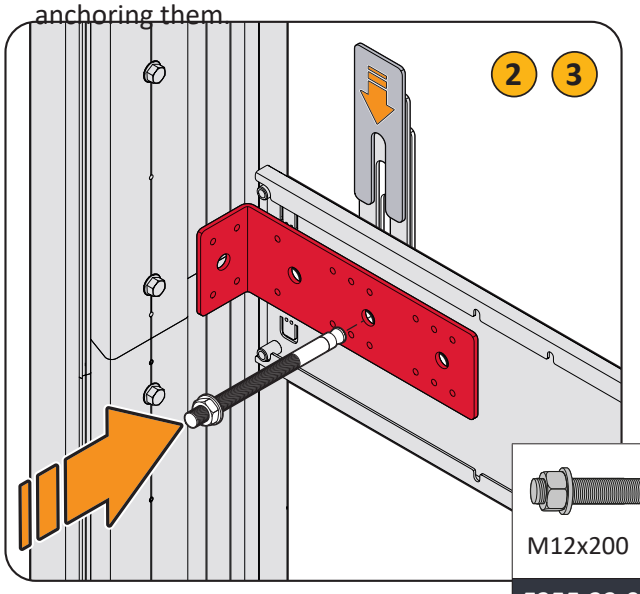


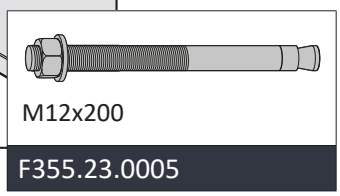




12.06.02 GUIDE RAILS - WALL ANCHORING

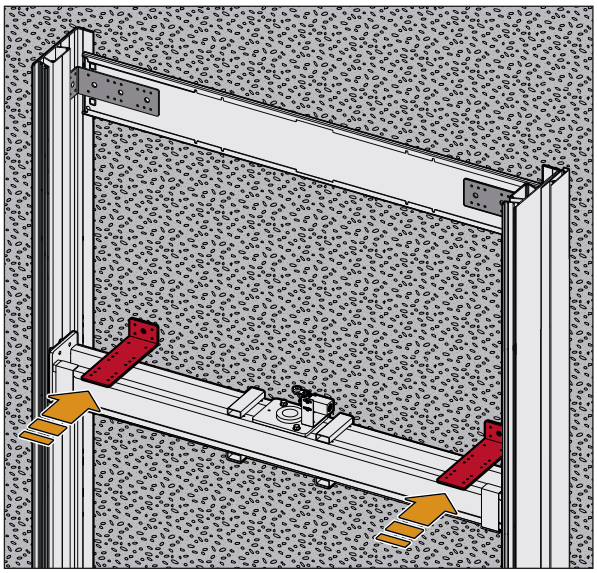
- Put the brackets into place and anchor them to the wall through the pre-drilled holes, using the supplied plugs (2) + (3) (optional).
  If necessary, use the supplied spacers to level them before anchoring them.

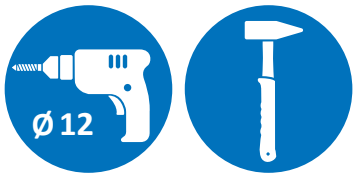


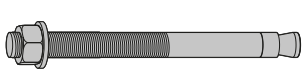


12.06.03 HEADROOM BEAM - WALL FASTENING (MASONRY SHAFT ONLY).

- Position the wall anchor brackets above the headroom beam.



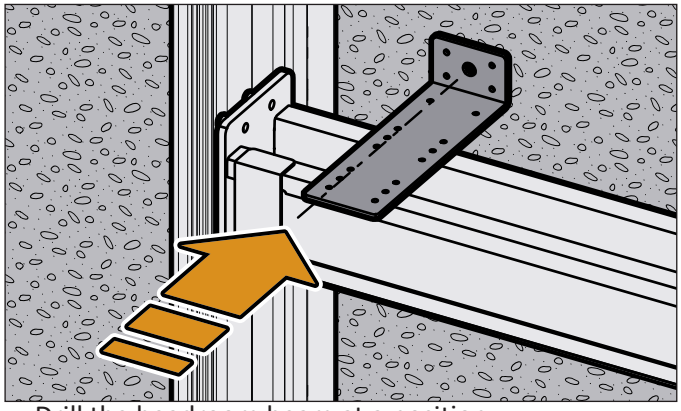


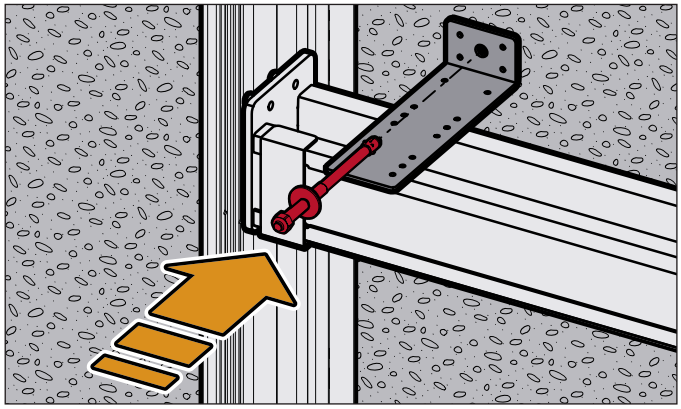


M12x125

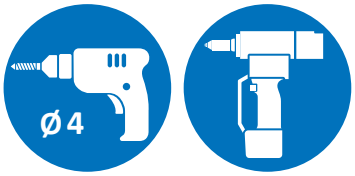
F353.23.0001

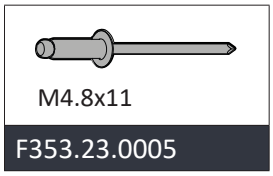
- Drill the wall at a position corresponding to the holes in the brackets.
- Anchor the brackets with the plugs provided.





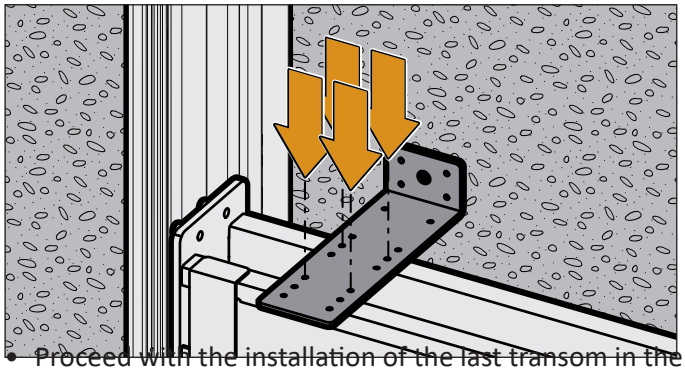
- Drill the headroom beam at a position corresponding to the holes in the brackets.
- Secure the brackets to the beam with the rivets provided.

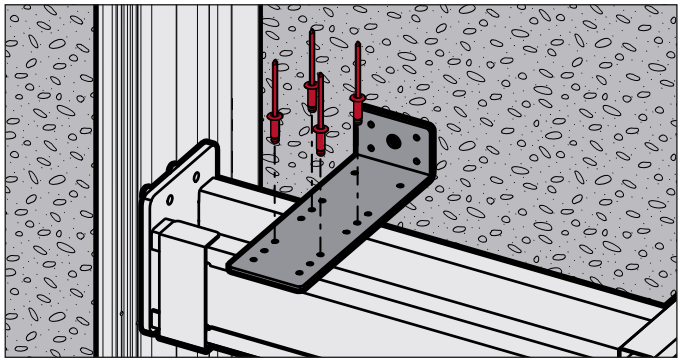




M4.8x11

F353.23.0005

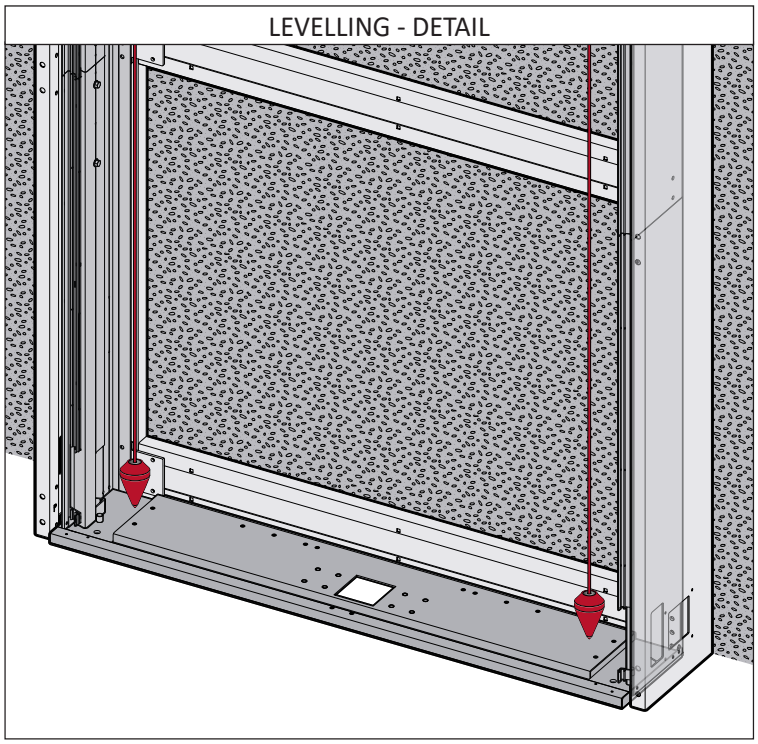


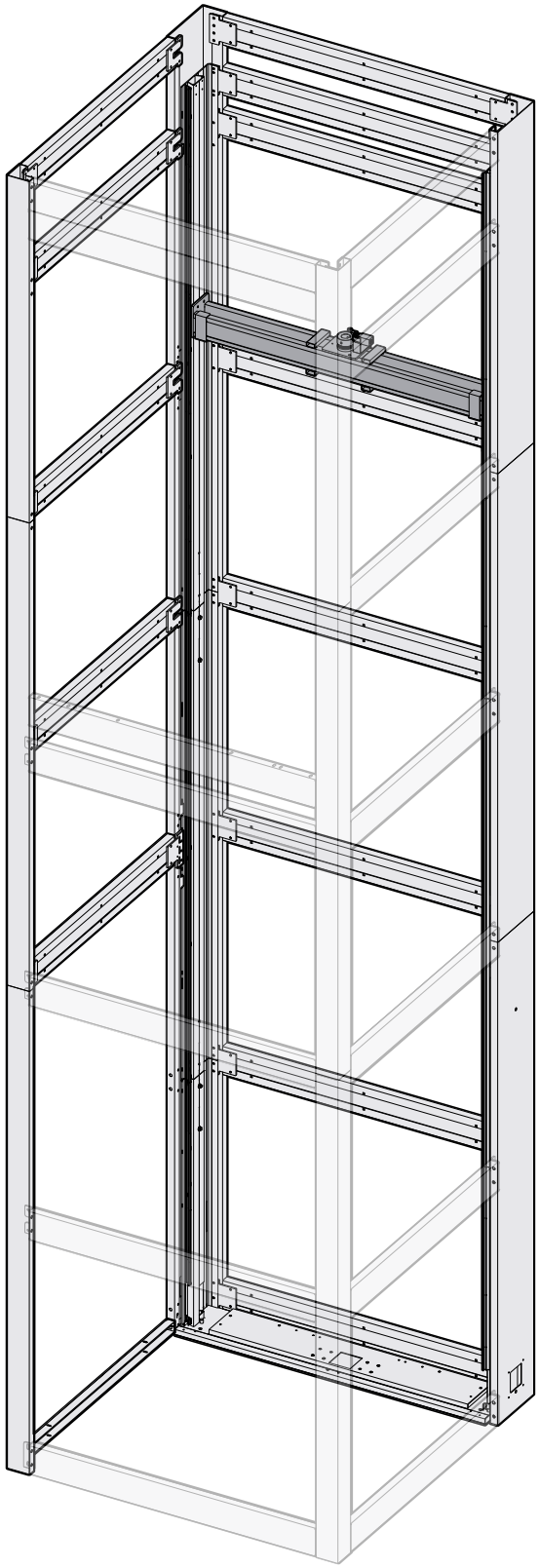


- Proceed with the installation of the last transom in the headroom as previously seen.

12.07. Shell - plumb / wall anchoring

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



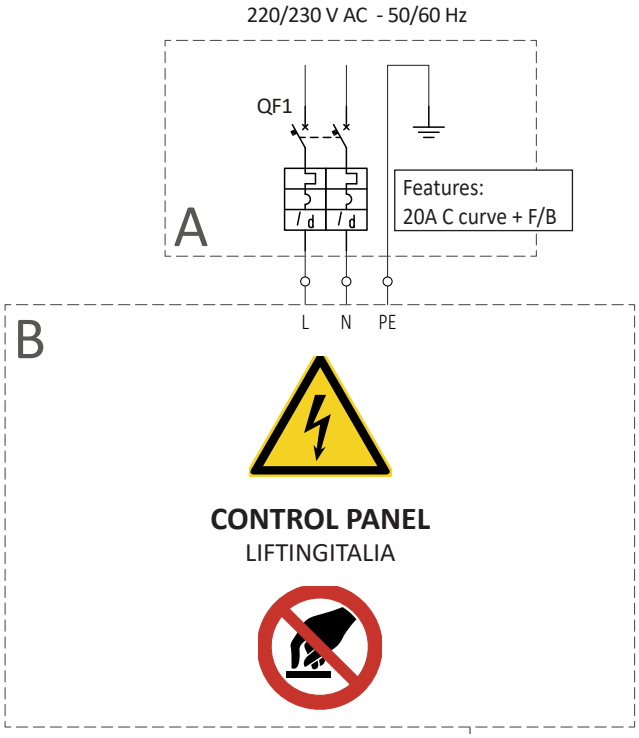


13. Electrical system - preliminary checks

13.01. Electrical system upstream of the platform - preliminary arrangements

- The client will have to provide, for the Power Supply Panel, protection devices that are suitable for the electrical power distribution system and for the relevant short-circuit current, in accordance with the standard CEI 64-8 and following (adequately sized thermal magnetic switch and 30mA residual current protection).
- The main switch cutting off the motive power, also supplied by LiftingItalia, is installed inside the control panel of the platform.
-

After installing the power supply panel, record the check completion as indicated at point 4.01.01 of the manual “IM.TEC.127 - DOMOFLEX-2 - Final Checks”.



Legend:	
A	Main building panel
B	LIFTINGITALIA CONTROL PANEL

WARNING

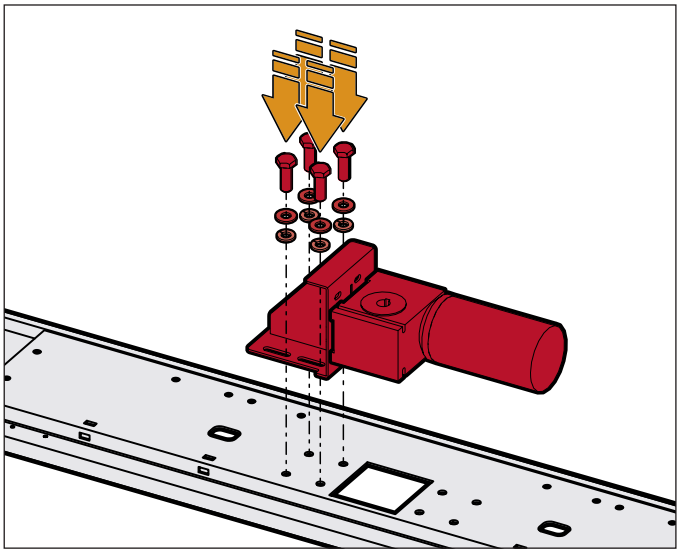
ELECTROCUTION RISK:
The lighting and power supply systems must meet the requirements of the system and of the regulations in force. Check that they are properly grounded. Should they fail to meet the requirements, stop the installation until the Client has ensured that they comply with the regulations.

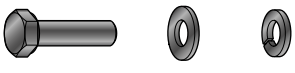
14. Mechanics - installation

14.01. Geared motor - installation

FOR OPTIMAL CENTRING AND TO AVOID VIBRATIONS:
Before fully tightening the screws, complete the platform installations. Then, with the platform at the lowest floor, fully tighten the screws to the prescribed tightening torques (page 15).

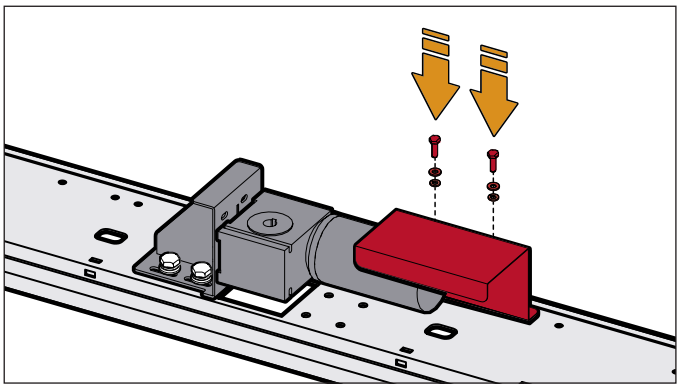
- Position and secure the geared motor with its support on the template with the screws provided.





F353.23.0002

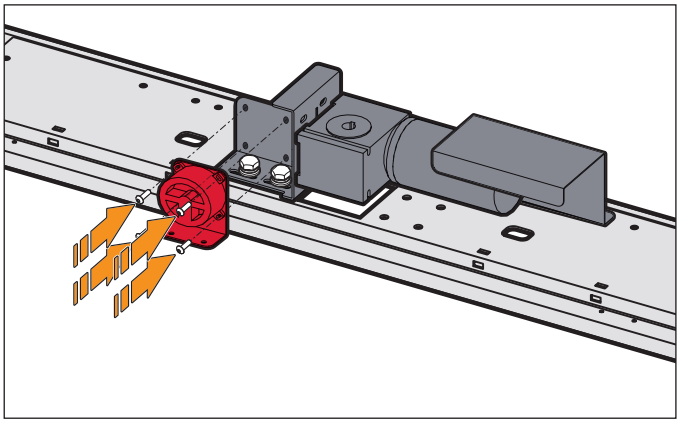
- Position the geared motor protection plate and secure it to the template, using the screws provided.

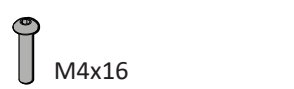


F353.23.0002

14.02. Pit stop - installation

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





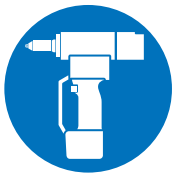
F353.23.0002

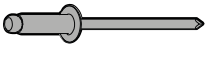
14.03. Safe Pit - installation

CAUTION

BEFORE ACCESSING THE PIT
Install the Safe Pit safety device to ensure safe operation in the pit.

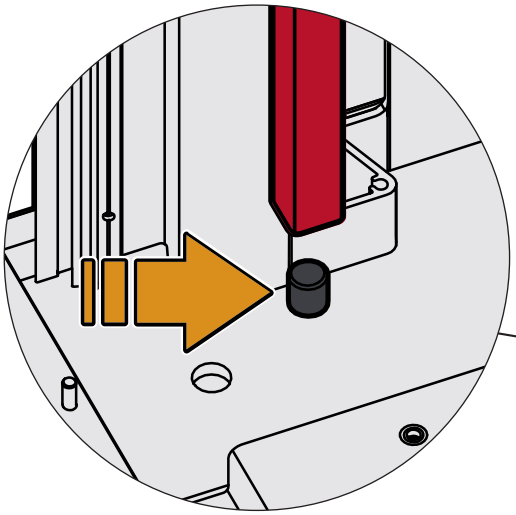
- Place the Safe Pit on the template at the bottom of the pit: the strut must rest on the template and fit into the prearranged pin.
- Secure the Safe Pit using the rivets provided.

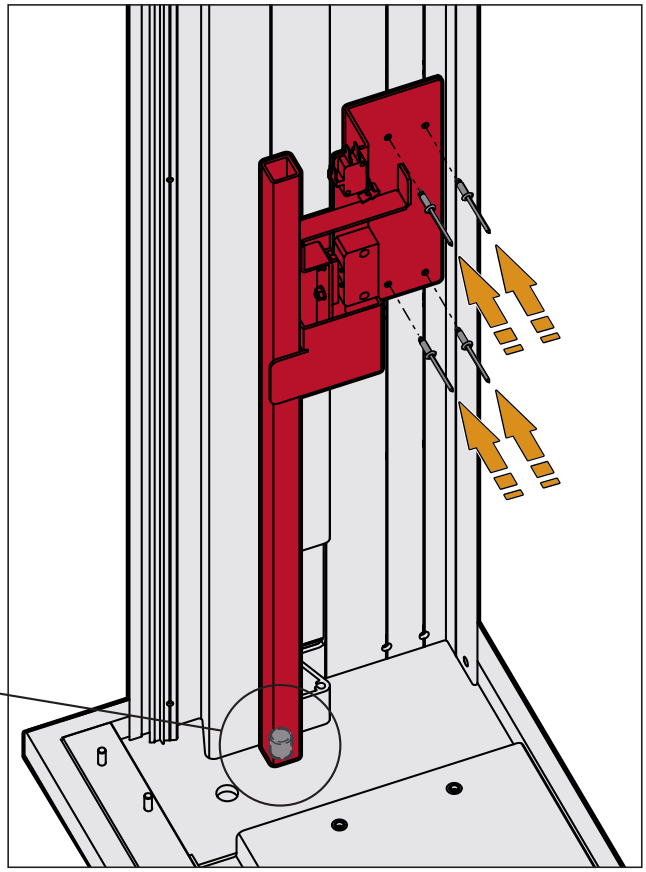




M4.8x11

F353.23.0005

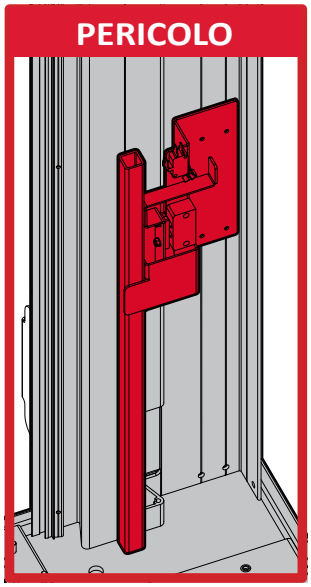




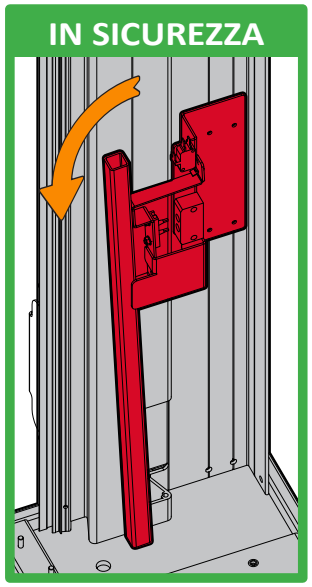
WARNING

CRUSHING HAZARD

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



CLOSED (OFF) SAFE PIT



OPEN (ON) SAFE PIT

14.04. Flat cables - installation and connection

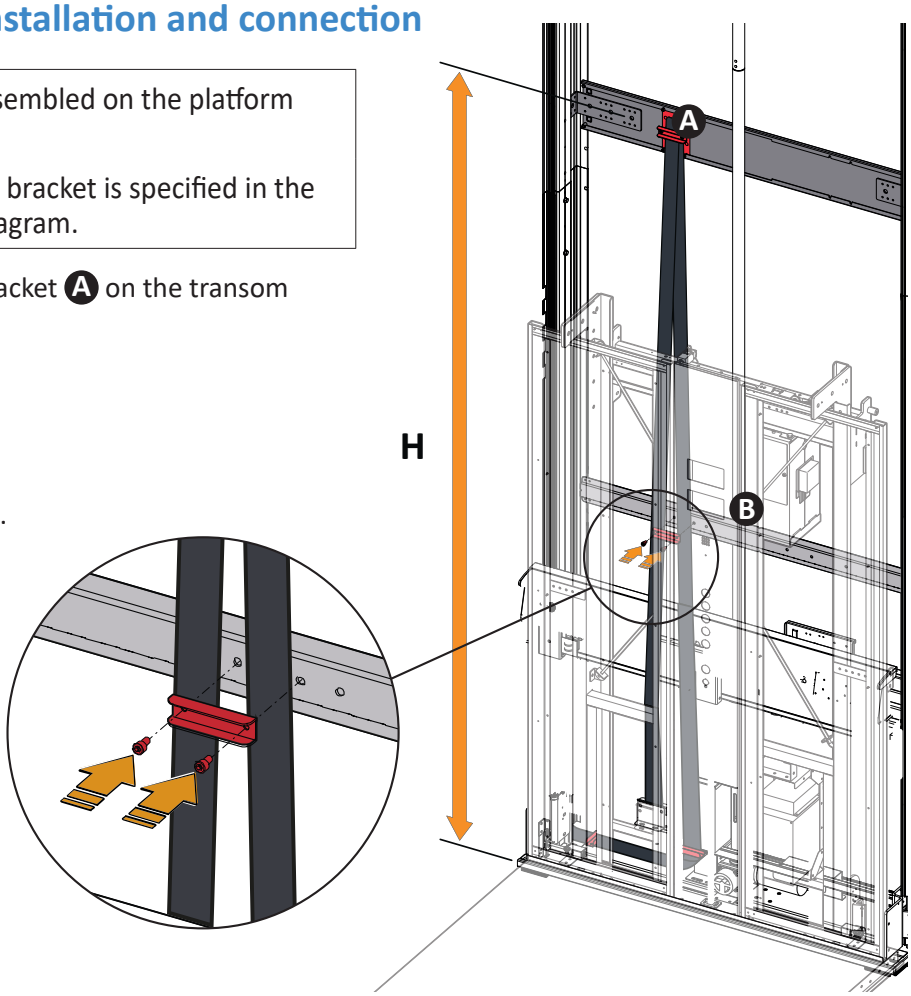
The flat cable is pre-assembled on the platform wall.

The exact height of the bracket is specified in the supplied installation diagram.

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

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

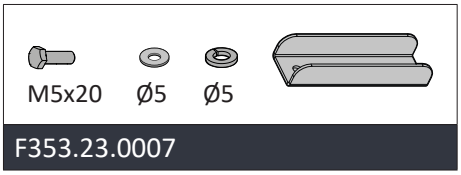
with respect to the lowest access.



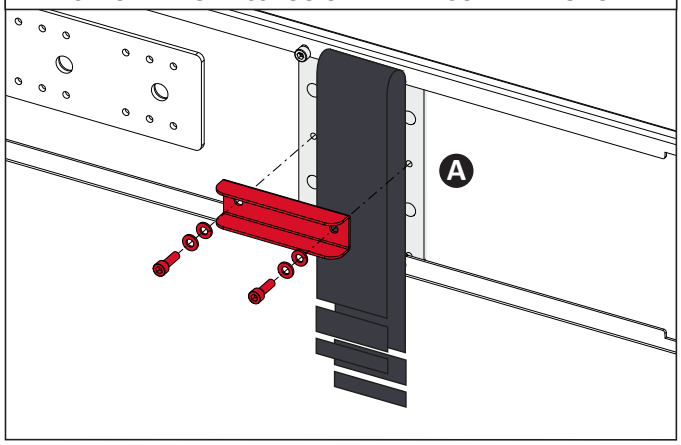
- Unwind the flat cable from the platform wall and secure it to the flat cable support bracket **A** on the transom.
- Route the flat cable toward the pit template and secure it by positioning the brackets provided.
- Fasten the flat cable to the transoms approximately every 2 m with cable clips, as indicated in **B**

IMPORTANT!

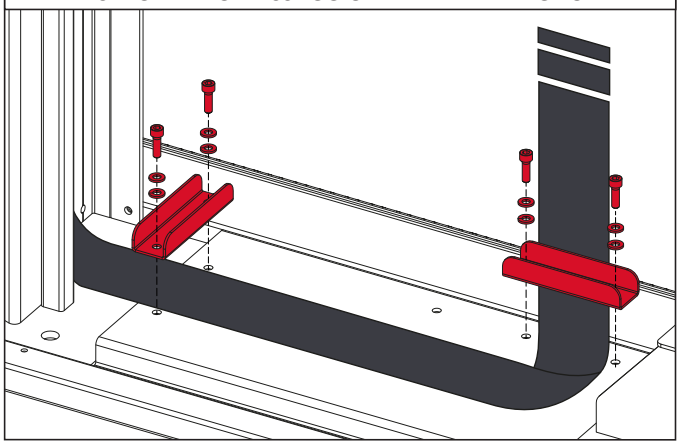
Route the flat cable so that the folds are soft and do not damage the cable.



CAVO PIATTO - FISSAGGIO A TRAVERSO - DETTAGLIO



CAVO PIATTO - FISSAGGIO A DIMA - DETTAGLIO



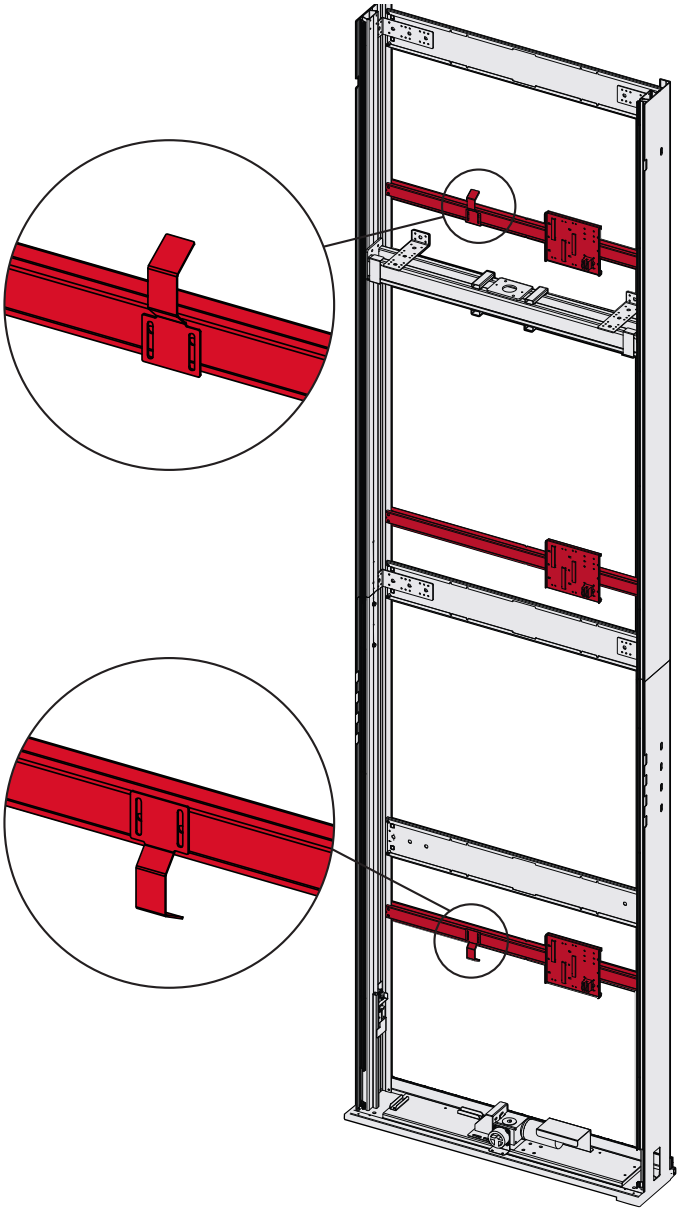
14.05. Magnet support brackets - contacts - ramps

Pay attention to the positioning of the magnet support brackets:

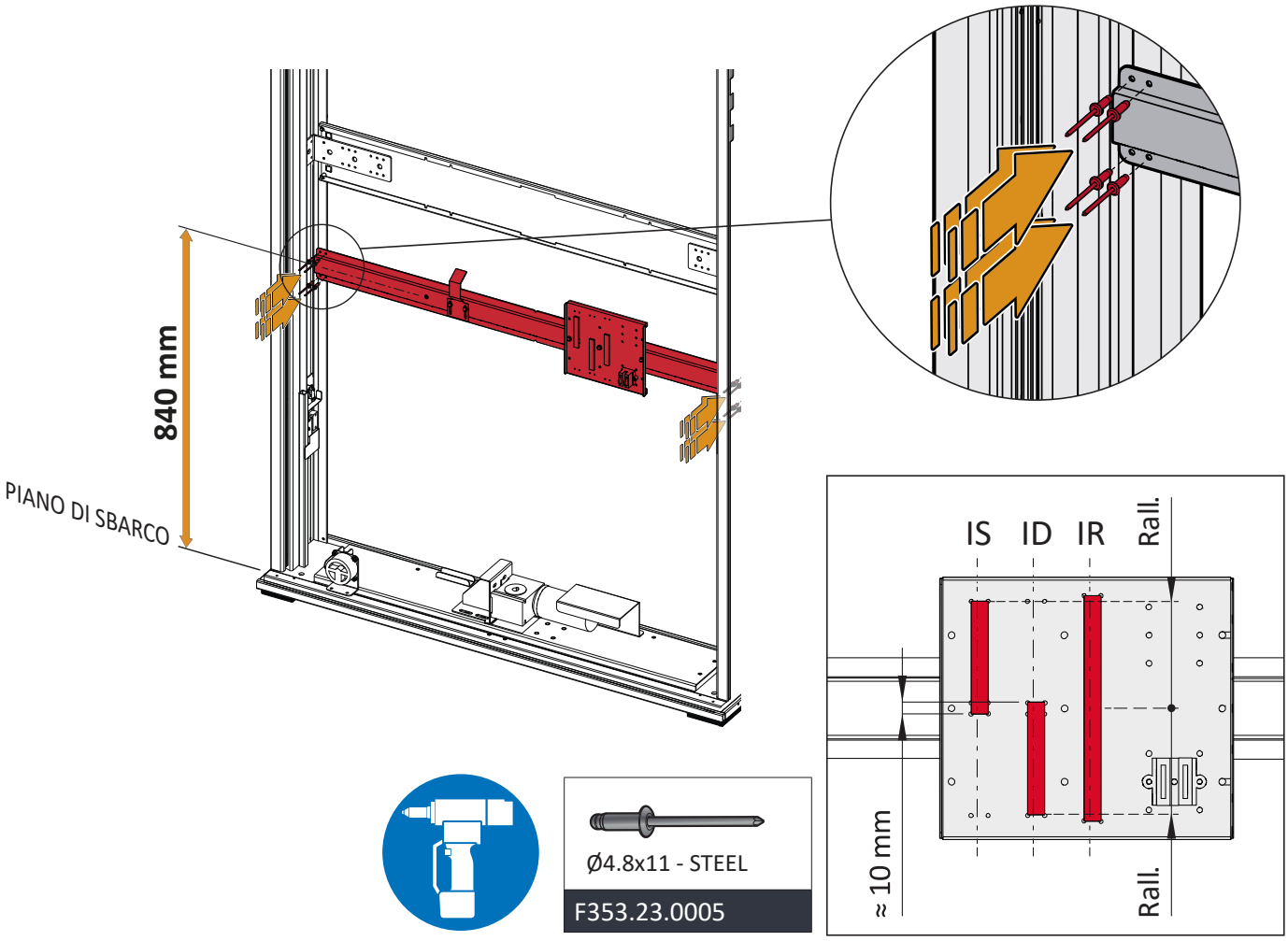
IN THE HEADROOM, the bracket with the overtravel contact must be positioned facing down (bottom overtravel).

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.

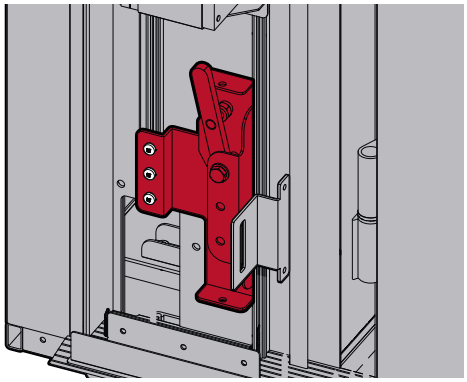


The IR magnet is located on the lowest access only.

- Repeat the procedure for each access.

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 - CONNECTION OF THE EXTERNAL CONTROL LEVEL.

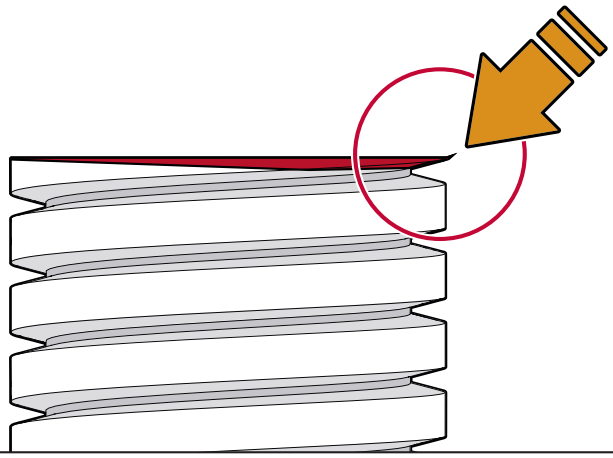


14.06. Manoeuvring screw - checks and precautions

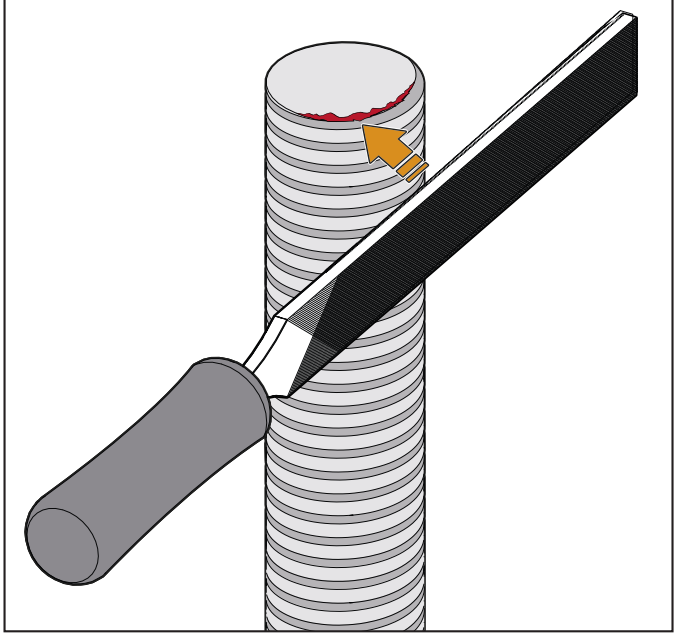
NOTICE

ALWAYS CHECK THE INTEGRITY OF THE MANOEUVRING SCREW.
Before and after assembling the manoeuvring screw segments, make sure that there are no damages, metal burrs or protruding parts.

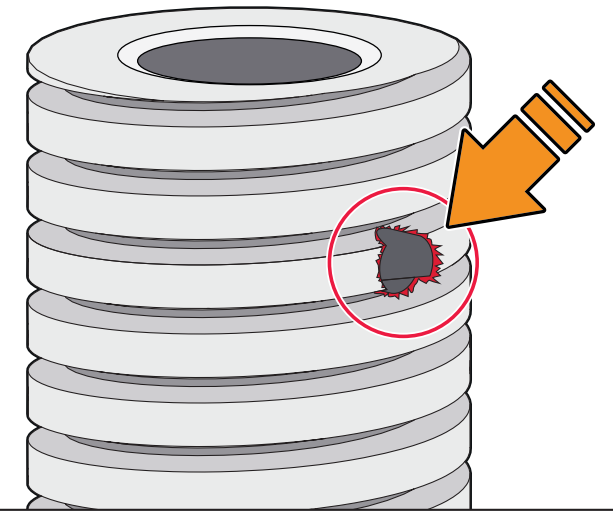
VITE DI MANOVRA - DETTAGLIO SBAVATURA



VITE DI MANOVRA - RIMOZIONE SBAVATURE



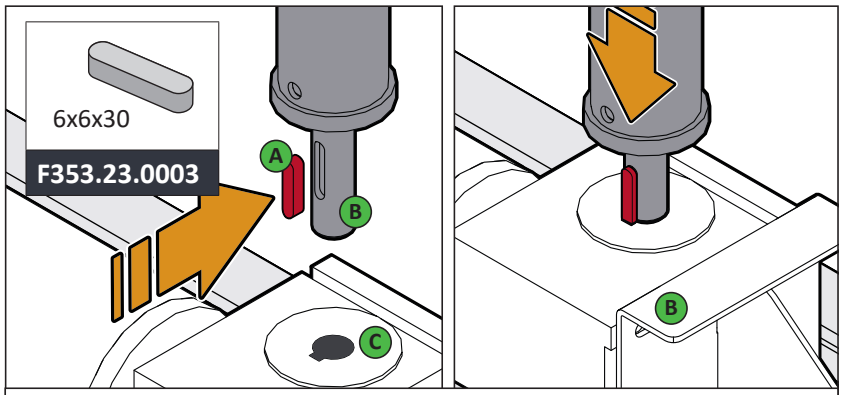
VITE DI MANOVRA - DETTAGLIO SBAVATURA

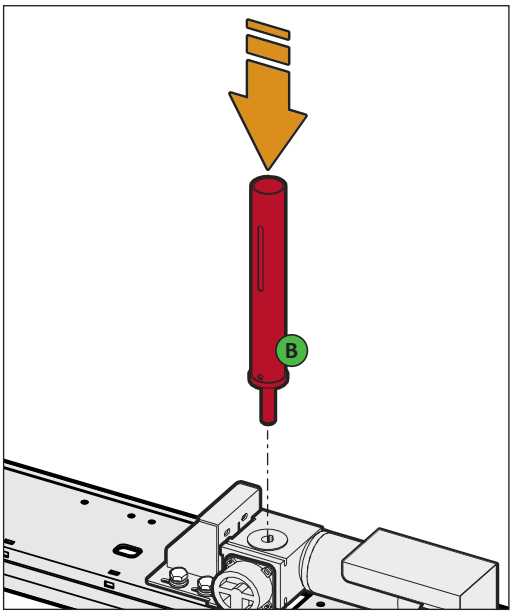


14.07. Manoeuvring screw - preliminary operations

14.07.01 SCREW SLEEVE (IN PIT)

1. Insert the tab (A) into the sleeve housing (B).
2. Insert the sleeve (B) into the geared motor hub (C).





CANOTTO VITE DI MANOVRA - DETTAGLIO INSERIMENTO

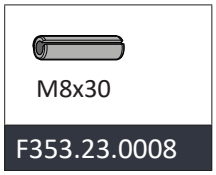
14.07.02 MANOEUVRING SCREW PRE-ASSEMBLY

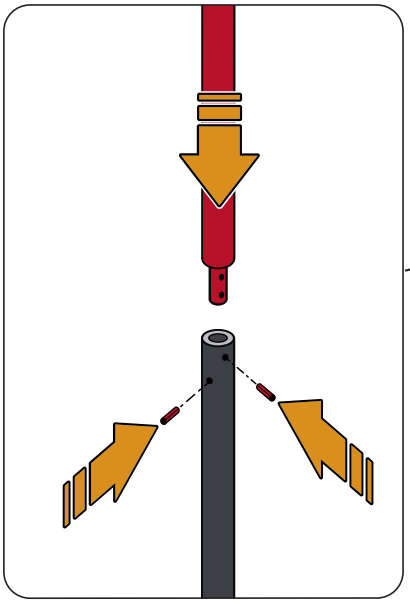
3. When possible (if there is enough space in the headroom), we recommend that you pre-assemble the screw segments (D), to optimise the accuracy of the assembly.

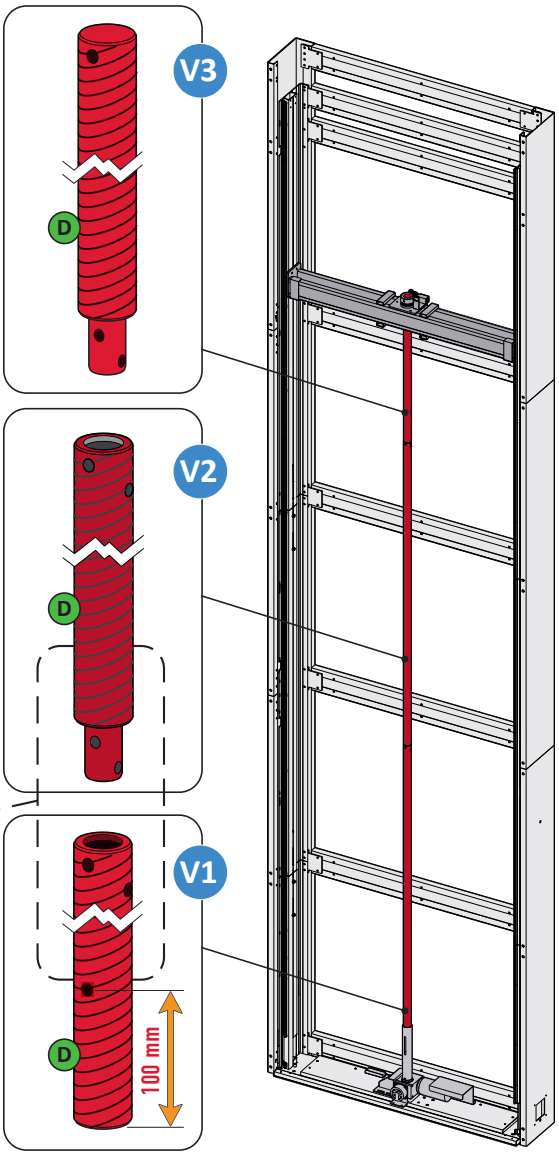
CHECK the design drawing for the length of the individual segments and the correct installation sequence.

The installation of the manoeuvring screws must be performed from the bottom upwards: **V1** > **V2** > **V3**.

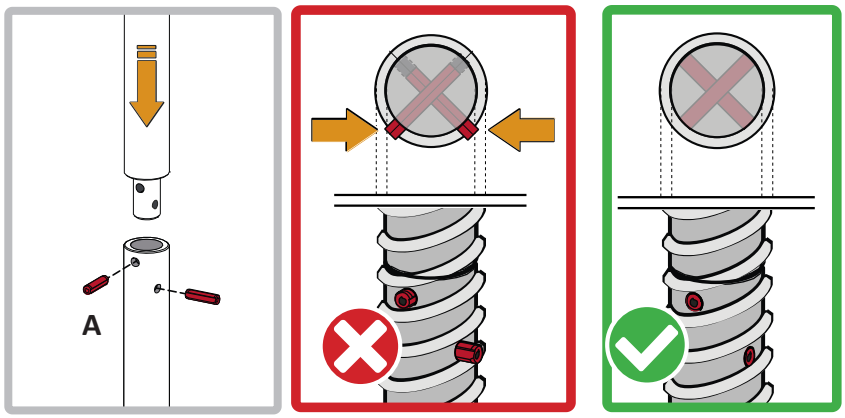
NOTE: The **V2** segment is not always present.





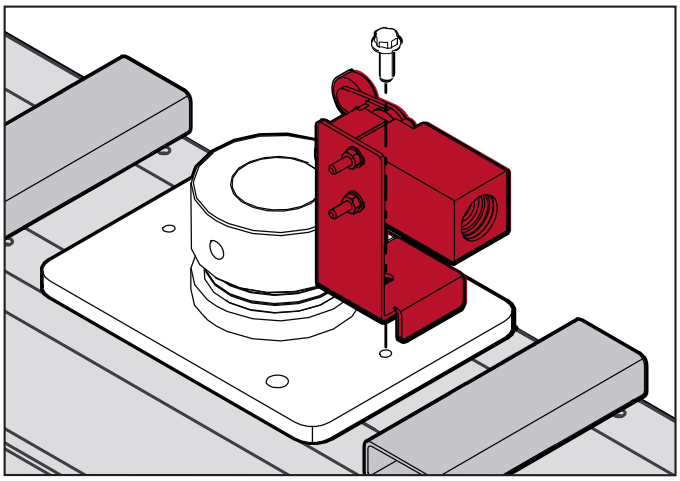


WARNING	
	ANY PROTRUDING PINS MAY PREJUDICE THE MACHINE SAFETY.
	Make sure that the **fastening pins DO NOT protrude** from their seat on both sides.



14.08. Safety contact in the headroom

- Place the headroom safety contact on the headroom beam.



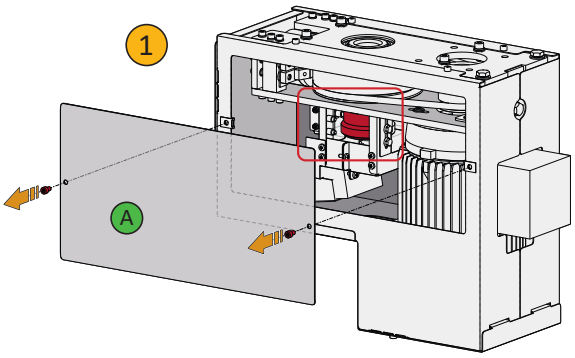

M6x16

F353.23.0008

14.09. Nut screw - check for wear and tear

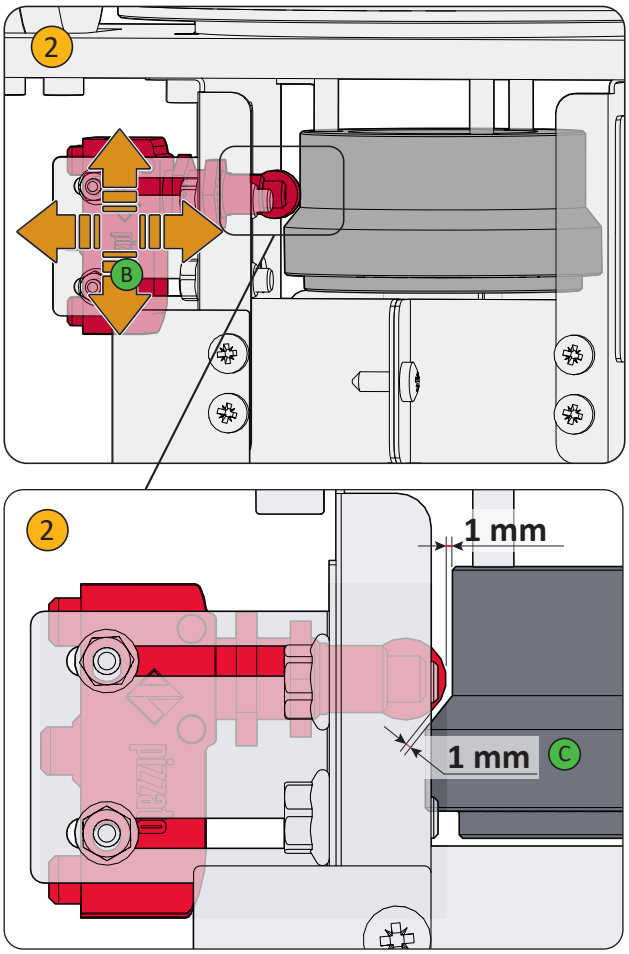
CAUTION	
⚠	**IMPORTANT SAFETY ADJUSTMENTS** The provisions contained in this paragraphs are important safety adjustments, and must be strictly observed.

1 Access the nut screw wear contact by removing the motor casing cover A.

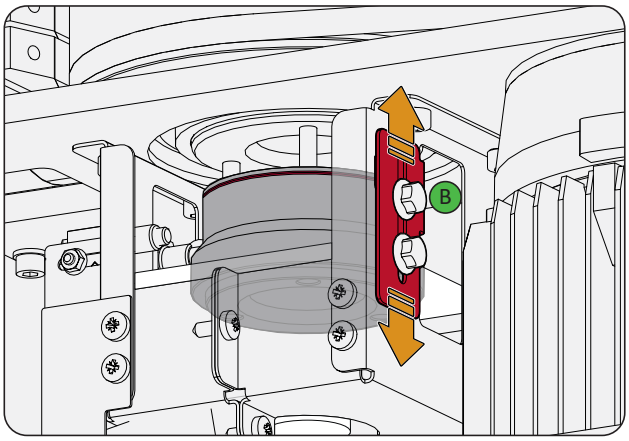


NUT SCREW WEAR CONTACT - SETTING

2 Adjust the vertical and horizontal position of the contact B so that the contact head lies ~1mm from both the vertical and the sloping surface of the safety nut screw C.

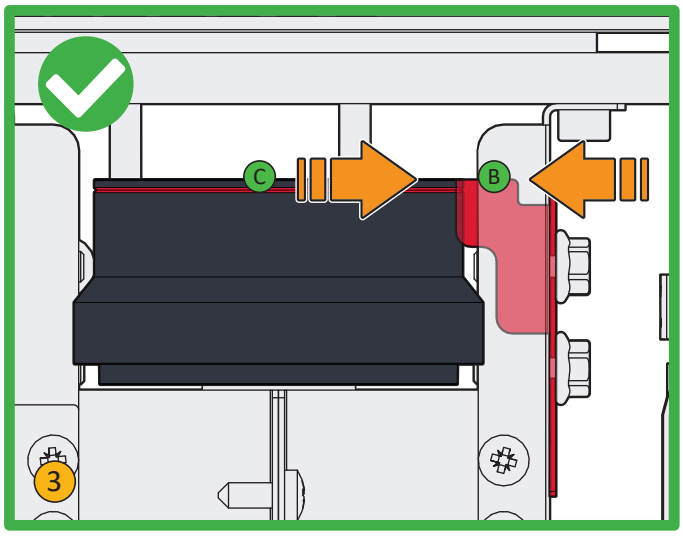


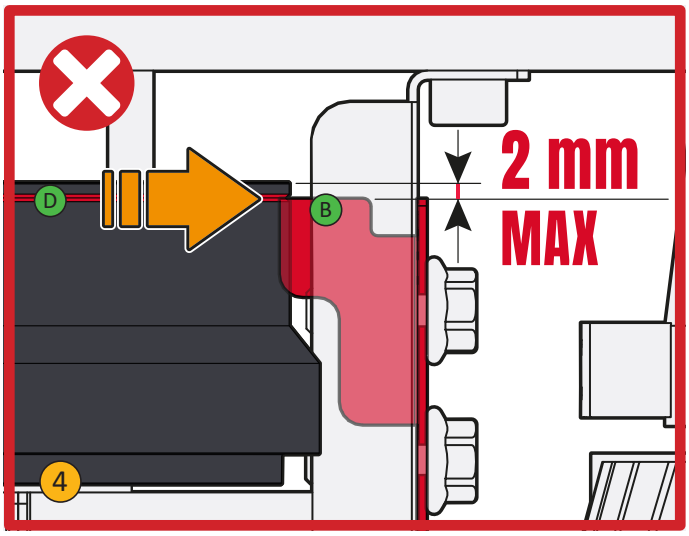
NUT SCREW WEAR REGULATOR - SETTING



3 Adjust the vertical position of the safety nut screw wear regulator B so that its upper edge is aligned, with a tolerance of +/- 0.1 mm, with the upper surface of the safety nut screw C.

NOTE: The vertical displacement limit, i.e., the wear limit of the drive nut screw is MAX 2 mm (see below)

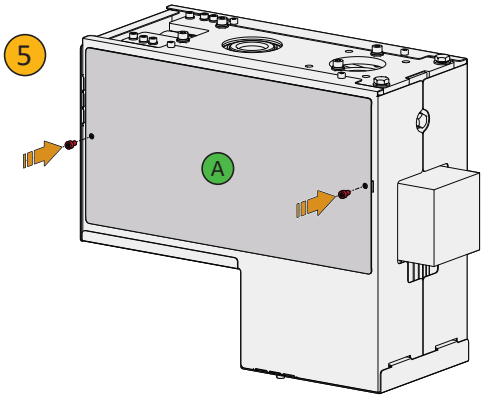




CAUTION

NUT SCREW WEAR

4 If the upper edge of the wear regulator B moves down to the nut screw reference mark D, i.e., by 2 mm, replace it right away!



5 After completing the adjustments, close back the motor casing cover A.

If the contact cannot be adjusted to a proper position, adjust the vertical position of the safety nut screw, moving it up or down by 1 or more threadings on the drive screw (the operation must be carried out after withdrawing the screw from the safety nut screw).

IMPORTANT!

THE CONTACT POSITION MUST NEVER BE CHANGED

After adjusting the contact position, never change it for any reason (except in case of contact or nut screw replacement).

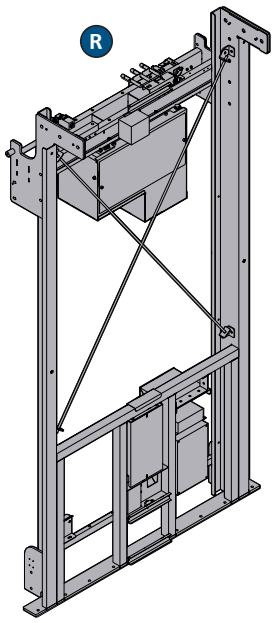
If the contact and/or the nut screw are replaced, repeat the adjustment operations described above.

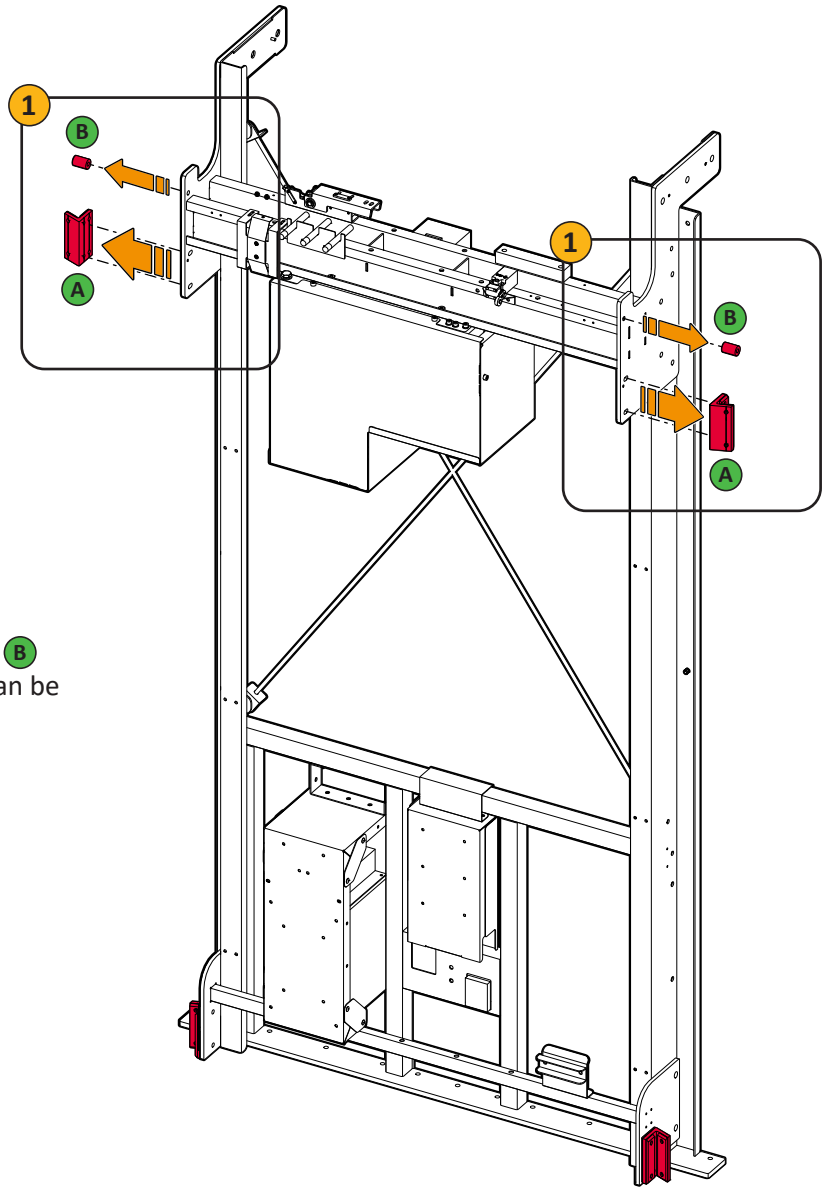
14.10. Sling (with mechanics) - preliminary operations

NOTICE

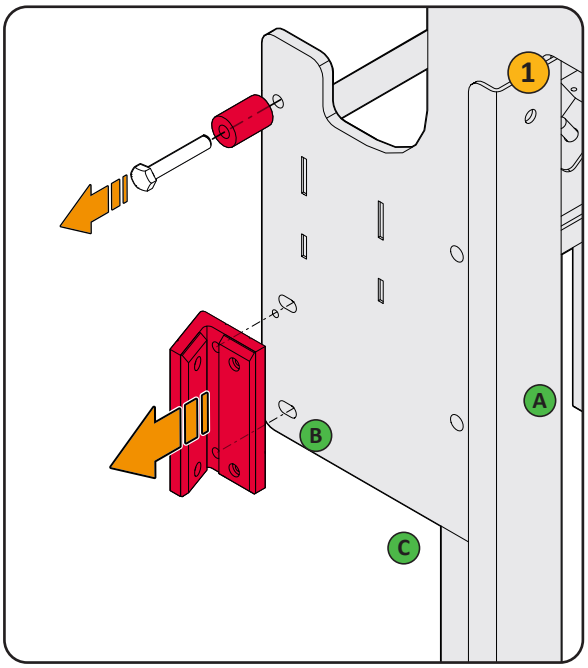
Position and levelling adjustment of the platform is very important: incorrect adjustment of the position and the shoes causes noises and vibrations

The car sling is supplied pre-assembled, as shown in the figure R.





1 Remove the top shoes A and the safety pins B from both sides of the pin, to ensure that it can be inserted into the guide rails.

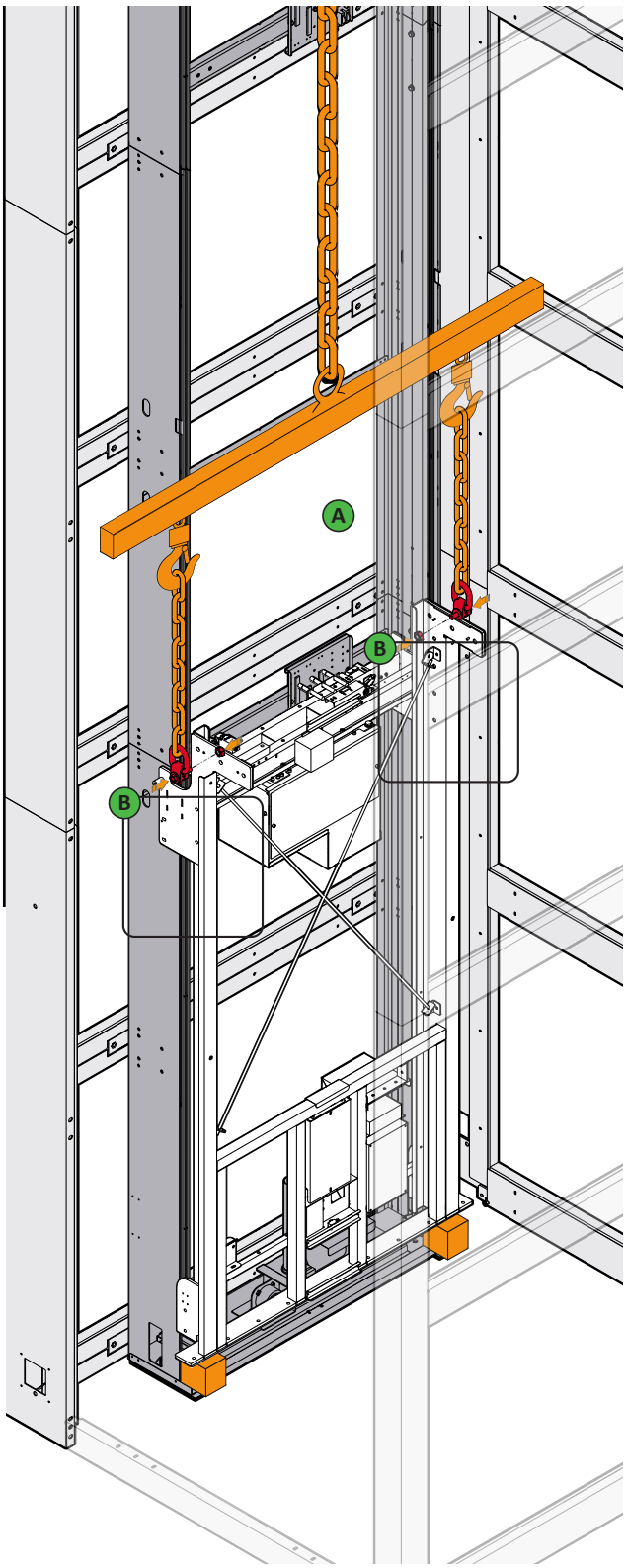


14.11. Sling (with mechanics) - handling

CAUTION		WEAR APPROPRIATE PPE
CRUSHING HAZARD Handle the components using a suitable lifting equipment (see Chap. 9).		

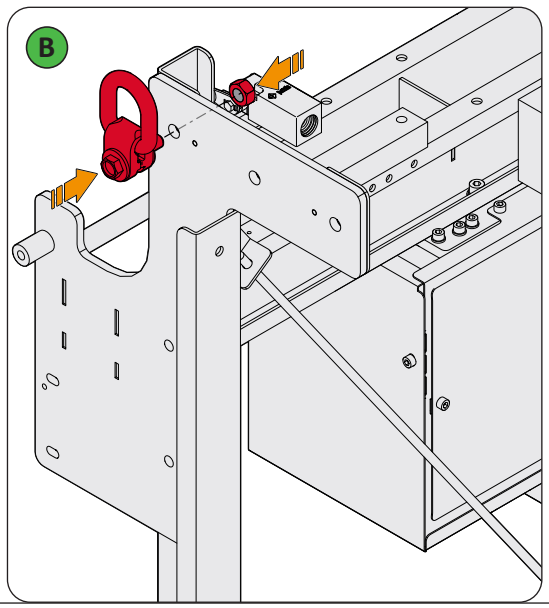
1 To handle/lift the platform components, we recommend that you use a winch/hoist anchored to the headroom (see Chap. 8), a lifting beam A and a set of lifting eyebolts B

1



NOTICE

Fasten the lifting equipment to the frame of the platform/car wall, using appropriate eyebolts or similar equipment, to avoid damaging or deforming it.

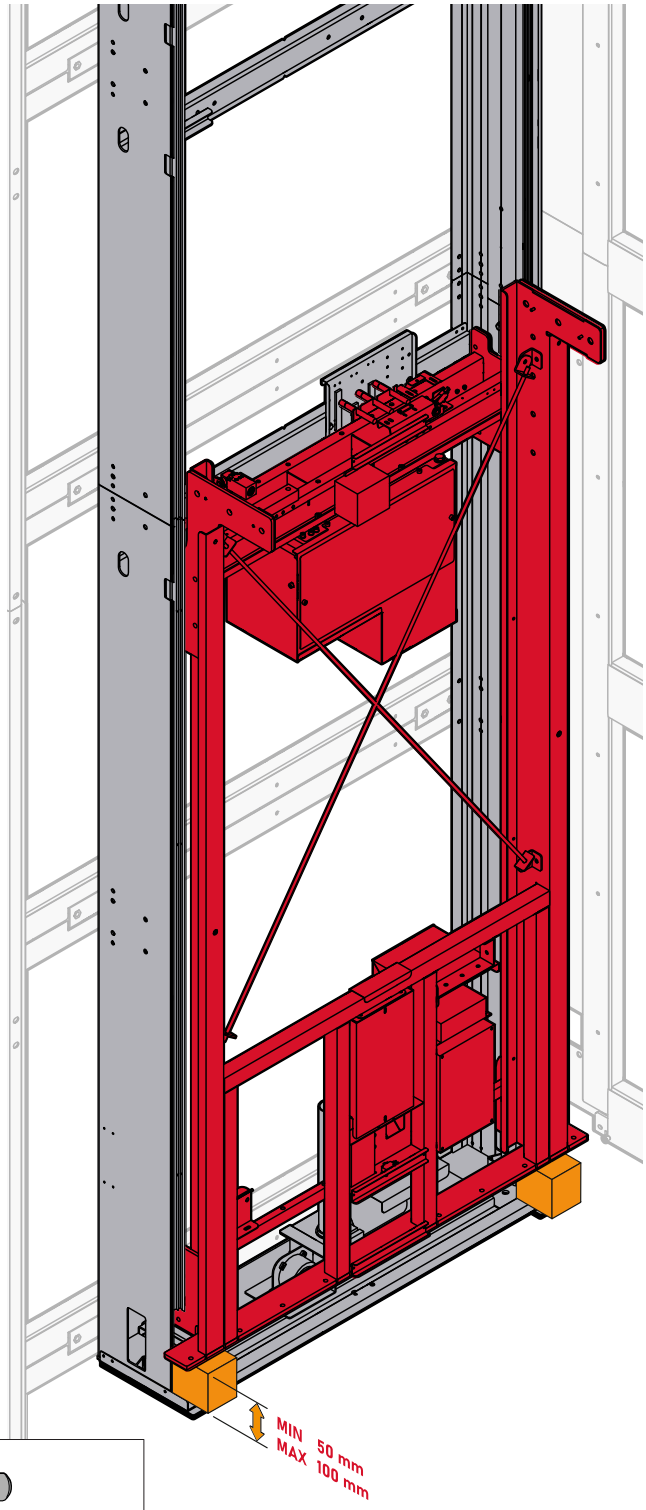


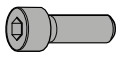
14.12. Sling (with mechanics) - installation

IMPORTANT!

The height of the mounts on which the sling is laid must be AT LEAST 50 mm and NO MORE THAN 100 mm, in order to be able to easily insert the sling into its housing.

1. Put the sling into place (A) in the pit (or inside the P0 shell), inserting it into the relevant discharges existing on the guide rails, holding it raised with two mounts (e.g., two wooden blocks) (B).





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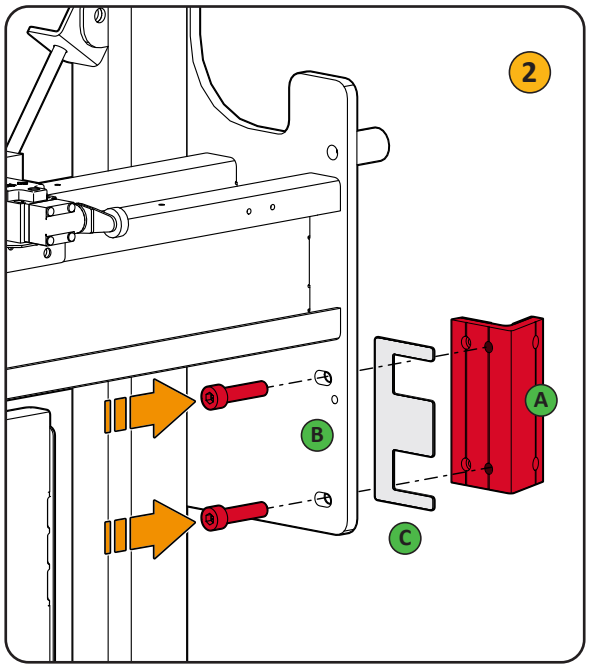
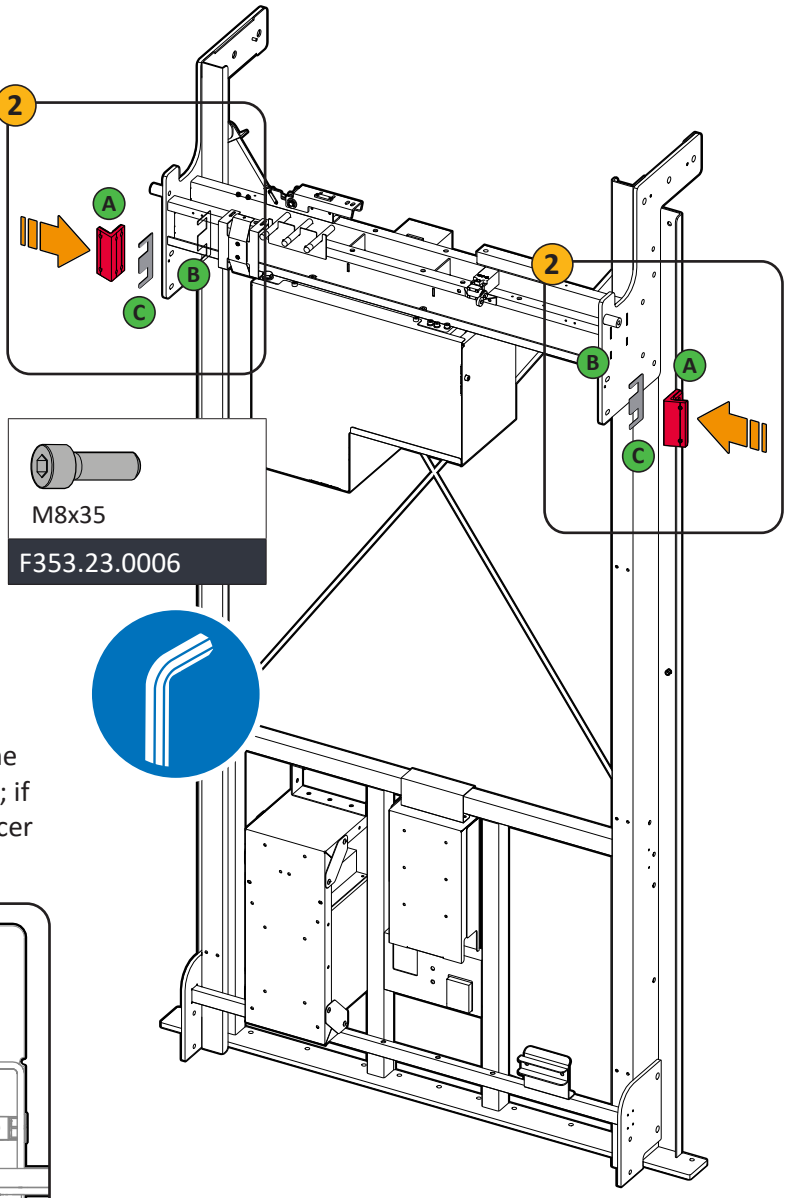
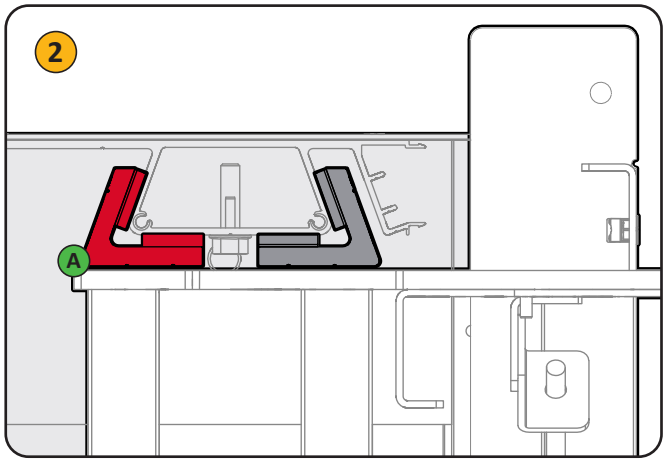
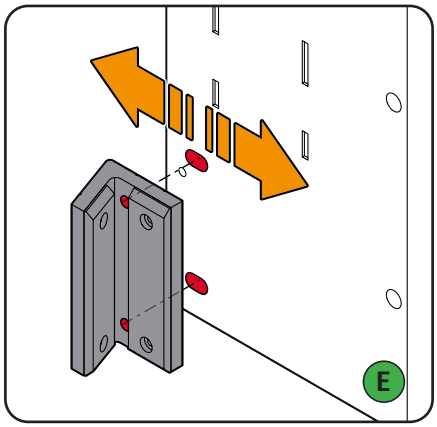


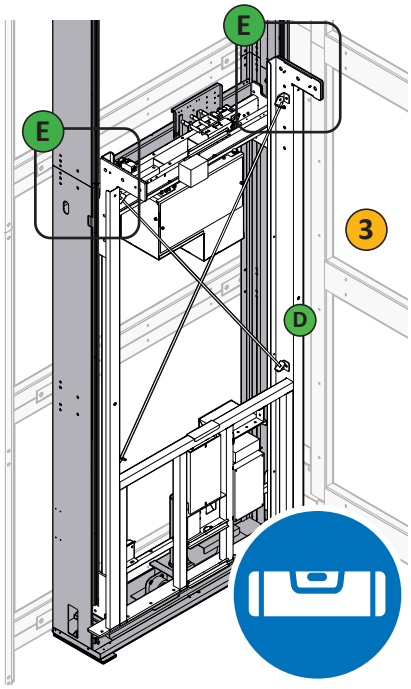


2 Reinstall the top shoes A, fastening them to the relevant brackets B, using the supplied screws; if necessary, add one or more of the relevant spacer plates C.



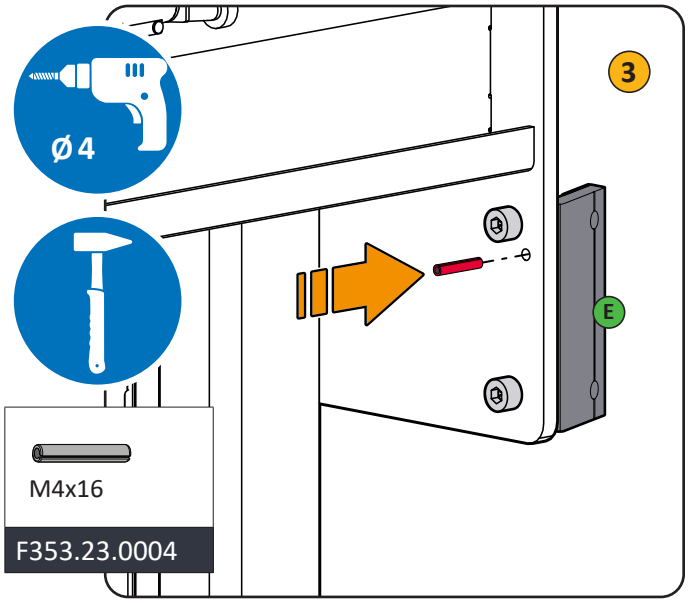
3 Check the sling levelling D. If necessary, adjust the levelling using the slots in the top shoes E.





TOP SHOES

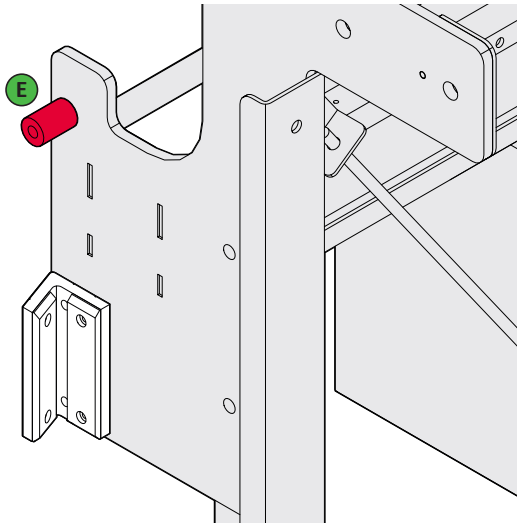
4. Drill the shoe (E) and insert a pin into the hole already drilled on the sheet.
5. Secure the shoes by tightening the screws



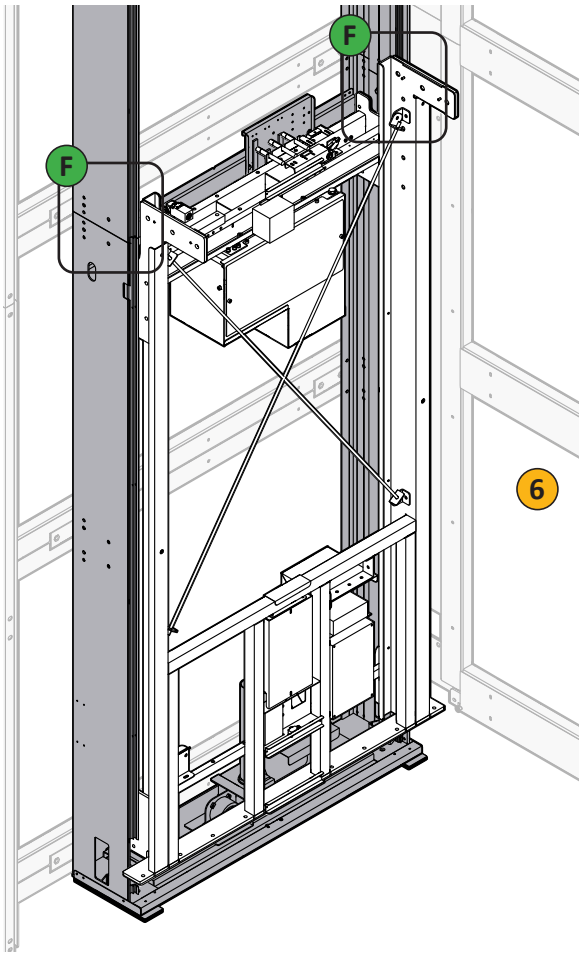
WARNING

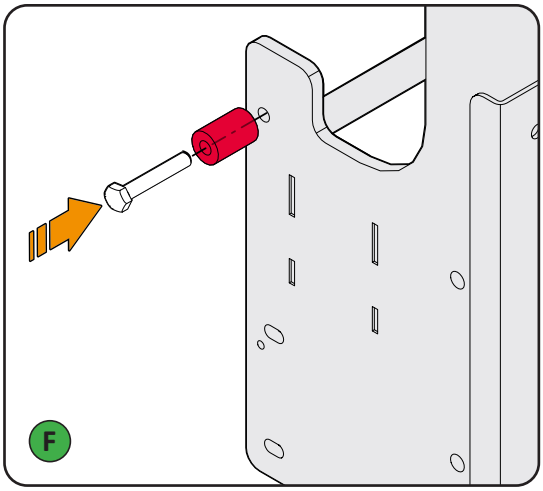
LACK OF SAFETY PINS CAN COMPROMISE THE SAFETY OF THE MACHINE.

Ensure that the safety pins are correctly installed.



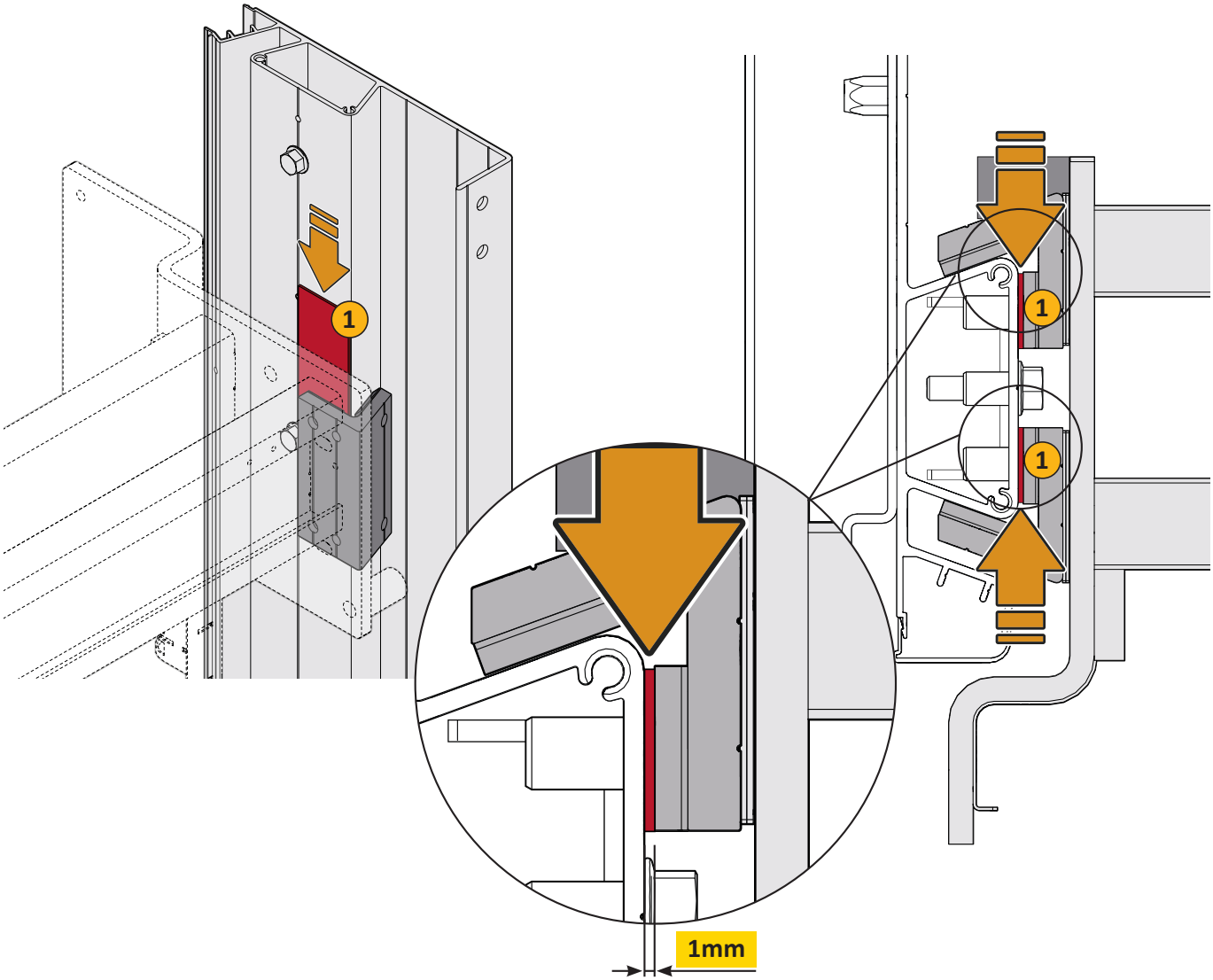
6. Reinstall the safety pins (F) of the top shoes, on both sides.





14.12.01 SHOES - PROPER POSITIONING

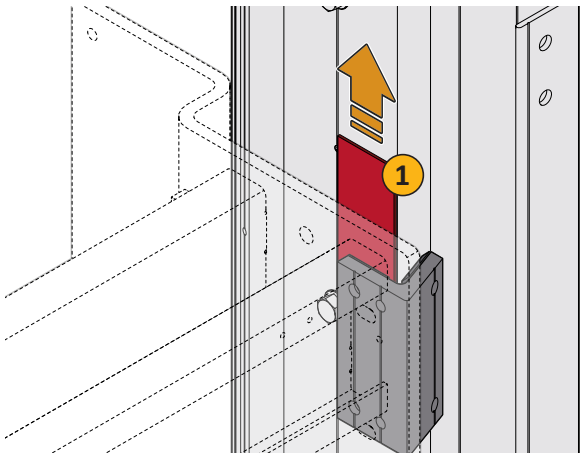
- When placing the shoes onto the guide rails, we recommend that you interpose a 1mm spacer between them (1), to obtain a 1mm slack that will improve the system operation.



IMPORTANT!

Make sure to remove the spacers once you have completed the platform wall installation.

Failing to remove them could damage the guide rails and the platform.



14.13. Manoeuvring screw - installation

14.13.01 STANDARD INSTALLATION

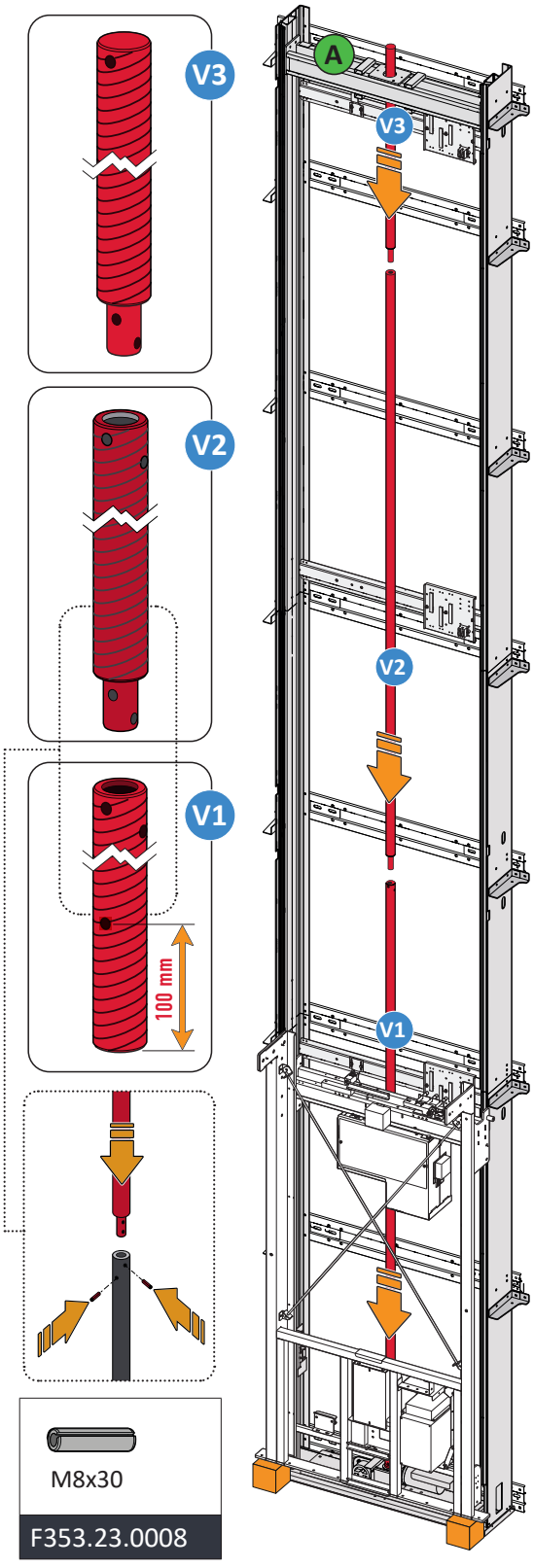
Use this installation method whenever the space in the headroom does not allow the pre-assembled screw to be lifted and inserted (§ 13.13.02).

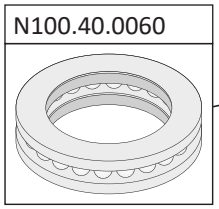
CAUTION

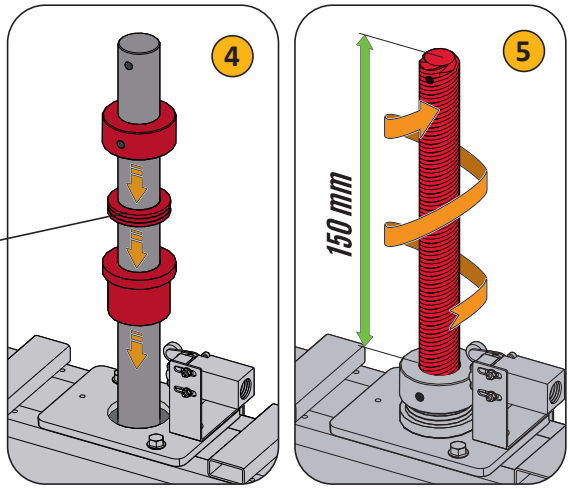
CRUSHING HAZARD
Lift the screw segments using suitable lifting equipment.

WEAR APPROPRIATE PPE

1. Insert the screw segment V1 into the pre-installed sleeve in the pit (§ 13.07.01) and fasten it with the supplied pins.
2. Insert the screw segment V2 into the housing of the first segment and fasten it using the supplied pins.
3. Insert the screw segment V3 into the headroom beam A.
4. ON THE HEADROOM BEAM A: position sleeve, bearing, and nut screw on the screw.
5. Screw in the screw segment V3, so that it protrudes from the headroom beam A by about 150 mm.





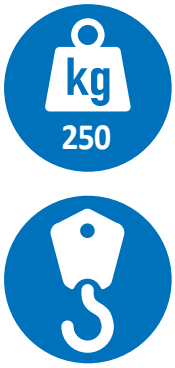


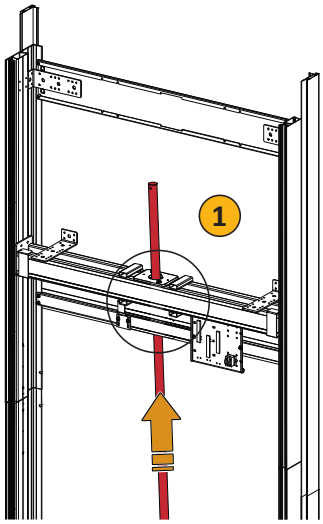
14.13.02 INSTALLATION IN CASE OF PRE-ASSEMBLED SCREW (§ 13.07.02)

CAUTION

CRUSHING HAZARD
Lift the screw segments using suitable lifting equipment.

WEAR APPROPRIATE PPE





- With the aid of a suitable lifting equipment (e.g., a hoist), lift the screw and insert it into the headroom beam (1).
- ON THE HEADROOM BEAM: position sleeve, bearing, and nut screw on the screw (2).
- Screw in the screw (3) so that it protrudes from the headroom beam by approximately 1m (4).

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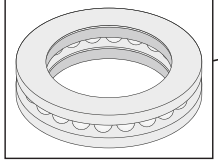
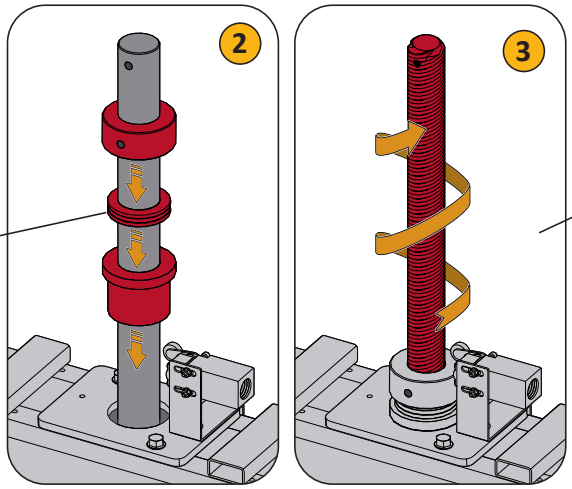
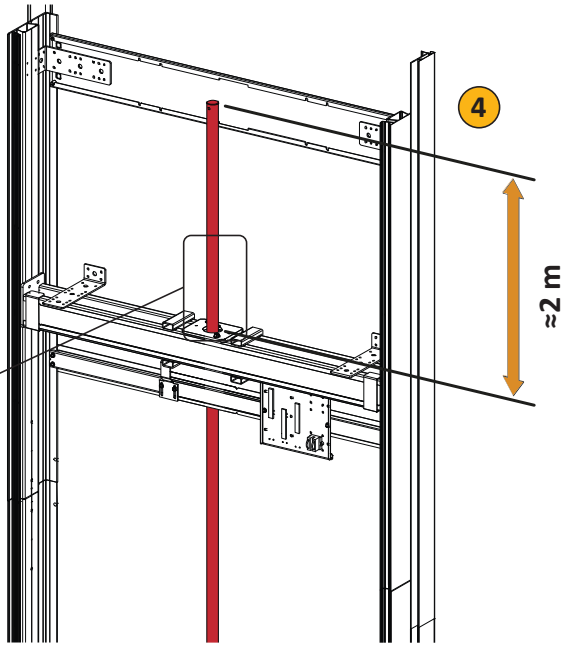
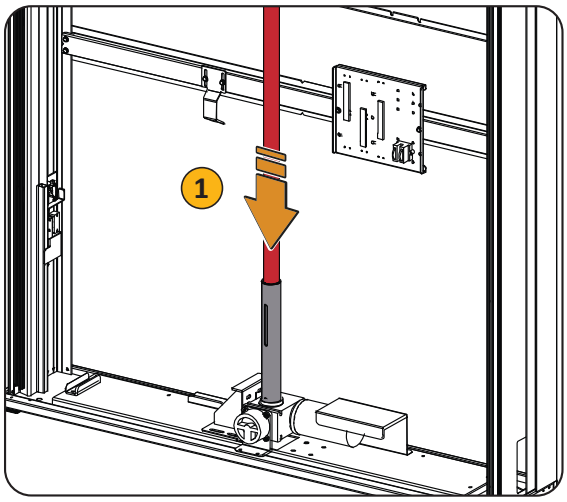
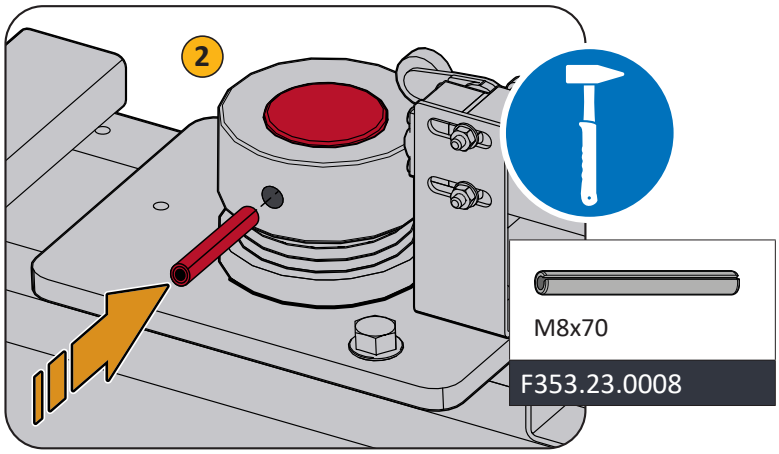




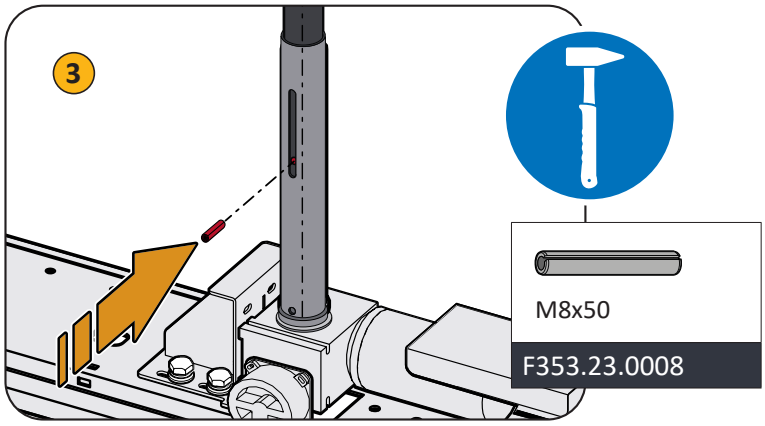


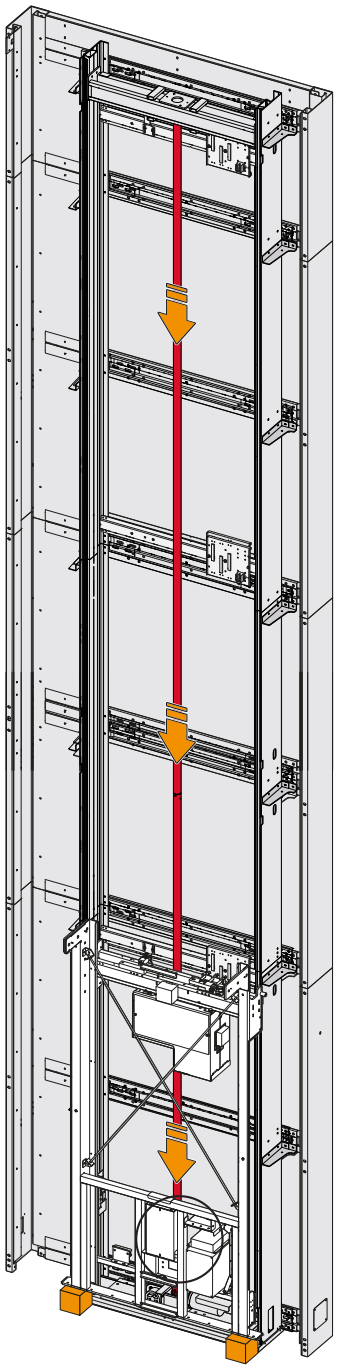
- Lower the manoeuvring screw until it is inserted into the pit sleeve, passing through the motor of the mechanics assembly (platform wall) (1).
- Secure the manoeuvring screw to the headroom nut screw using the safety pin provided (2)





- Secure the screw to the pit sleeve using the safety pin provided (3).

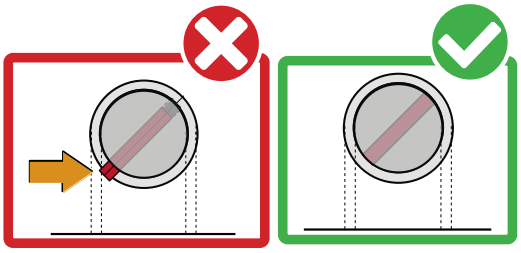




WARNING

ANY PROTRUDING PINS MAY PREJUDICE THE MACHINE SAFETY.

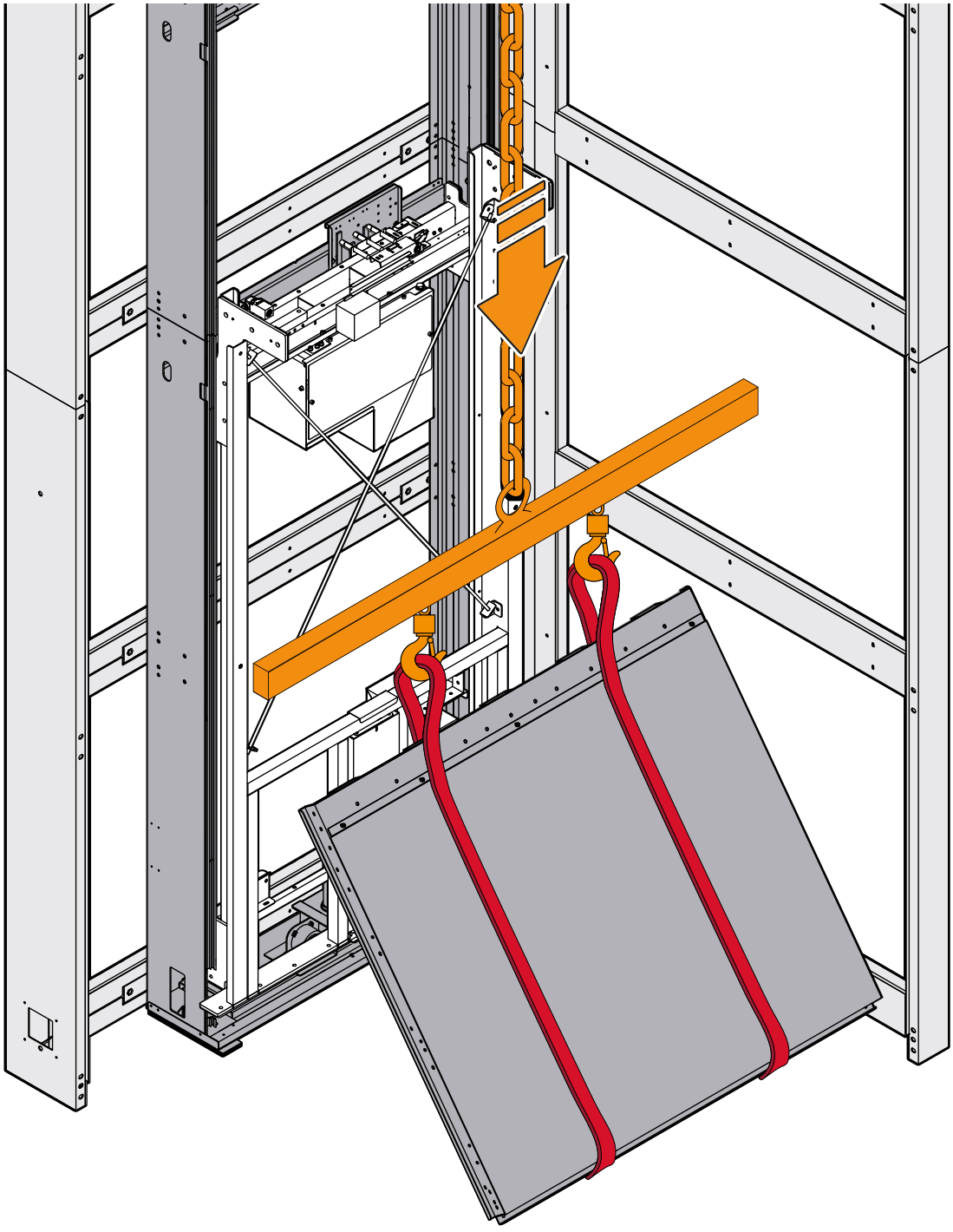
Make sure that the **fastening pins DO NOT protrude** from their seat on both sides.



14.14. Car floor - handling/putting into place

CAUTION			WEAR APPROPRIATE PPE
	**CRUSHING HAZARD** Handle the components using a suitable lifting equipment (see Chap. 9).		

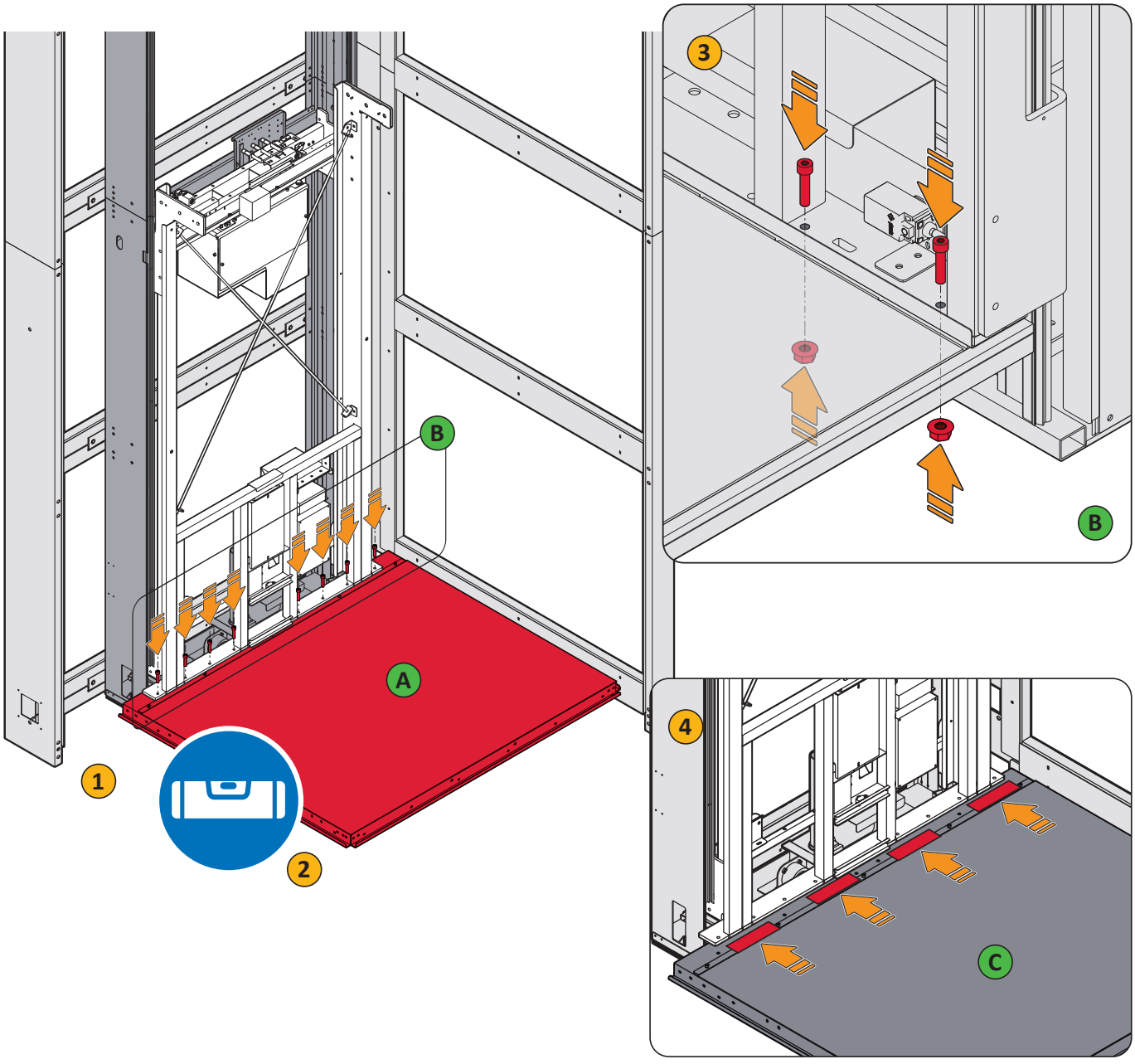
To handle/lift the platform components, we recommend that you use a winch/hoist anchored to the headroom (see Chap. 8) and a lifting beam (A)



14.15. Car floor - fastening and adjustment

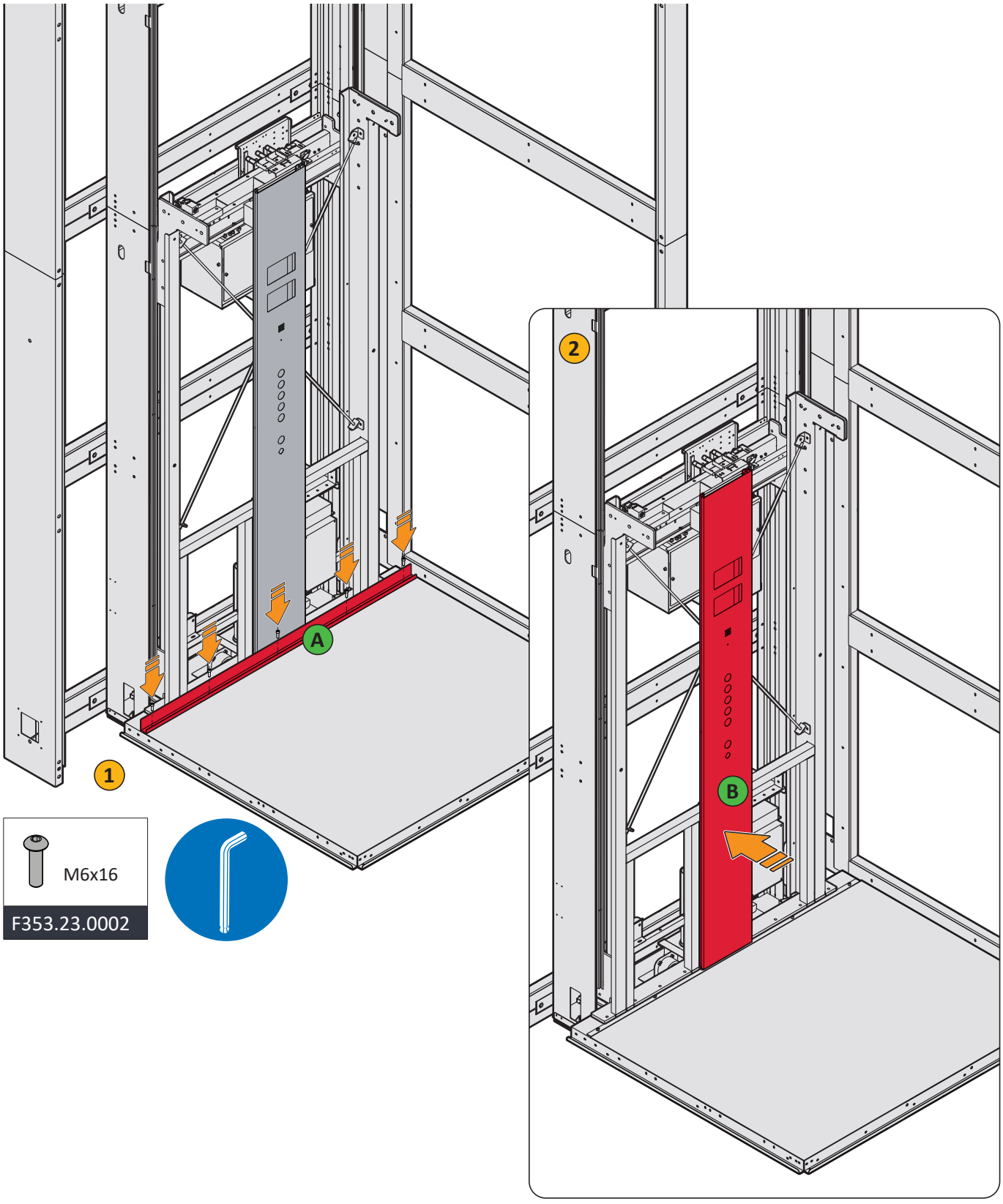
WARNING	
⚠	**ANY FAILURE TO OBSERVE THE ABOVE INDICATIONS MAY PREJUDICE THE MACHINE SAFETY.**
	The screws must be M8x35 socket head screws **CLASS 12.9**
	Observe the prescribed tightening torques. (MIN 17 Nm, MAX 21 Nm)

1. Position the platform floor by resting it on the pit bottom
2. Check that the platform floor is properly levelled.
3. Fasten the car floor A as shown in the figure B, using the supplied screws.
4. if necessary, adjust the floor sloping using the supplied spacers C.



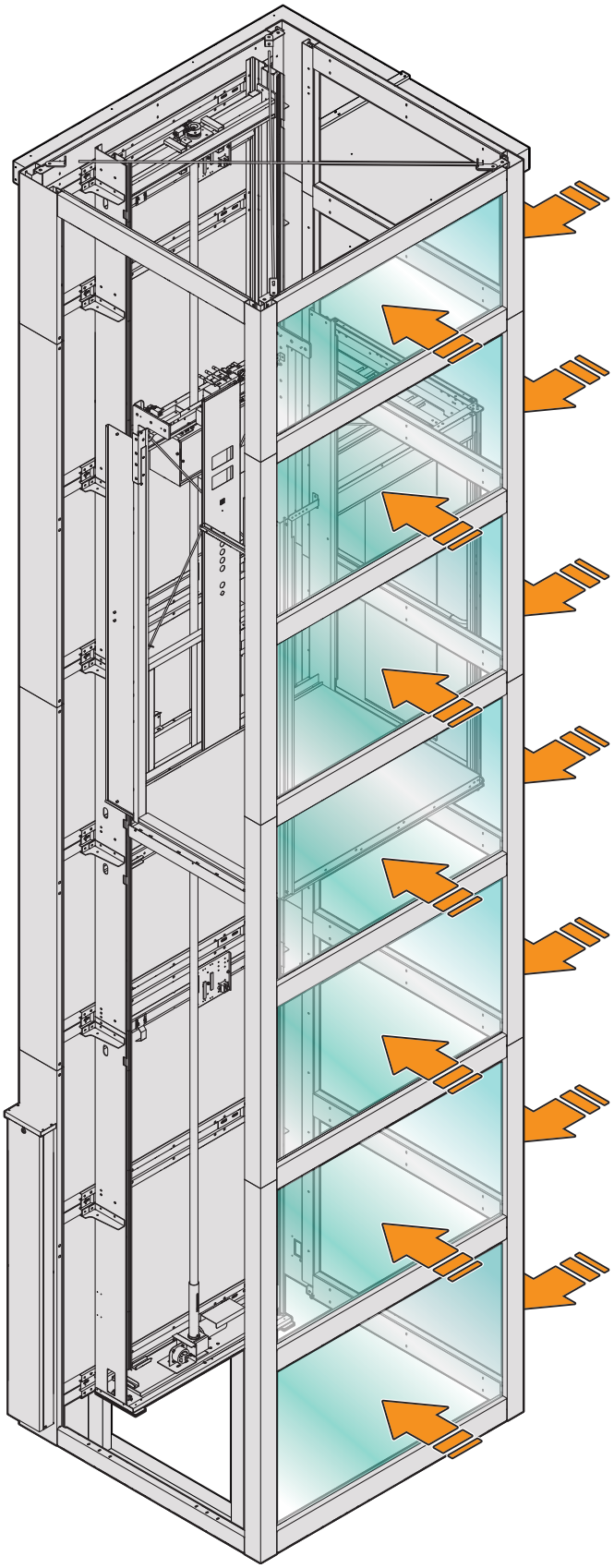
14.16. Car operation panel (COP) - temporary installation

1 Put into place and fasten the mechanics side A bottom profile.
2 Temporarily install the car operation panel (COP) B to move the car during installation.



14.17. Shell infills - installation

1 Install all the car infills, using the car to move the material.

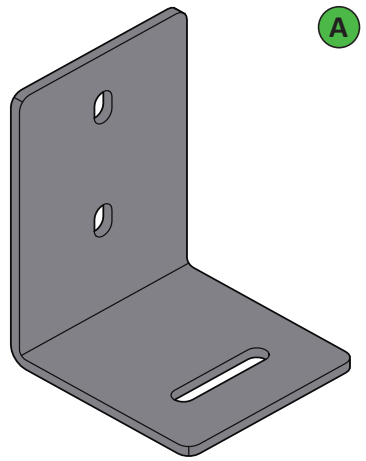


14.18. Automatic sliding doors - installation

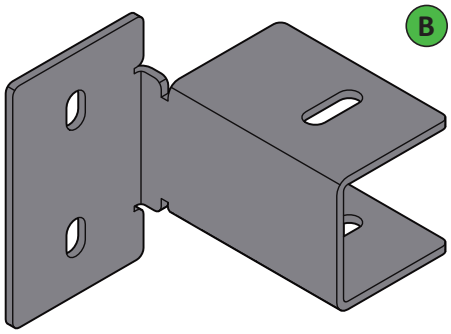
14.18.01 DOOR FASTENING BRACKETS - IDENTIFICATION

Pay attention to the proper use of the fastening brackets and to their positioning.

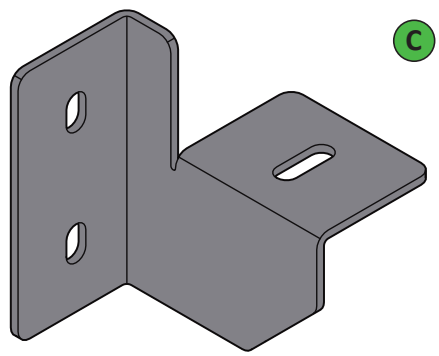
SOPRA PORTA

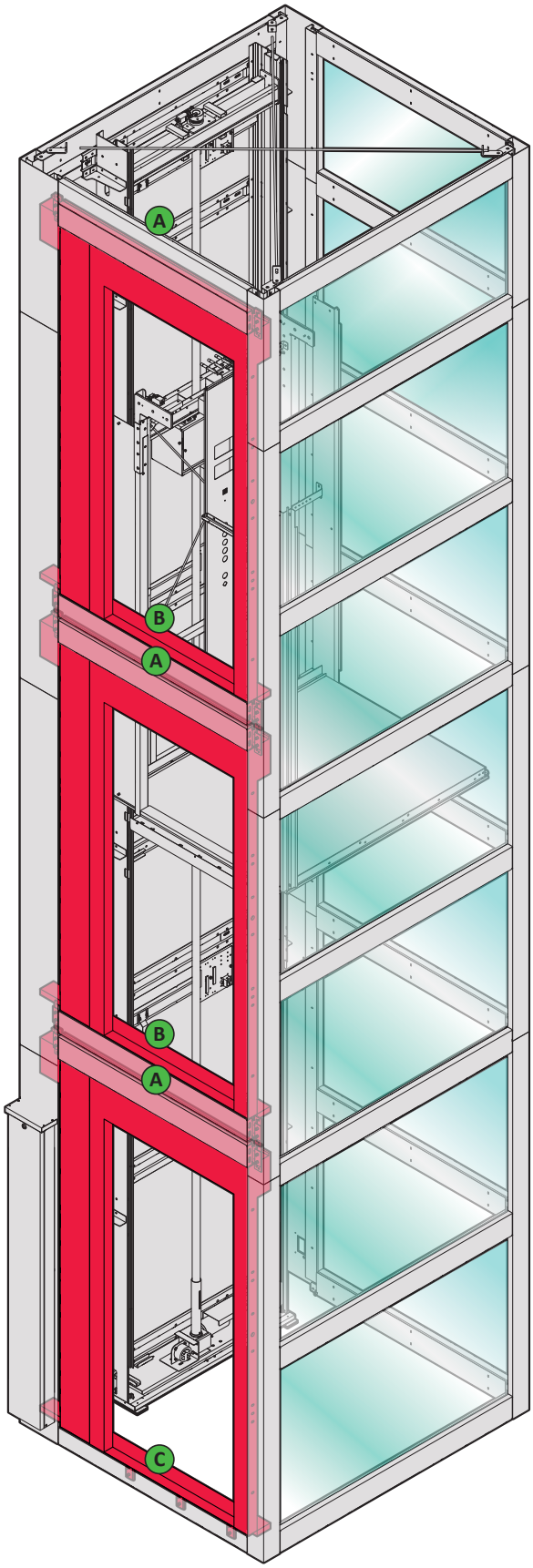


STAFFA SOTTORTA - PIANI INTERMEDI



STAFFA SOTTORTA - PIANO 0

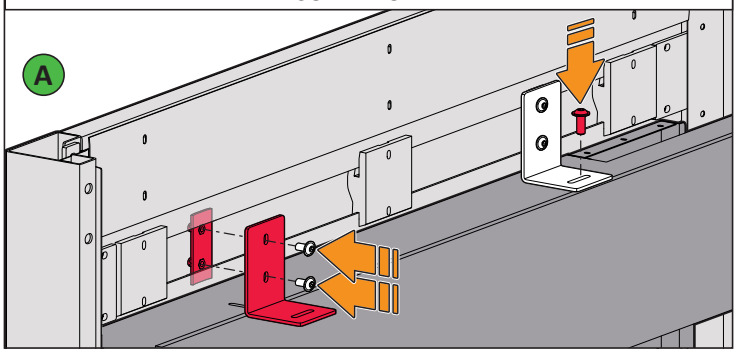




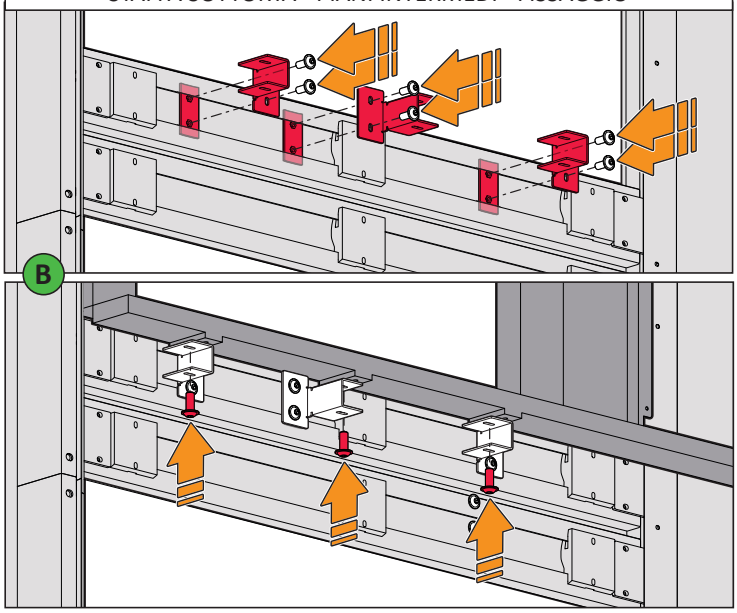
14.18.02 DOOR FASTENING BRACKETS - INSTALLATION

1. Put the frames into place on the door transoms.
2. Fasten the frames to the door transoms using the plates (A, B, C) and the supplied screws, as shown below.

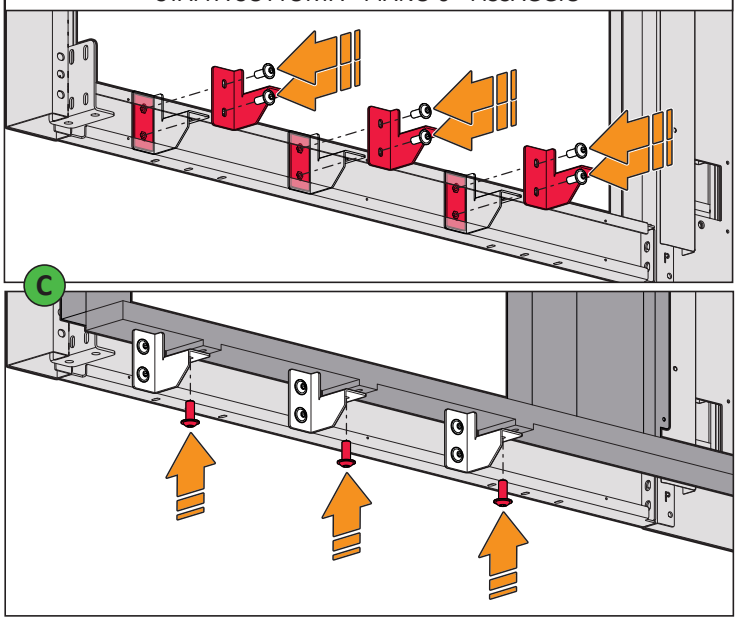
SOPRA PORTA

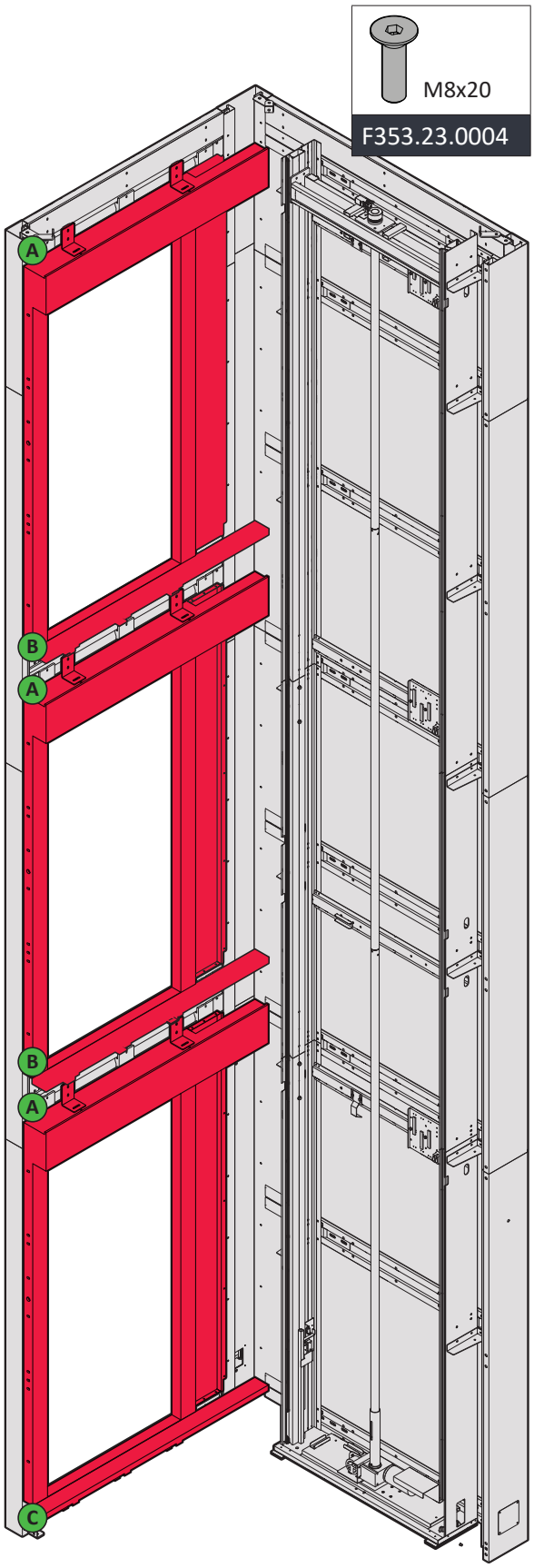


STAFFA SOTTORTA - PIANI INTERMEDI - FISSAGGIO



STAFFA SOTTORTA - PIANO 0 - FISSAGGIO

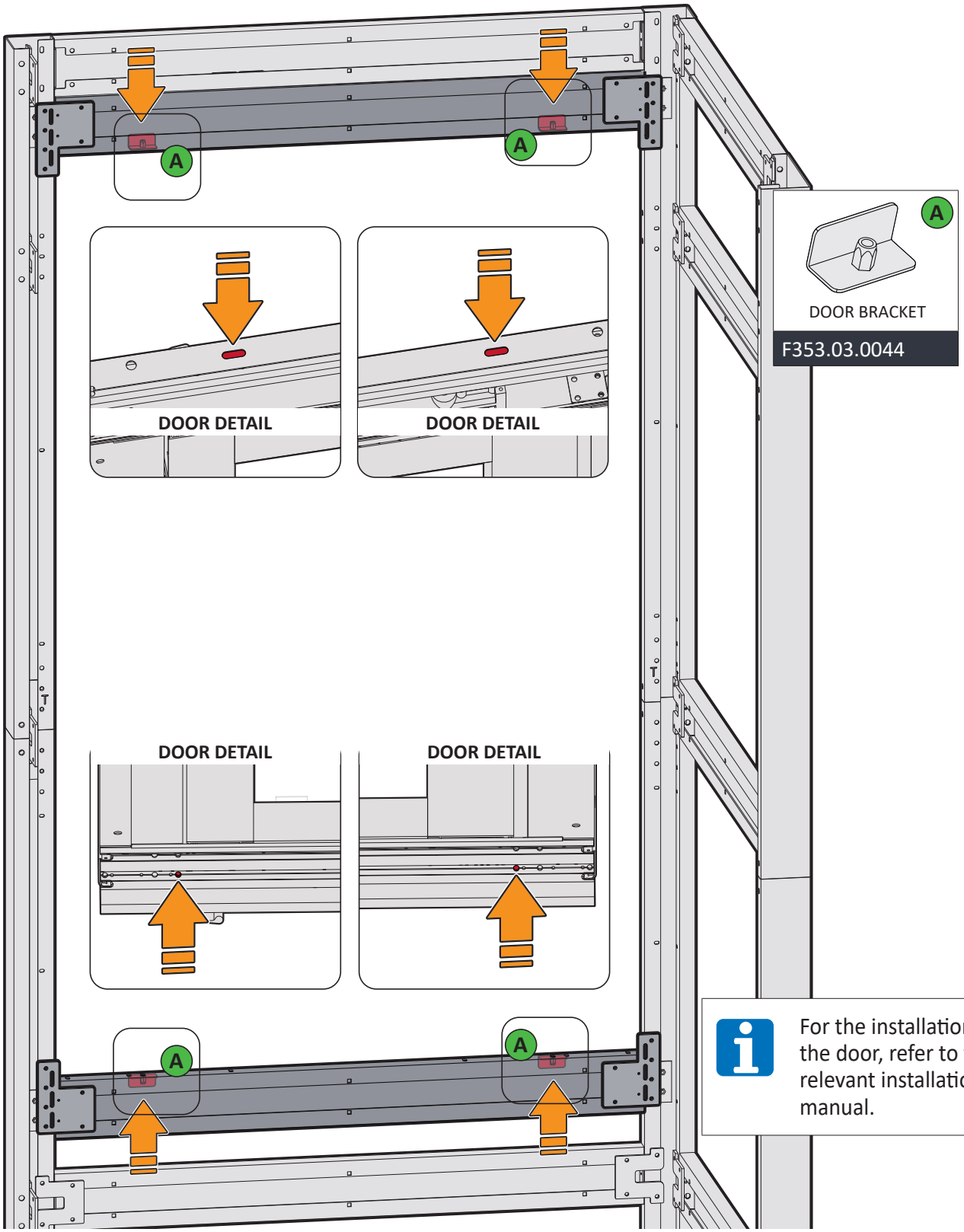




14.19. Swing doors - installation

14.19.01 SHELL - PRELIMINARY OPERATIONS

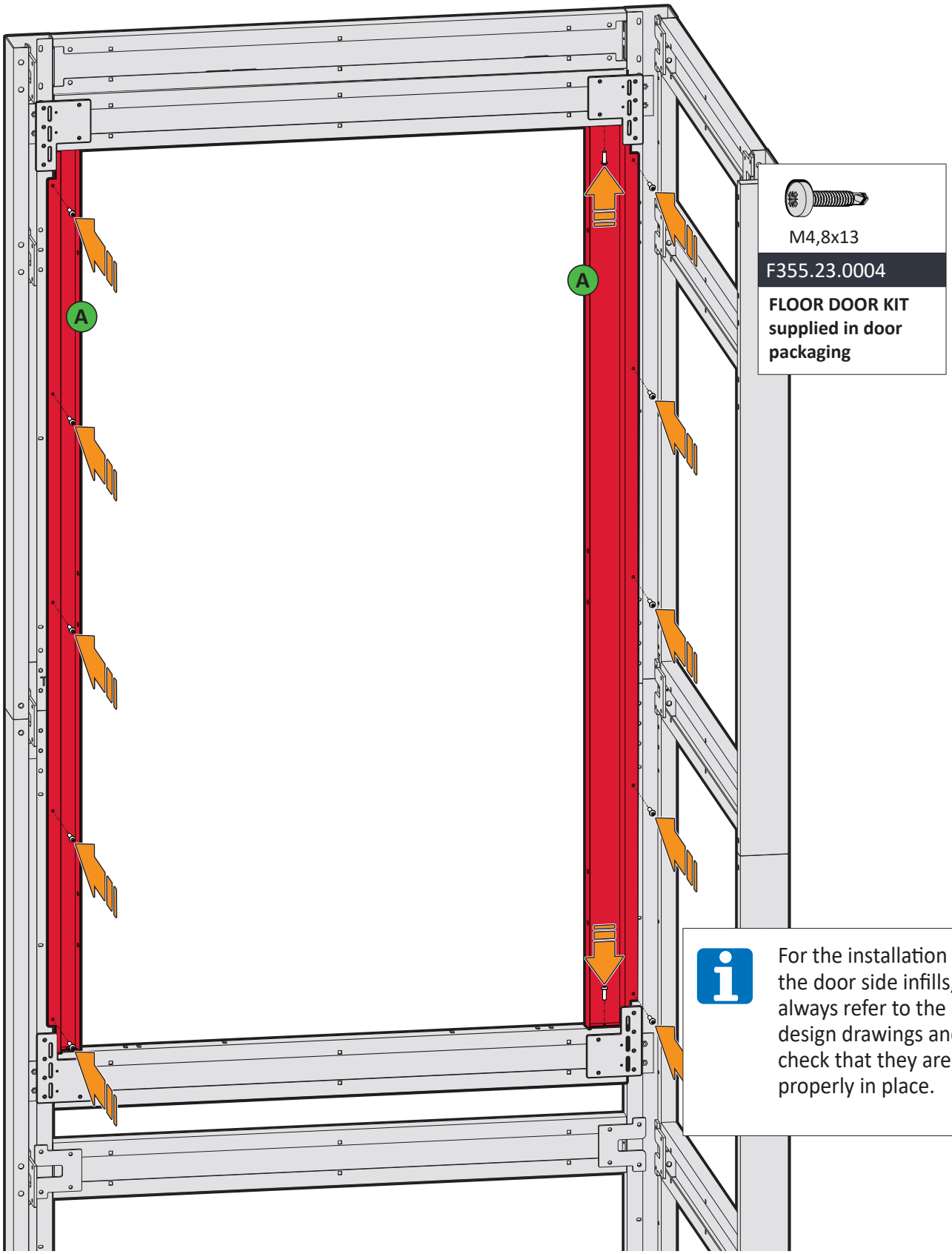
1 Insert into the door transoms the relevant fastening brackets A, to which the door frame will be anchored.



For the installation of the door, refer to the relevant installation manual.

14.19.02 SHELL - PRELIMINARY OPERATIONS

1 Put into place the infill profiles (or the individual profile) A, then fasten them/it using the supplied self-tapping screws.



M4,8x13

F355.23.0004

FLOOR DOOR KIT supplied in door packaging

For the installation of the door side infills, always refer to the design drawings and check that they are properly in place.

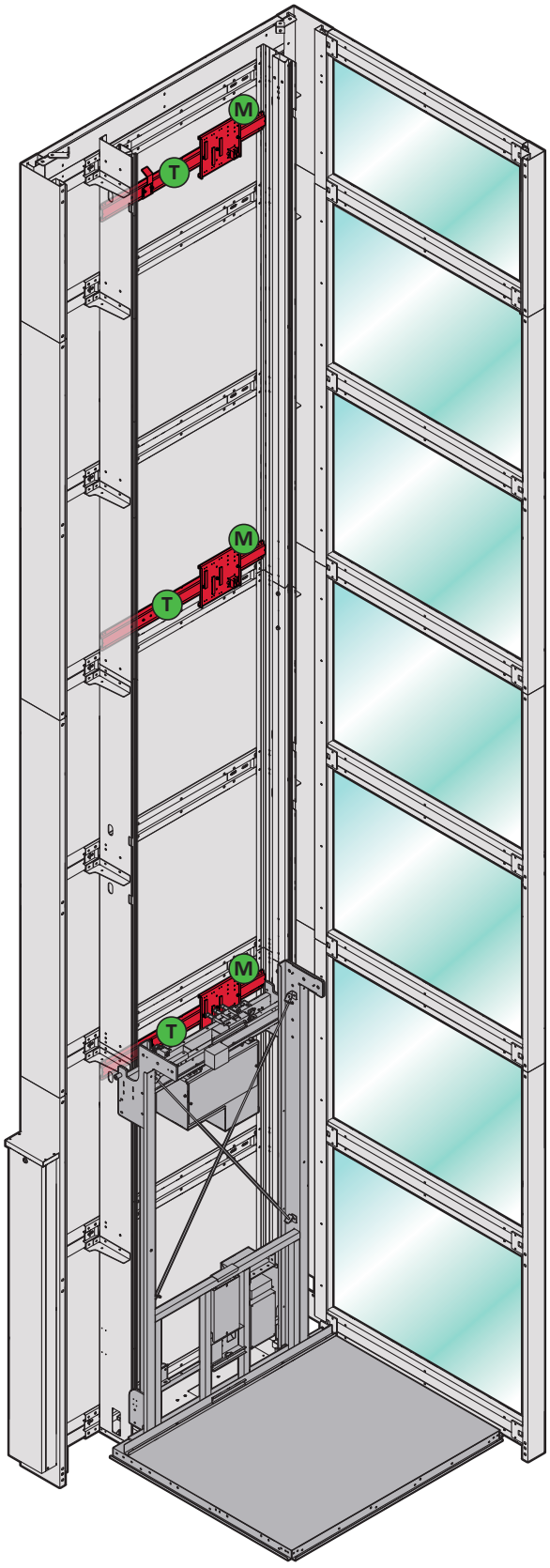
14.20. Shaft electrical system - installation

14.20.01 WIRING - INSTALLATION

Before proceeding with the next mechanical installations, we recommend that you install all the shaft wiring, to take advantage of the absence of parts that could hinder the installation, if it was performed later.

14.20.02 MAGNETS FOR SENSORS - INSTALLATION

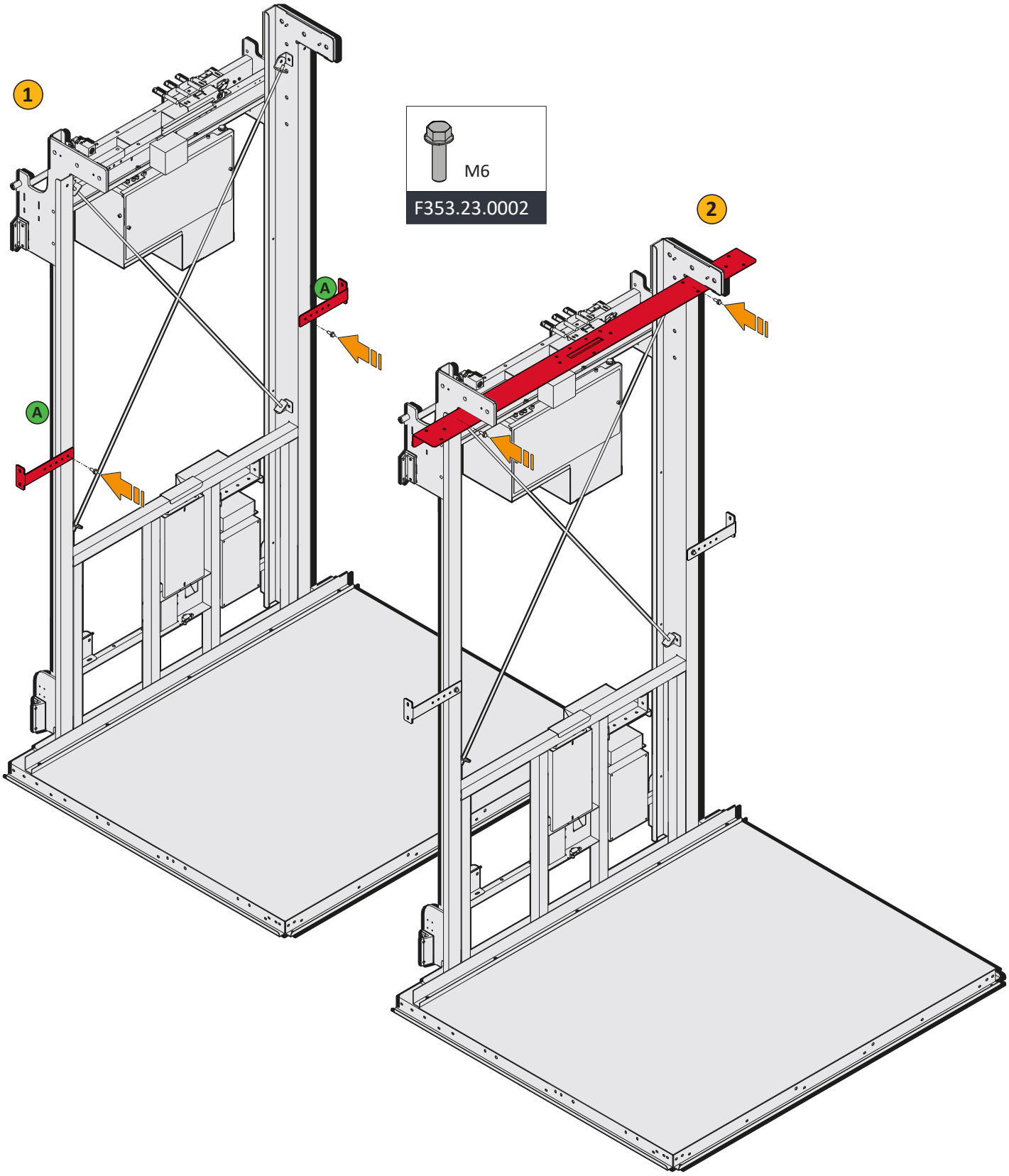
1. Put into place and fasten the support transoms for the sensor magnets (T).
2. Carefully put into place the magnets for the sensors (M).



14.21. Car - installation

14.21.01 SUPPORT BRACKET - INSTALLATION

1 Install the side brackets A on the sling, using the supplied screws.
2 Install the top L-brackets B on the sling, using the supplied screws.

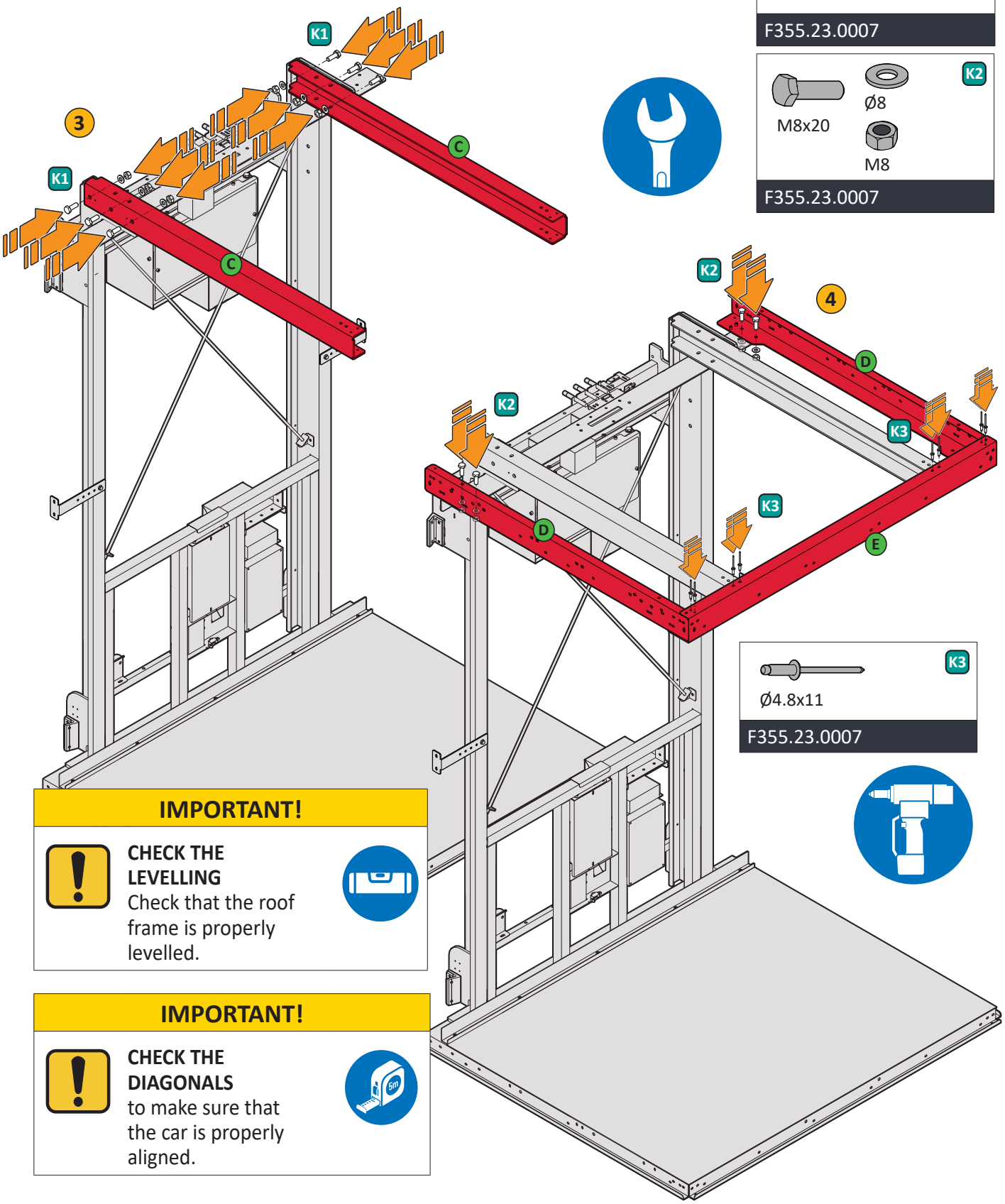


14.21.02 CAR ROOF - FRAME - INSTALLATION

3 Put into place the roof transoms C, fastening them with the supplied screws K1.

4 Put into place the roof side-members D, fastening them with the supplied screws K2.

4 Put into place the roof front E, fastening it with the supplied rivets K3.



IMPORTANT!

CHECK THE LEVELLING
Check that the roof frame is properly levelled.

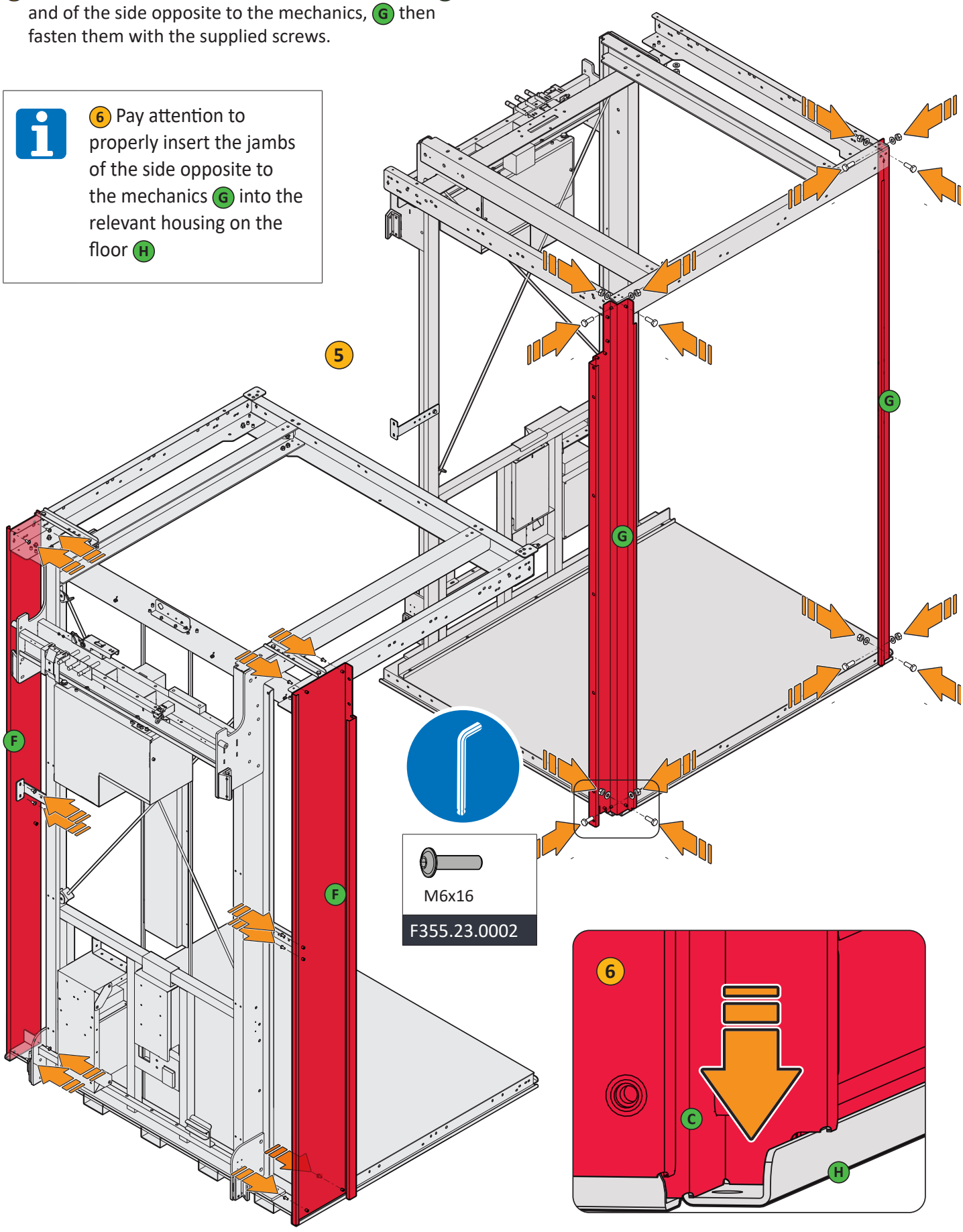
IMPORTANT!

CHECK THE DIAGONALS
to make sure that the car is properly aligned.

14.21.03 CAR JAMBS AND ELECTRONIC BARRIER - INSTALLATION

5 Put into place the car jambs of the mechanics side F and of the side opposite to the mechanics, G then fasten them with the supplied screws.

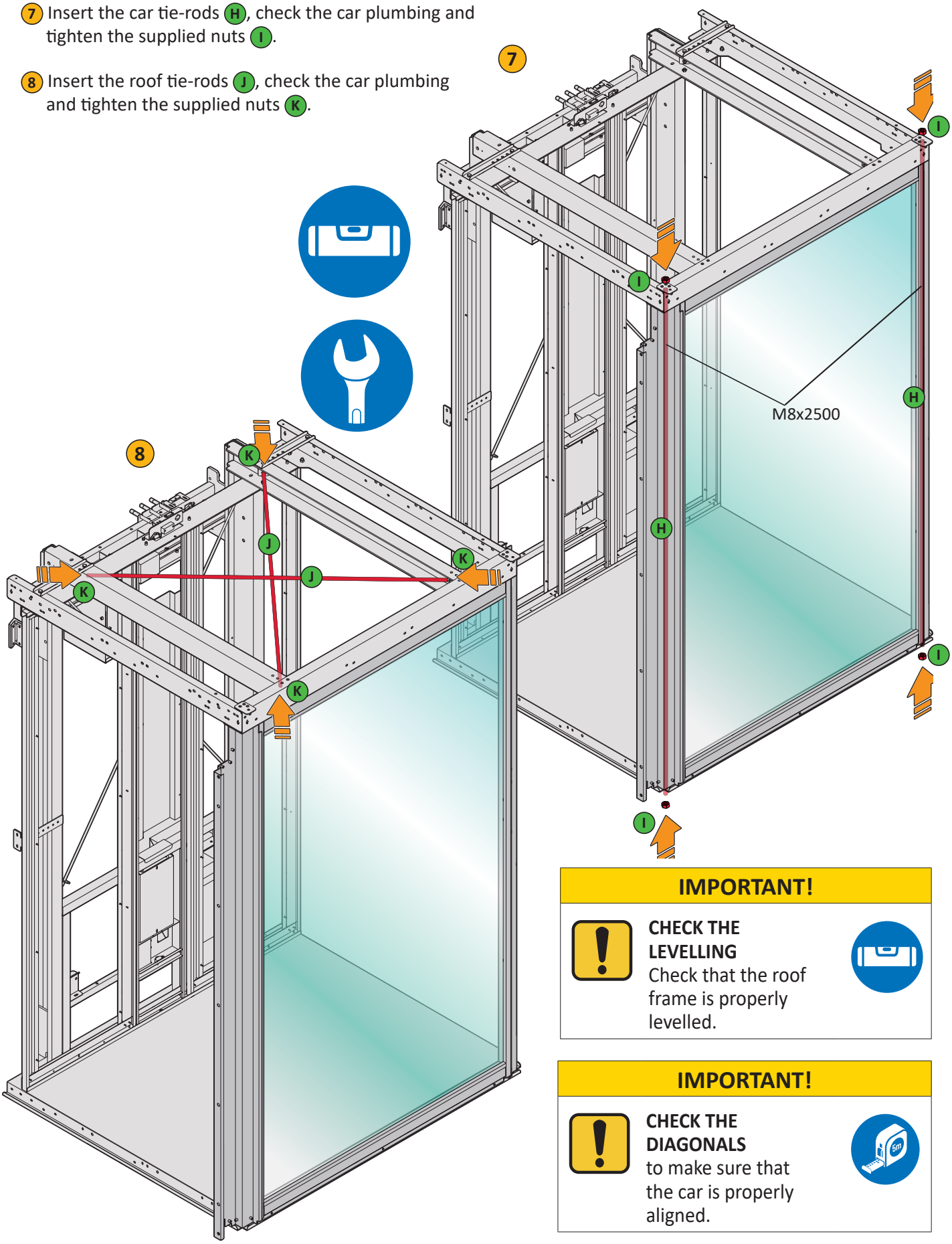
6 Pay attention to properly insert the jambs of the side opposite to the mechanics G into the relevant housing on the floor H



14.21.04 FRONT TIE-RODS AND ROOF TIE-RODS - INSTALLATION AND CAR PLUMBING

7 Insert the car tie-rods H, check the car plumbing and tighten the supplied nuts I.

8 Insert the roof tie-rods J, check the car plumbing and tighten the supplied nuts K.



IMPORTANT!

CHECK THE LEVELLING
Check that the roof frame is properly levelled.

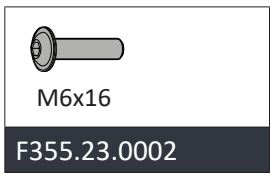
IMPORTANT!

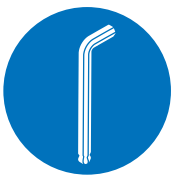
CHECK THE DIAGONALS
to make sure that the car is properly aligned.

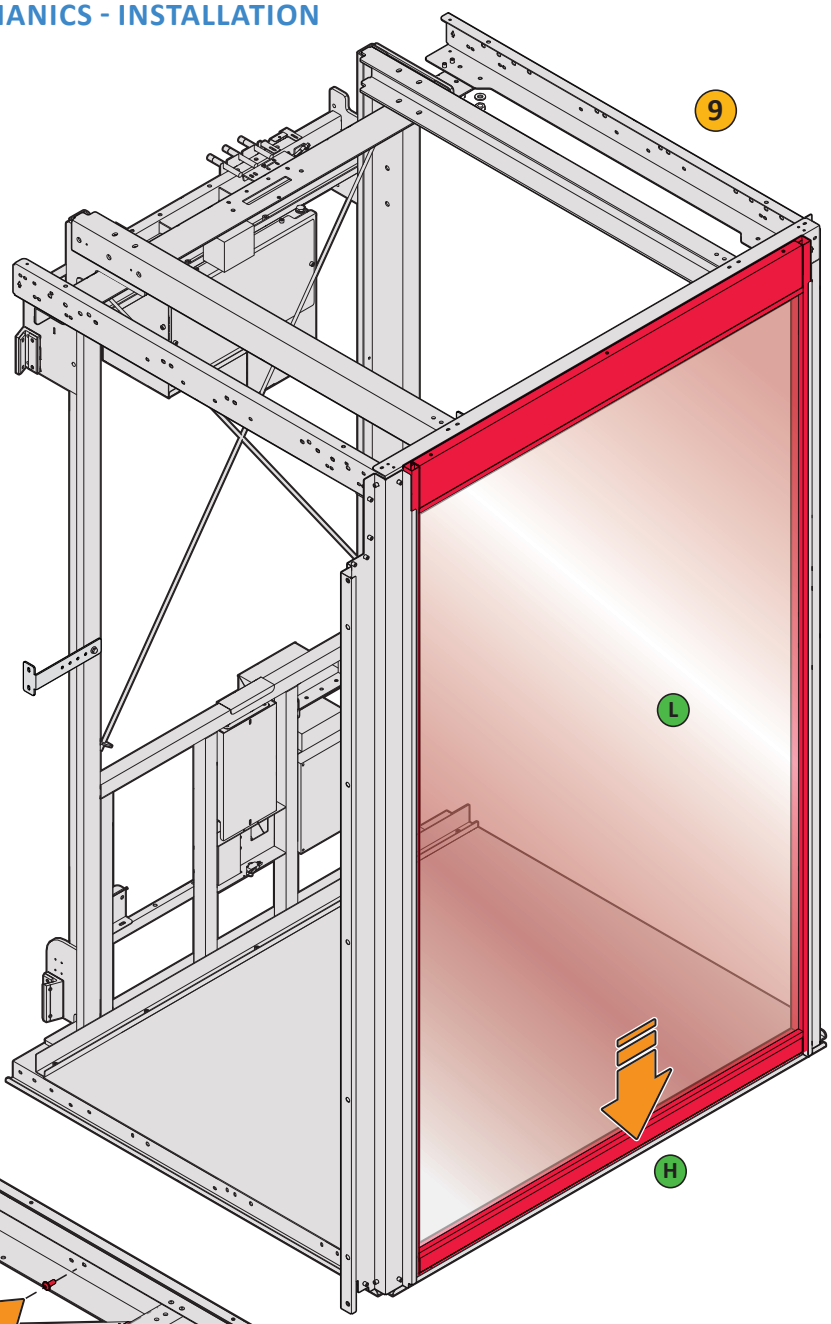
14.21.05 WALL OPPOSITE TO THE MECHANICS - INSTALLATION

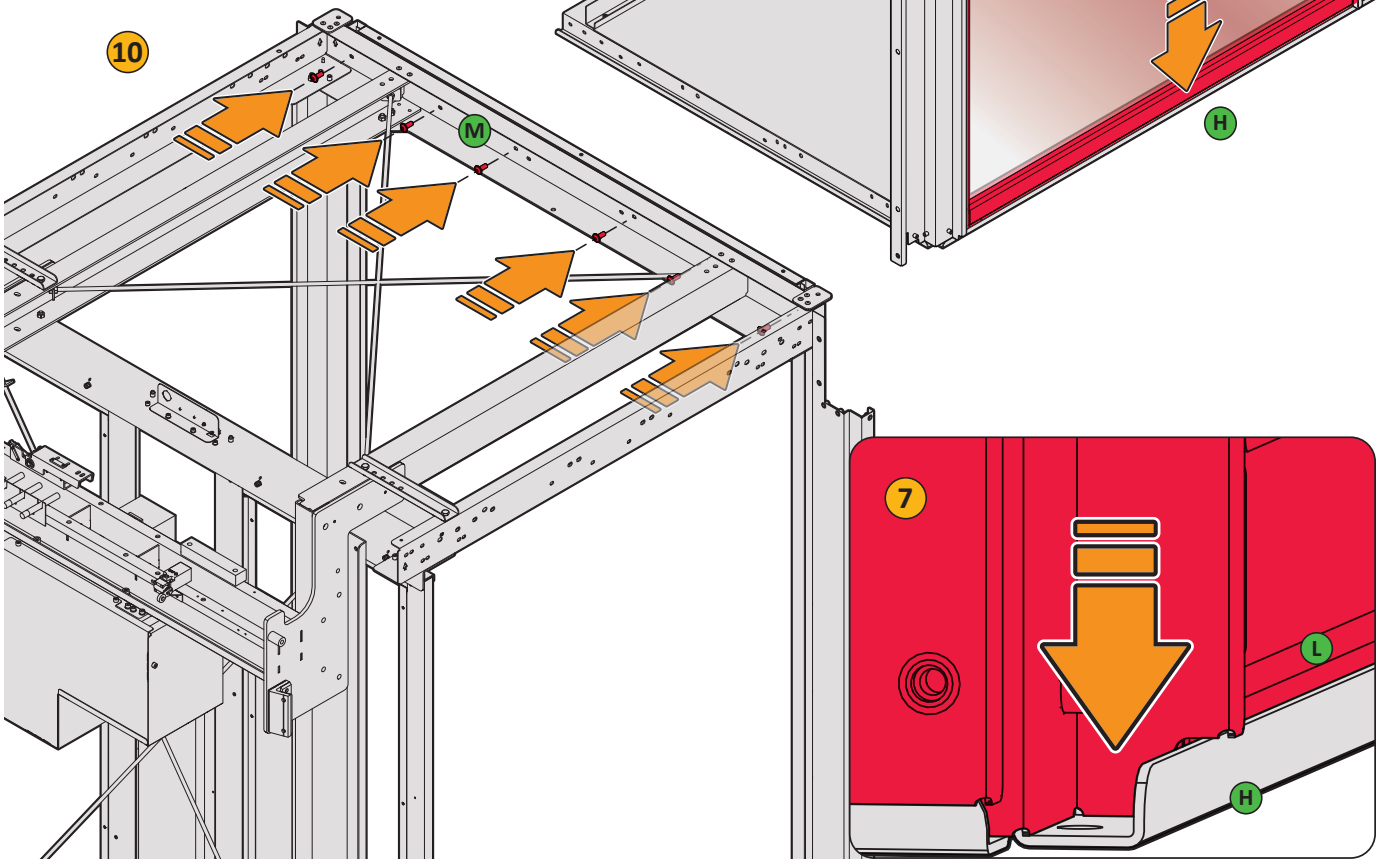
9 Put into place the car wall L between the opposite jambs, paying attention to properly insert it into the relevant floor housing H

10 Fasten the car wall to the car roof frame M using the supplied screws.







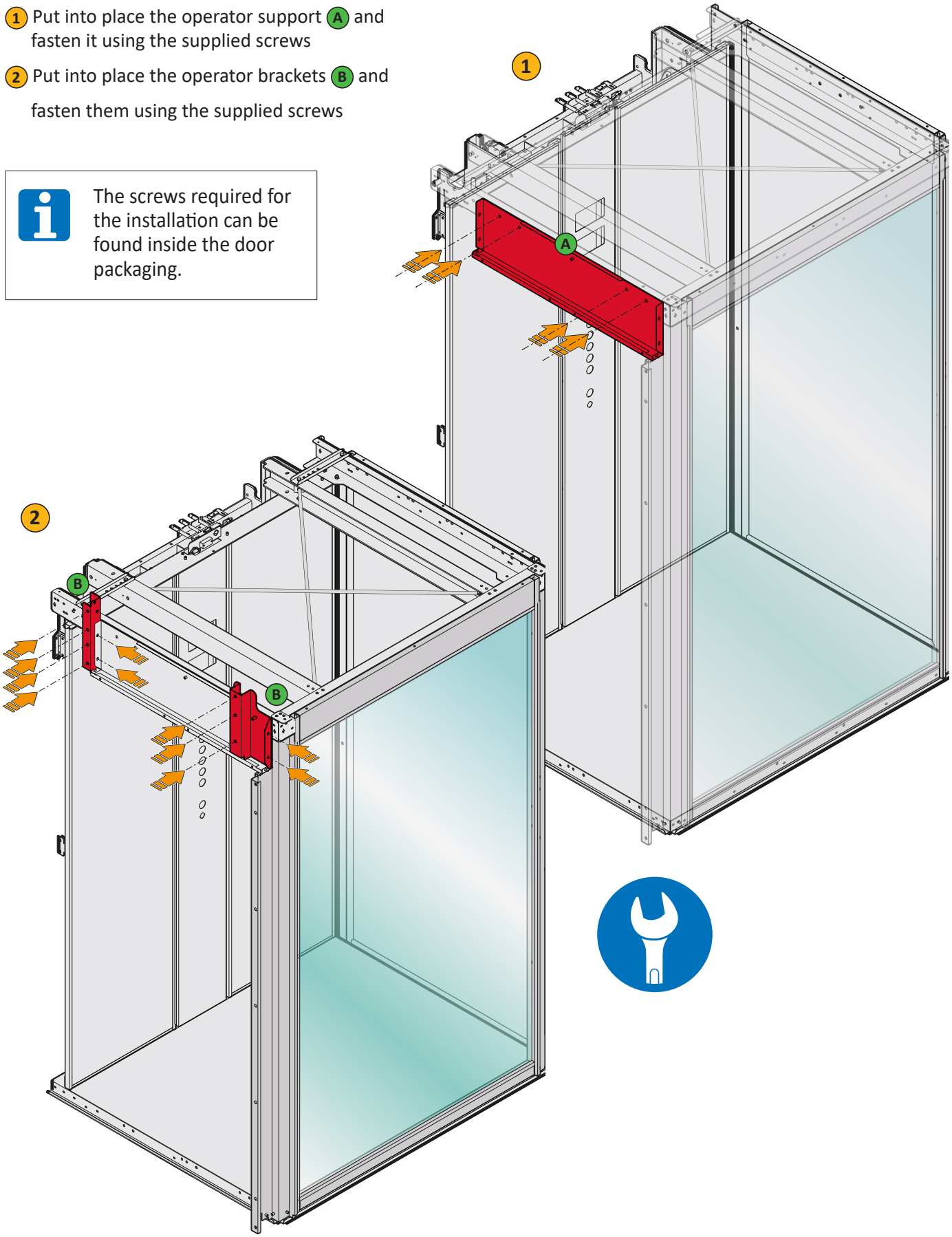


14.22. Automatic sliding doors - installation

14.22.01 DOOR OPERATORS - INSTALLATION

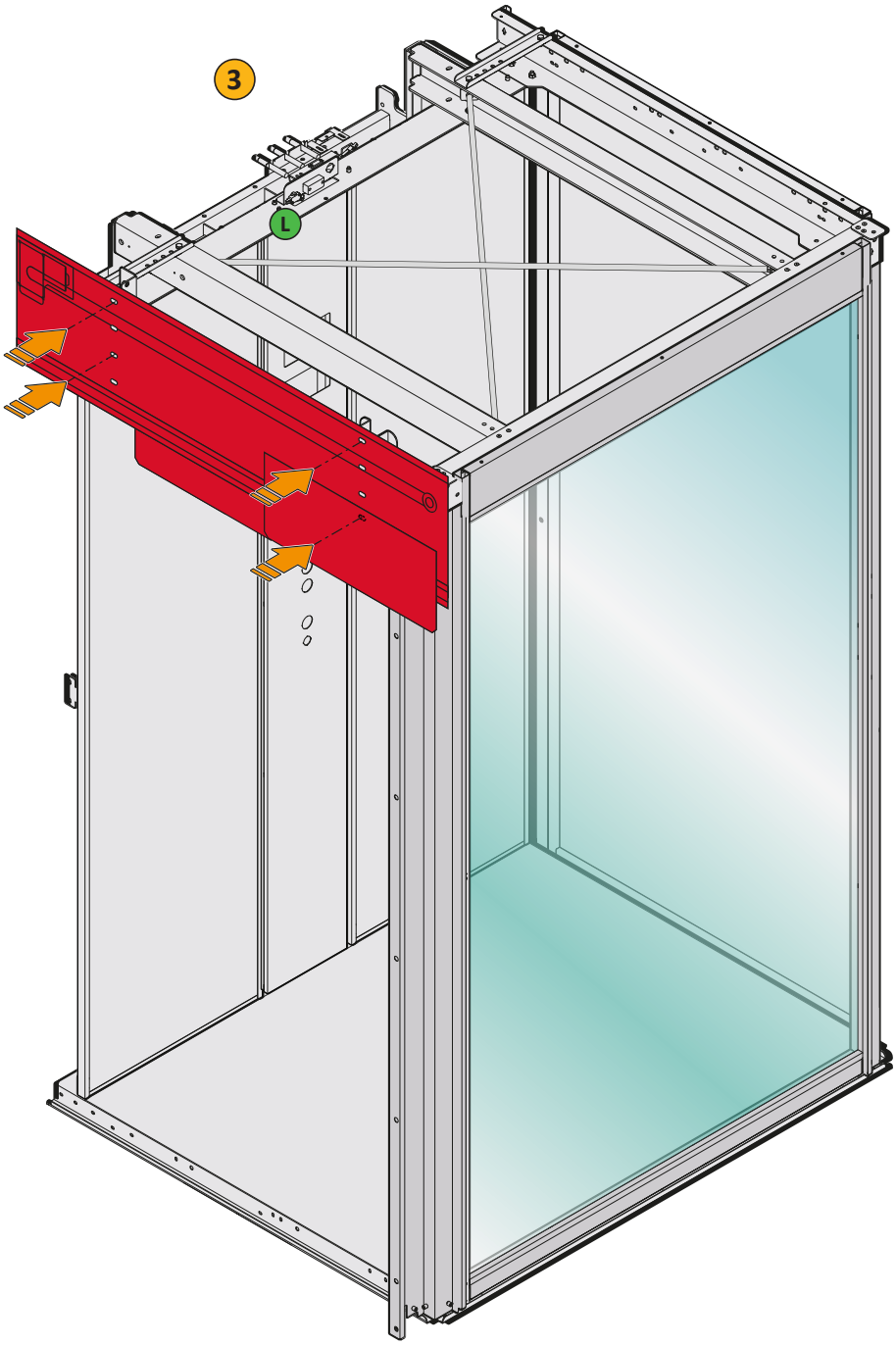
1. Put into place the operator support A and fasten it using the supplied screws
2. Put into place the operator brackets B and fasten them using the supplied screws

> The screws required for the installation can be found inside the door packaging.



3 Put into place the operator L and fasten it using the supplied screws

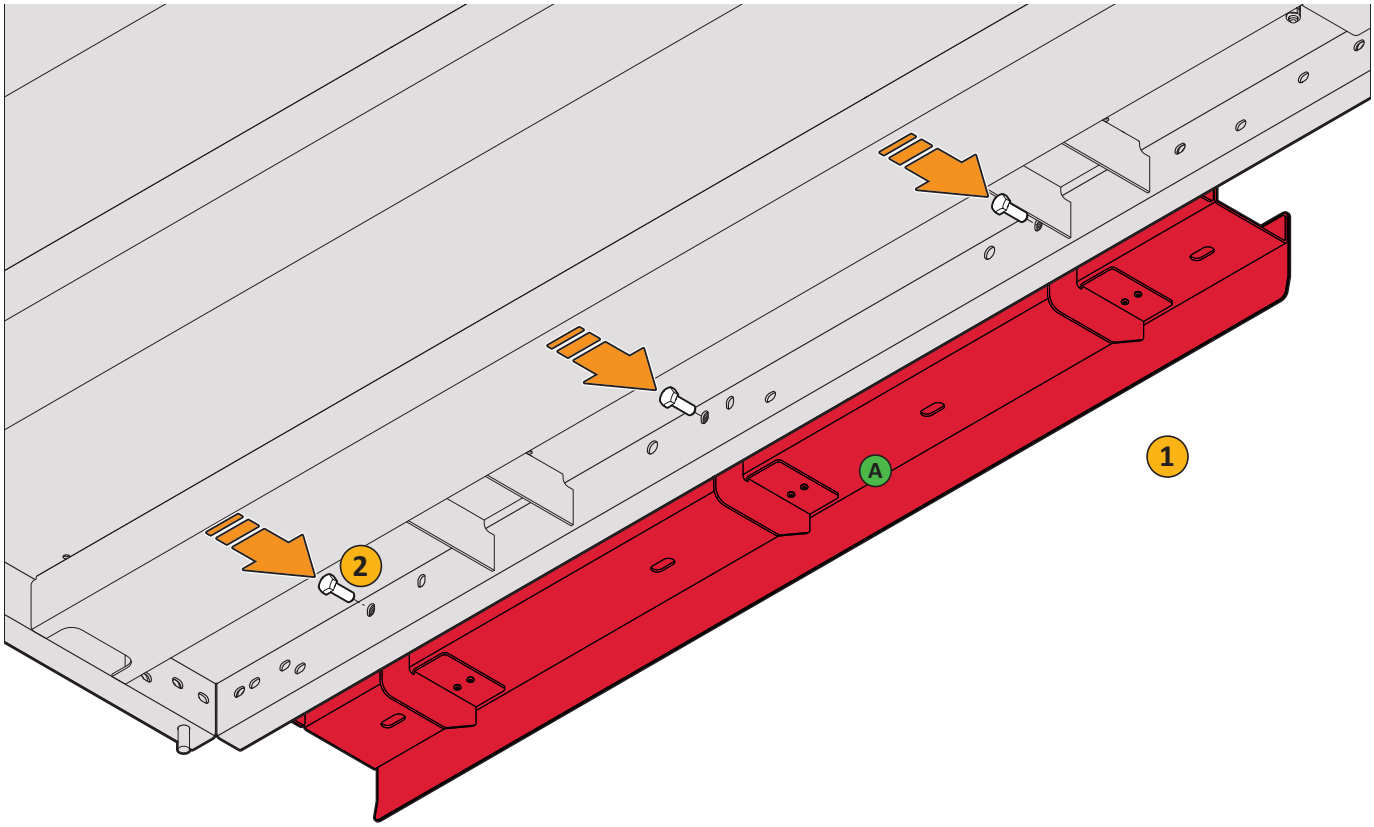
For the door installation, refer to the specific manuals.



14.23. Automatic sliding doors - installation

14.23.01 THRESHOLD SUPPORT - INSTALLATION

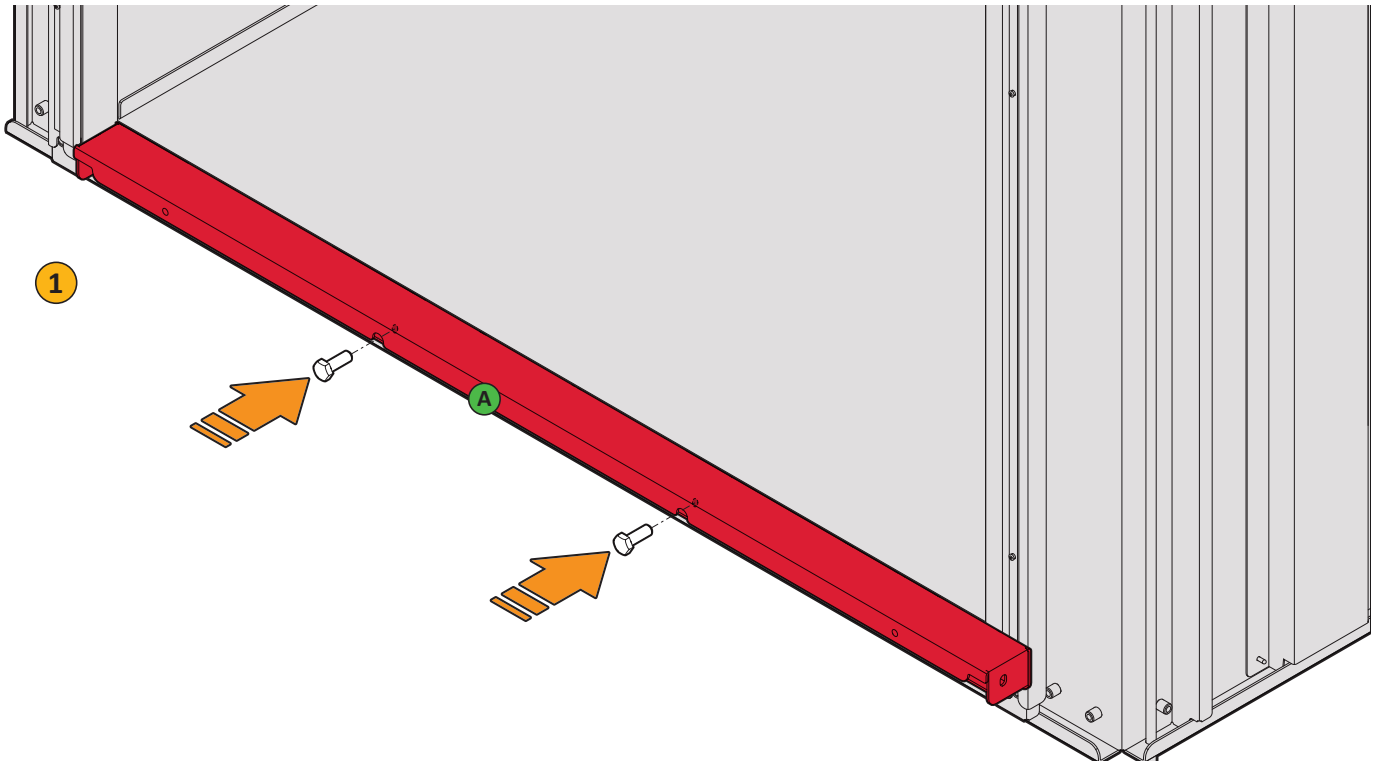
(1) Put into place the threshold support (A) on the car basement and fasten it using the supplied screws from the rear side (under the car).



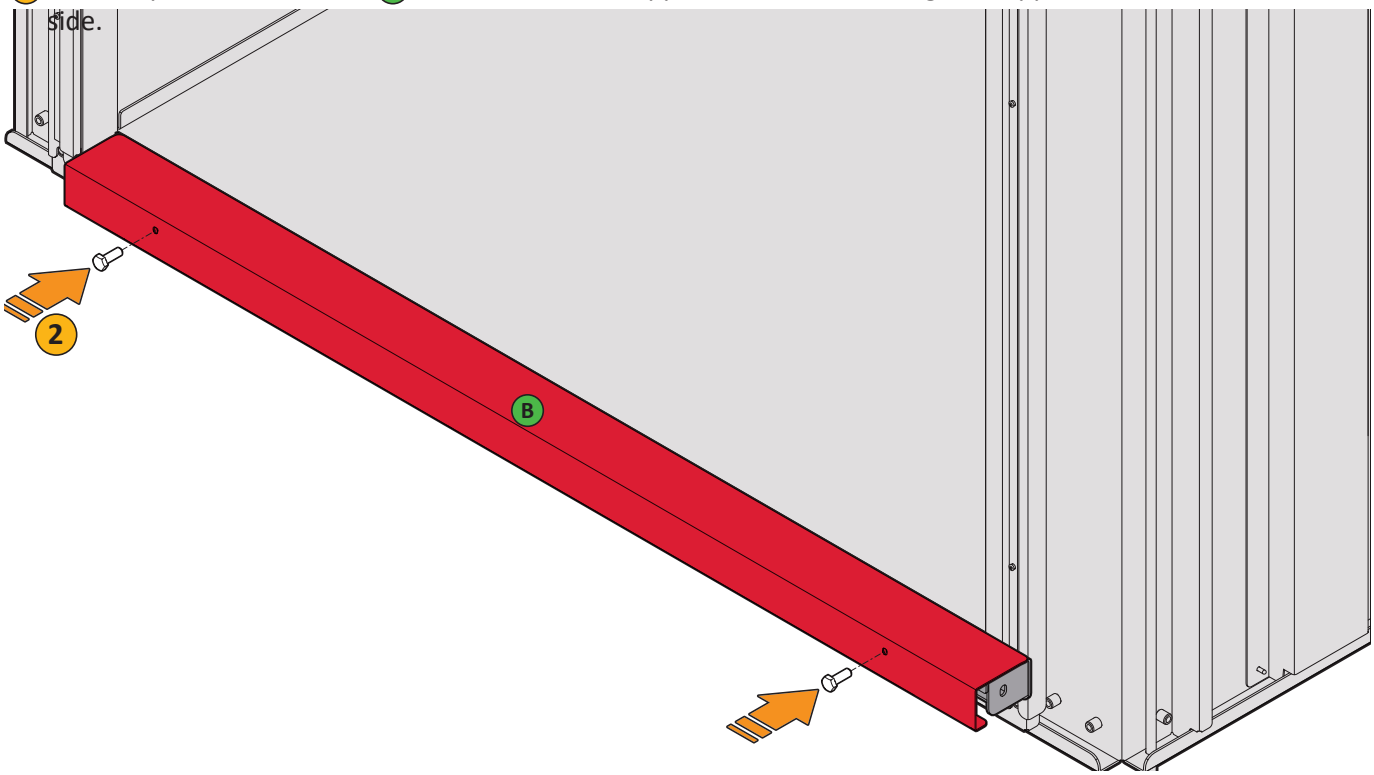
14.24. Swing doors - installation

14.24.01 THRESHOLD SUPPORT - INSTALLATION

1 Put into place the threshold support A on the car basement and fasten it using the supplied screws from the front side.



2 Put into place the sill cover B on the threshold support and fasten it using the supplied screws from the front side.



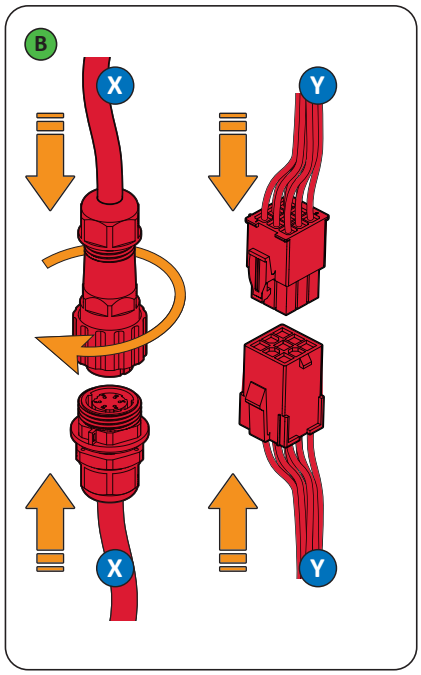
14.25. Car electrical connections

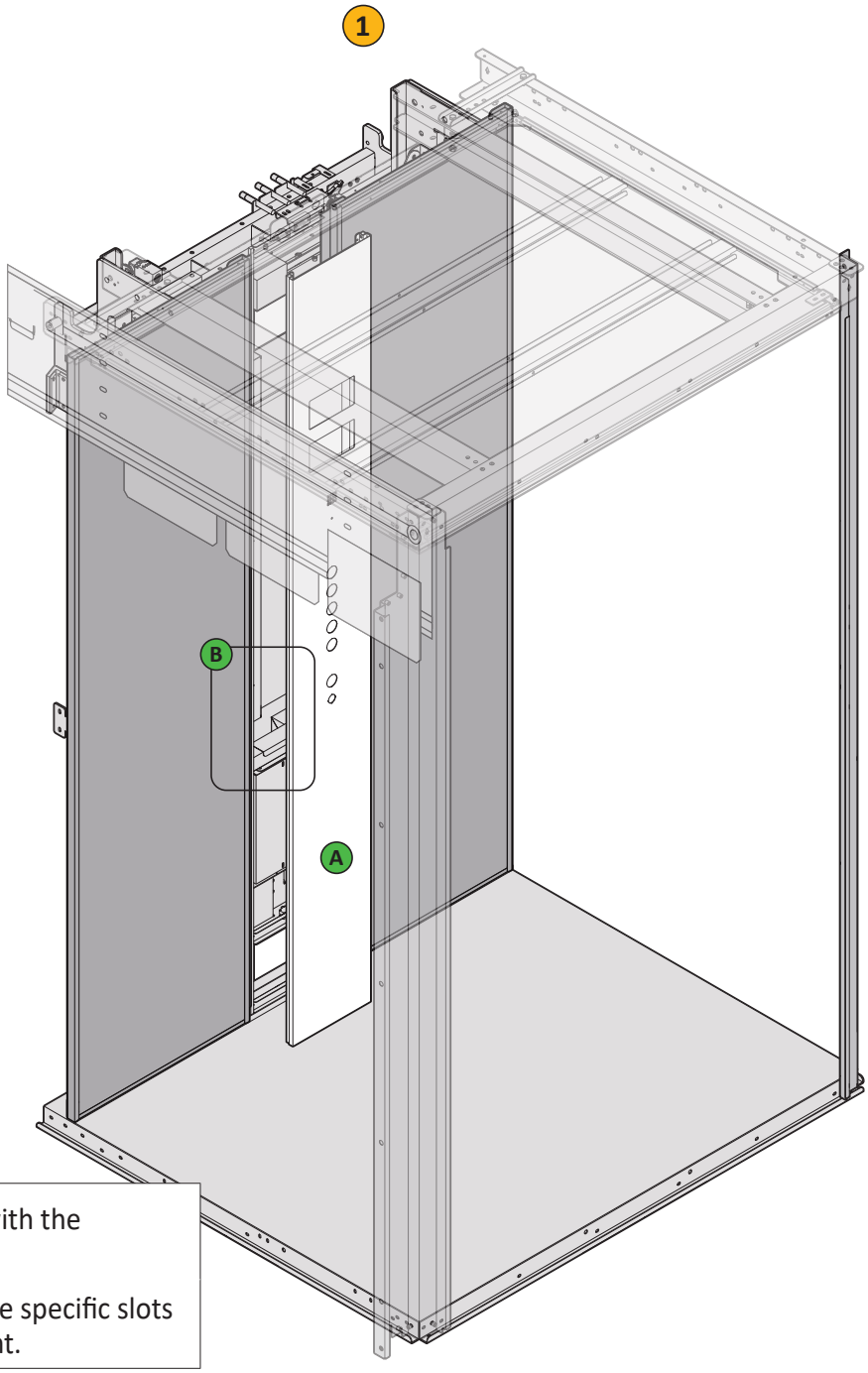
14.25.01 CAR CONTROL BOARD (UCEC.C) - CONNECTION

(1) Before fastening the car operation panel (COP), (A) perform the electrical connections between the sling and the car (B) (board UDEC.C).

- Plug and screw the waterproof circular connectors, making sure that they are properly tightened.
- Plug the waterproof rectangular connectors, making sure that the locking hook is properly engaged.

X	Connettore impermeabile a vite
Y	Connettore Mini Universal MATE-N-LOK





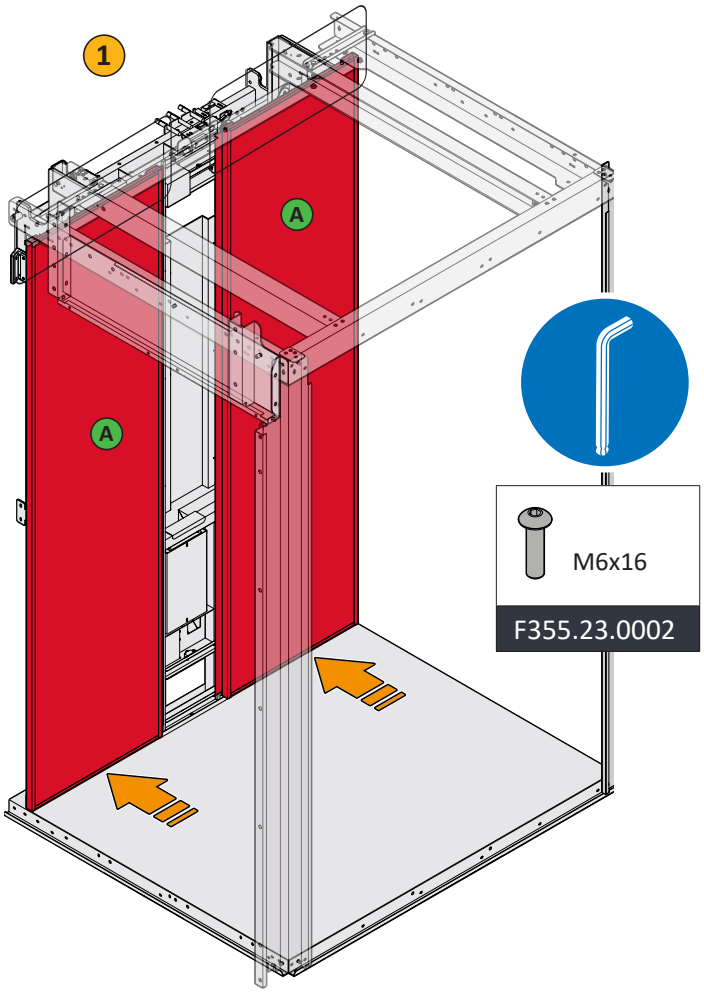
All connectors are marked with the relevant numbers/letters.

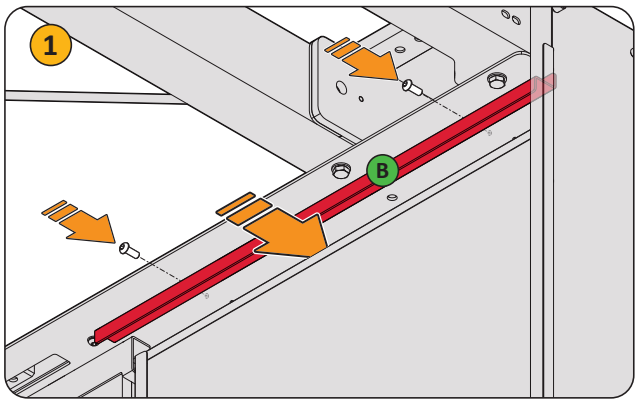
Store any excess wiring in the specific slots in the COP rear compartment.

14.26. Mechanics side wall and car operation panel - Installation

14.26.01 MECHANICS SIDE WALL - INSTALLATION

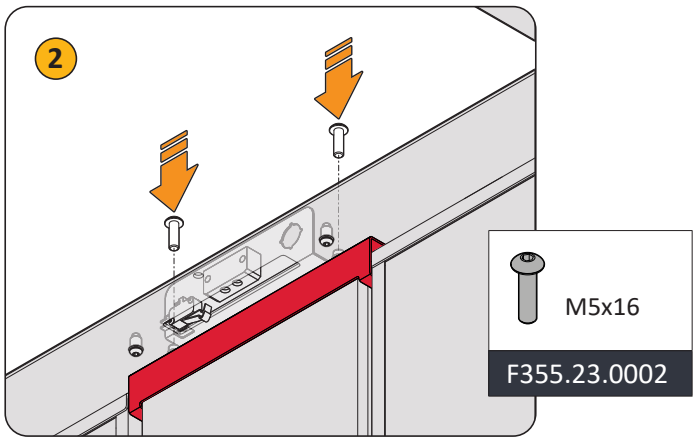
1 Put into place the wall panels A and fasten them using the relevant bars B and the supplied screws.

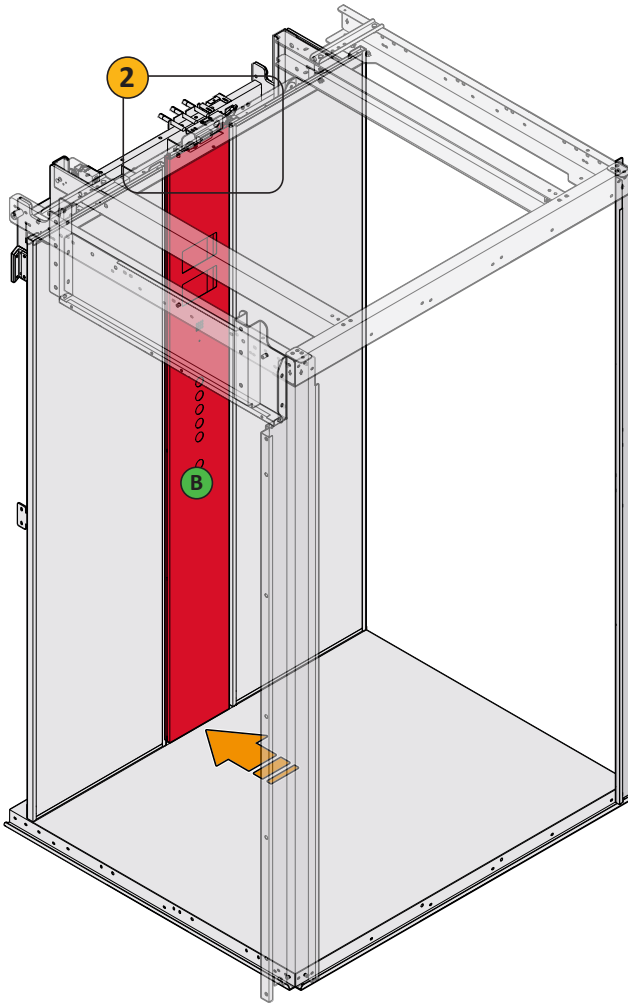




14.26.02 CAR OPERATION PANEL (COP) WITH SAFETY CONTACT - INSTALLATION

2 Put into place the car operation panel B and fasten it using the supplied screws

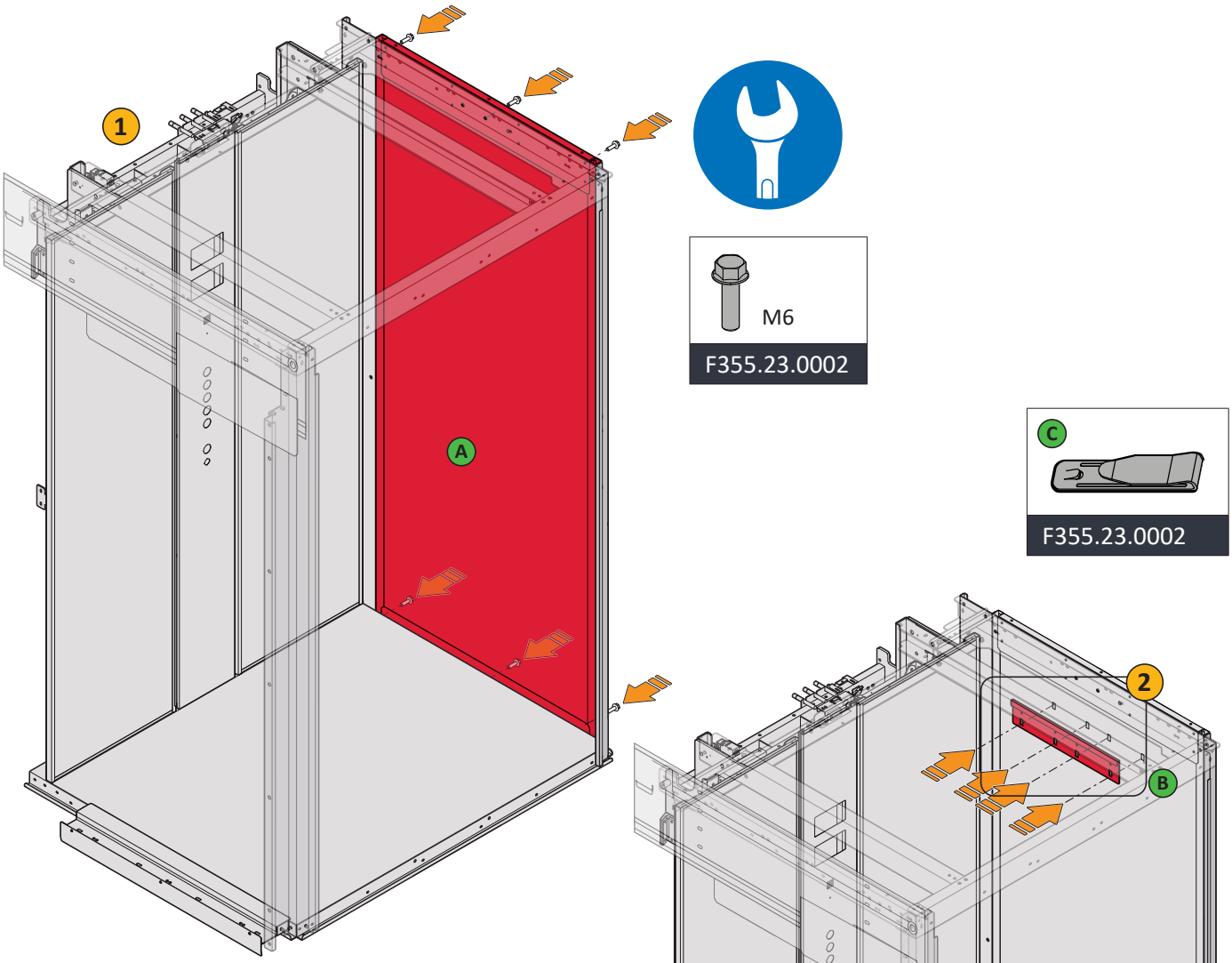




14.27. Wall with mirror and handrail - Installation

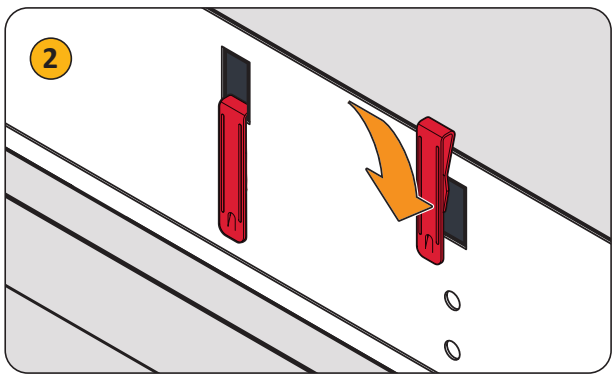
14.27.01 WALL - INSTALLATION

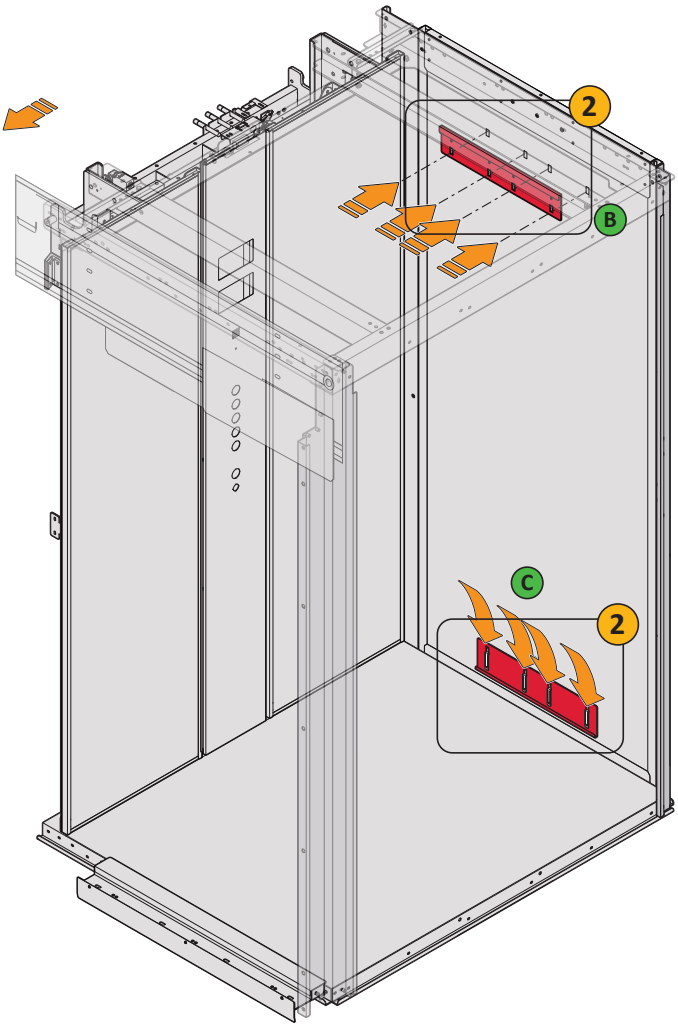
1 Put into place the wall A and fasten it using the supplied screws



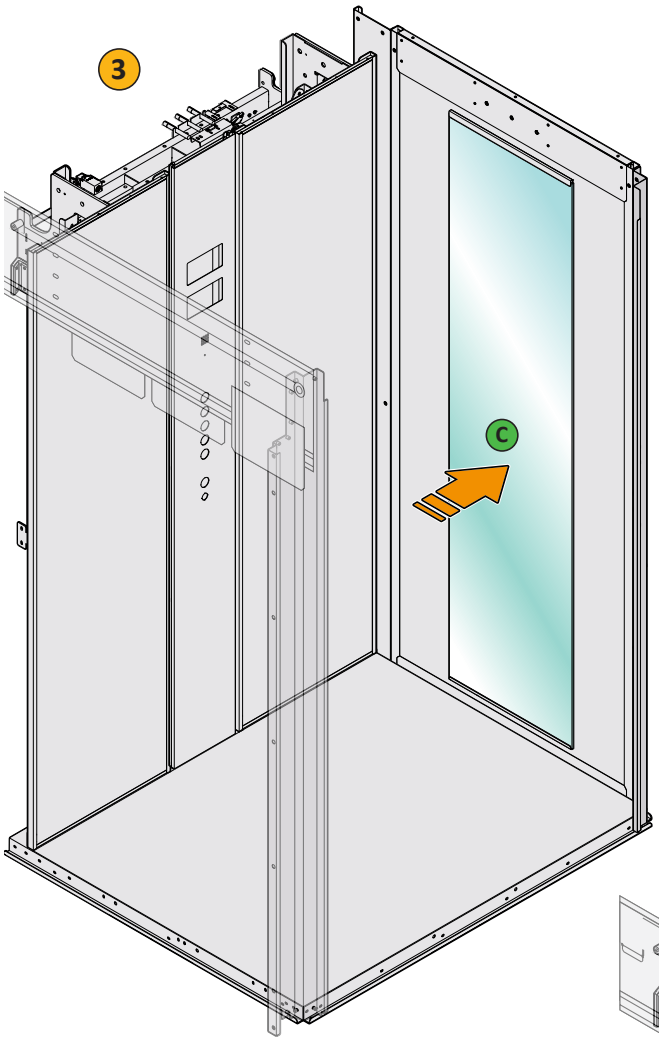
14.27.02 MIRROR - INSTALLATION

2 Put into place the mirror supports B in the rectangular holes and fasten them using the supplied clips C .

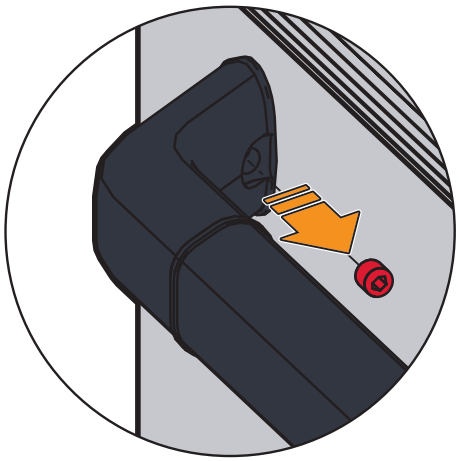


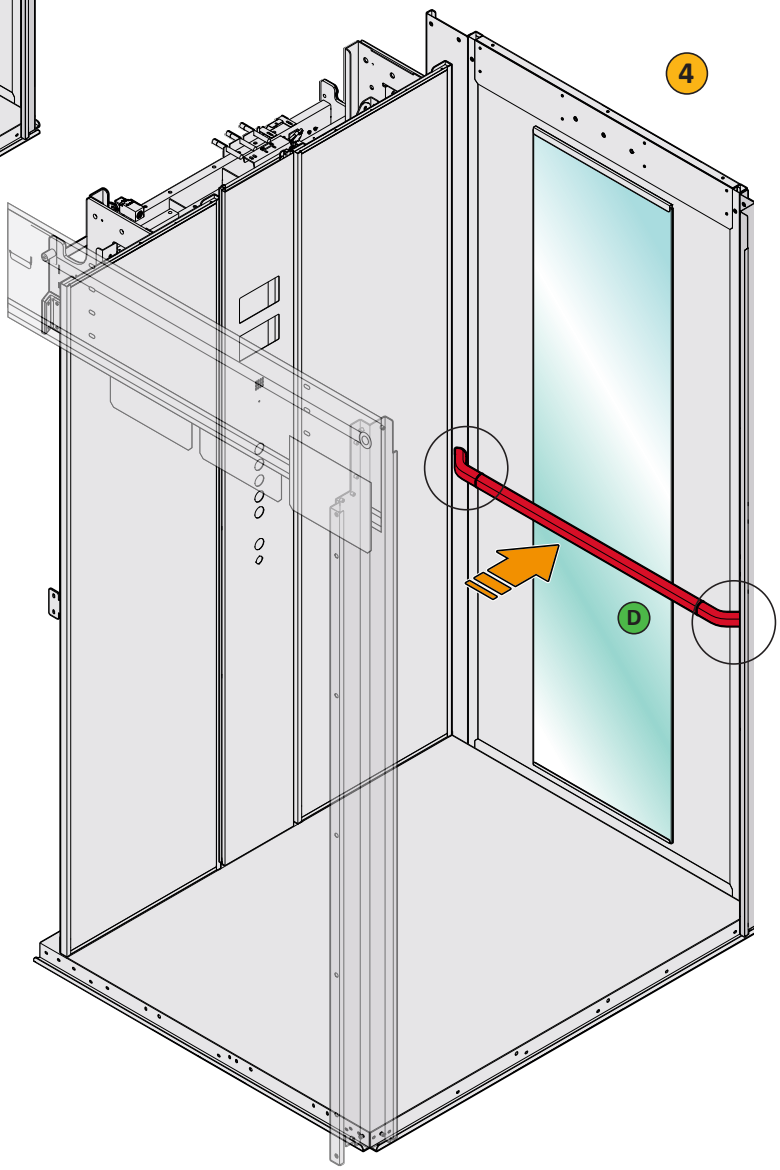


3 Insert the mirror C into the relevant supports.



4 Put into place the handrail (if any) D and fasten it using the hardware pre-installed in the handrail itself.

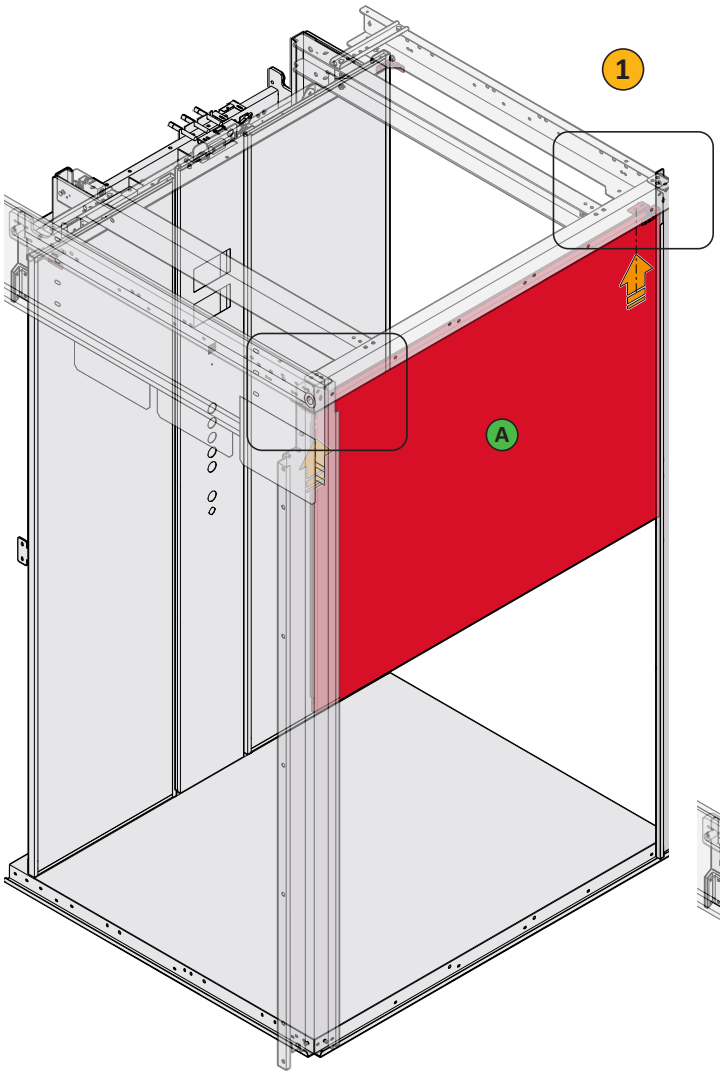


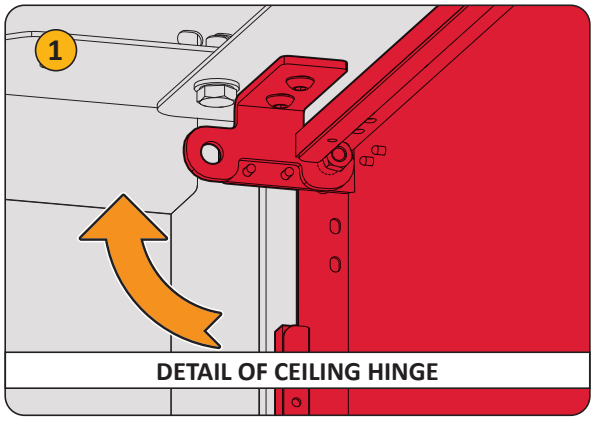


14.28. Car counter-ceiling - Installation

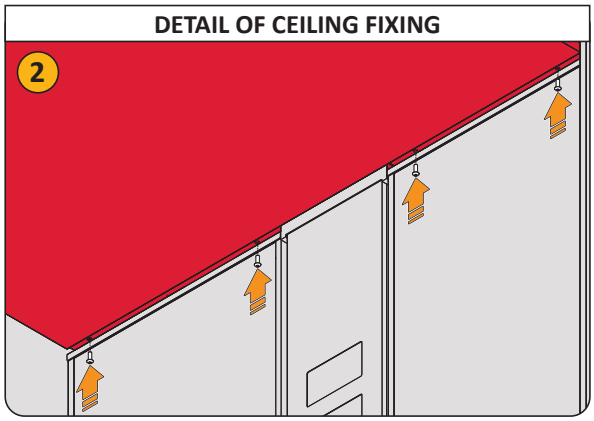
14.28.01 CAR COUNTER-CEILING (WITH SAFETY CONTACT) - INSTALLATION

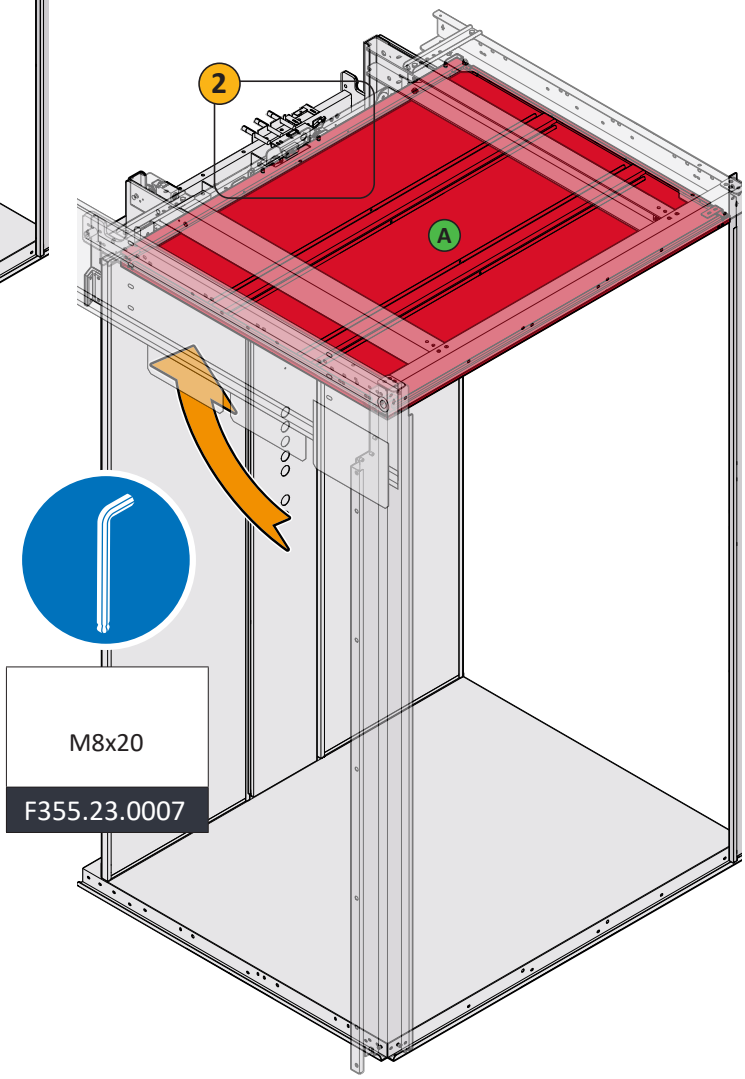
(1) Put into place the car counter-ceiling (A) and fasten it using the supplied screws





(2) Raise the counter-ceiling, (A) swivelling it on the hinges, and fasten it using the supplied screws.

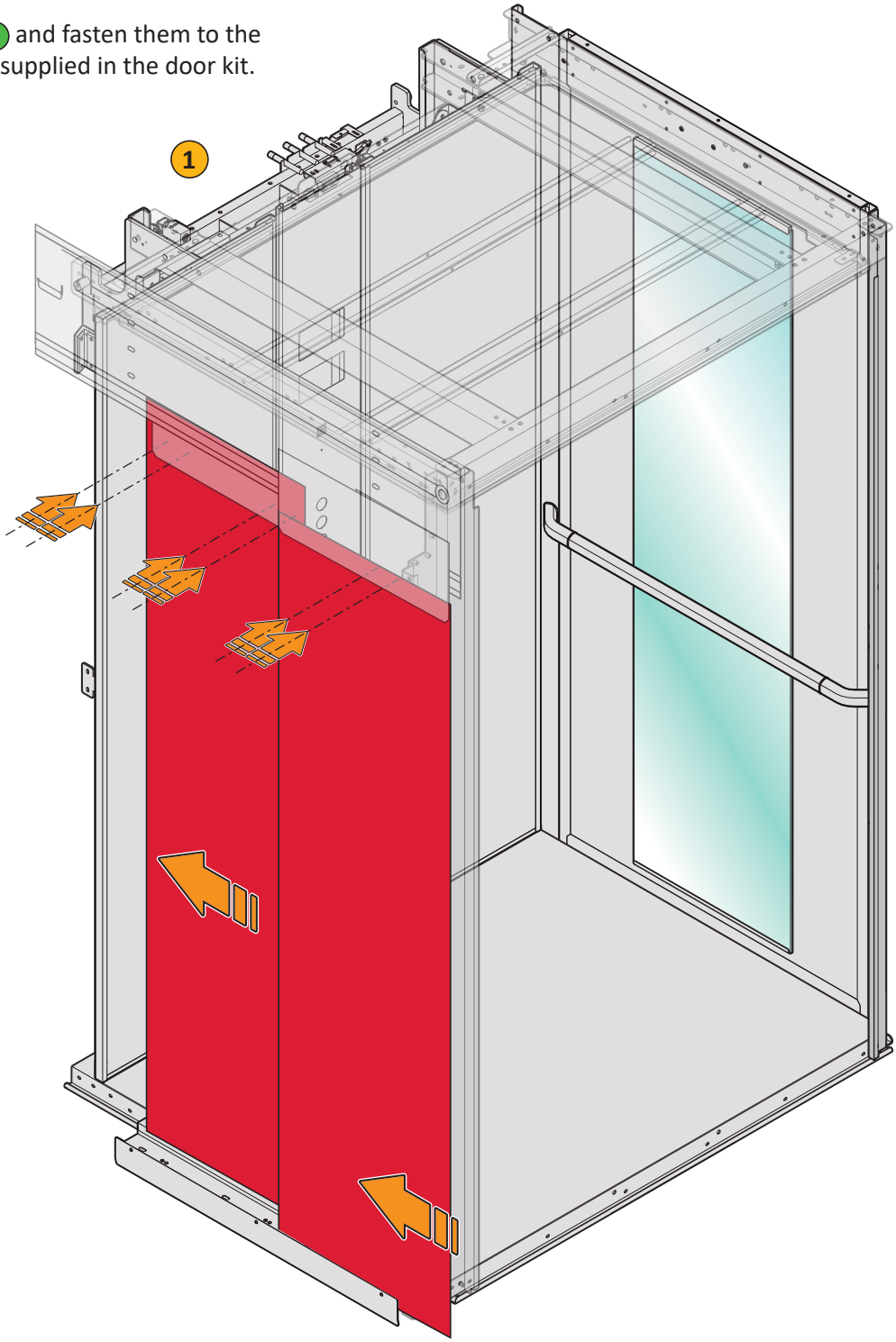




14.29. Car doors - Panels - Installation

14.29.01 SLIDING PANELS - INSTALLATION

(1) Insert the sliding panels (B) and fasten them to the operator using the screws supplied in the door kit.



14.30. 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.

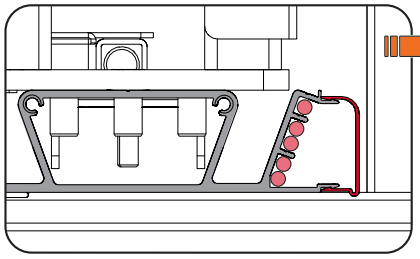
For electrical connections, refer to the manual IM.TEC.129 “ELECTRICAL EQUIPMENT (U.D.E.C.) INSTALLATION AND DIAGNOSTIC INSTRUCTIONS” and to the system wiring diagram.

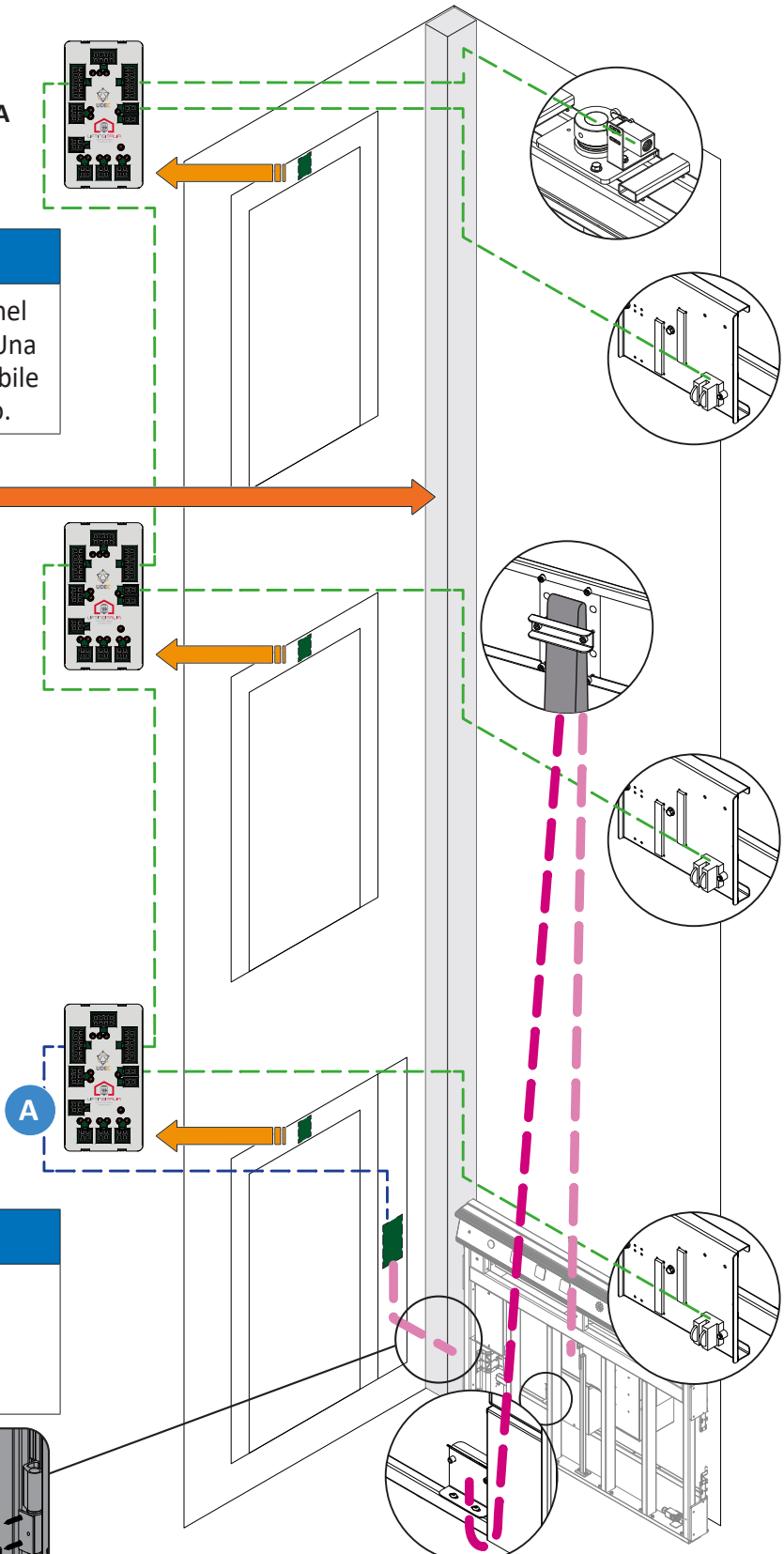
14.30.01 COLLEGAMENTI ELETTRICI DI VANO

- Cablare i componenti elettrici mano a mano che vengono installati.
- Collegare per ULTIMO la dorsale di vano **A** al quadro elettrico.

AVVISO

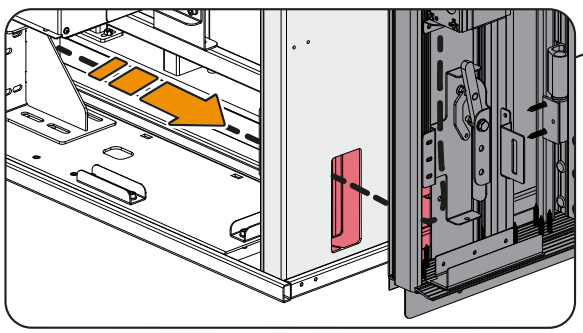
I cavi elettrici devono passare nel vano predisposto nella guida. Una volta finito il cablaggio, è possibile installare la protezione a scatto.



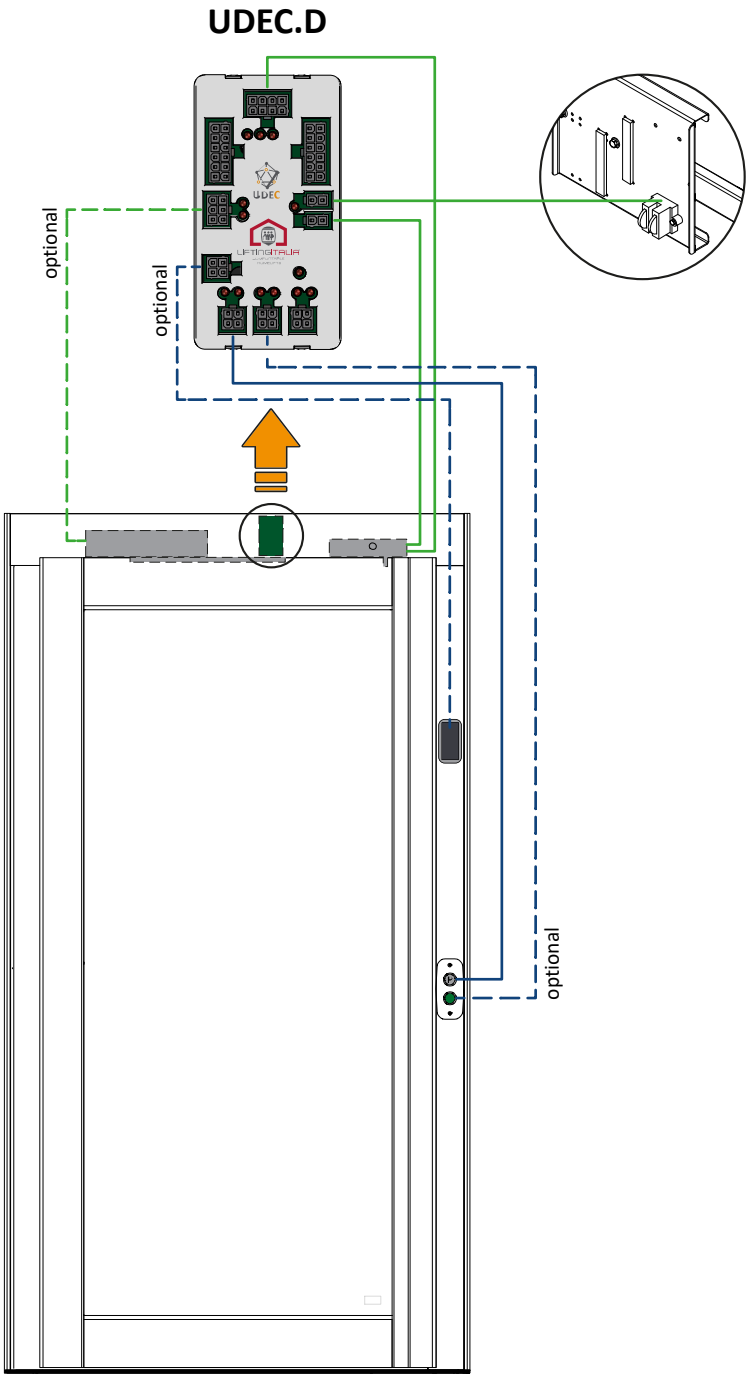


AVVISO

I cavi piatti devono passare nel foro passante fra la guida e la porta contenente il quadro elettrico, in fondo fossa.



14.30.02 COLLEGAMENTI ELETTRICI DELLE PORTE



14.31. Operations to be performed before operating the platform

NOTICE

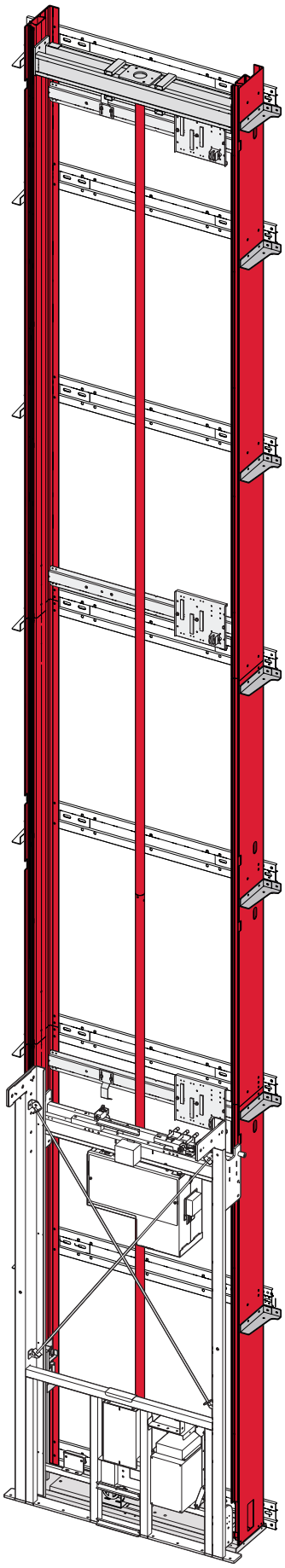
LUBRICATE ALL GUIDE RAILS USING THE SILICONE SPRAY OIL SUPPLIED WITH THE SYSTEM (F353.05.9017).

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.

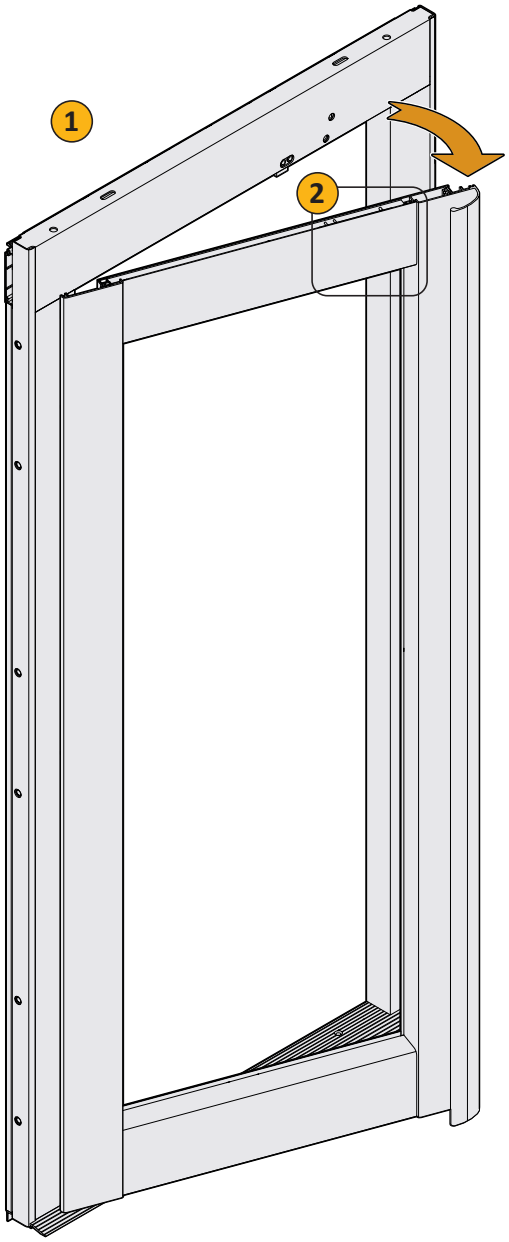


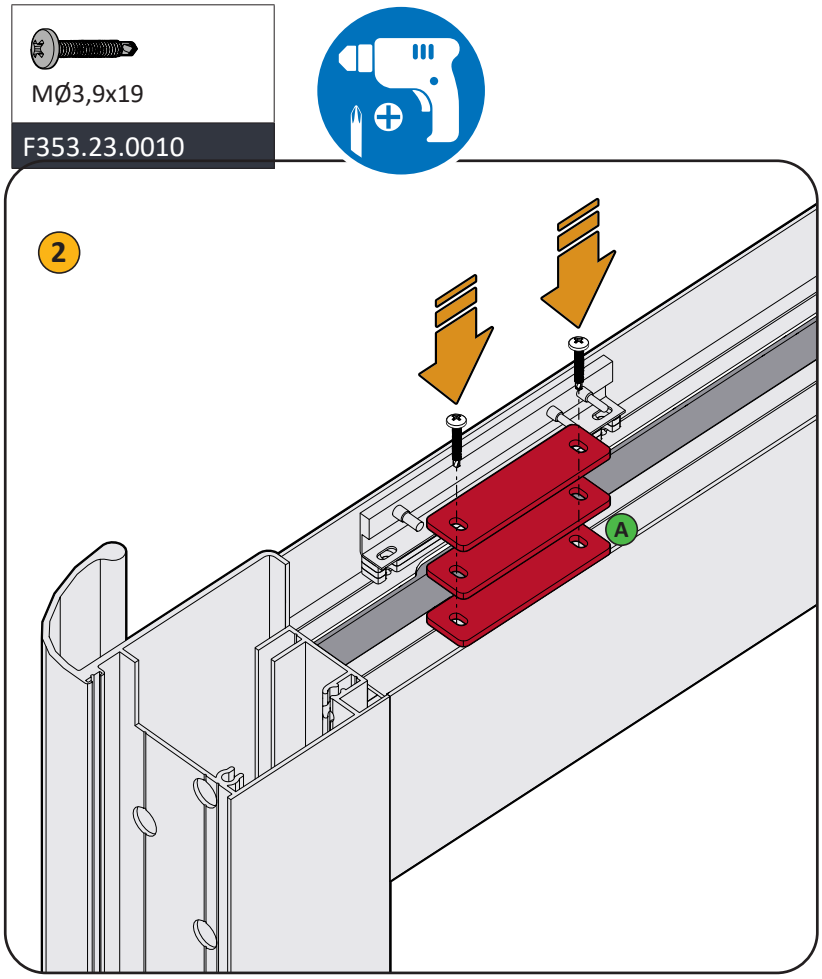
14.32. Landing door - adjustments

14.32.01 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.





14.33. Shaft in structure - assembly

14.33.01 IN STRUCTURE SHAFT (WITH SIDE INFILL) - ASSEMBLY

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).

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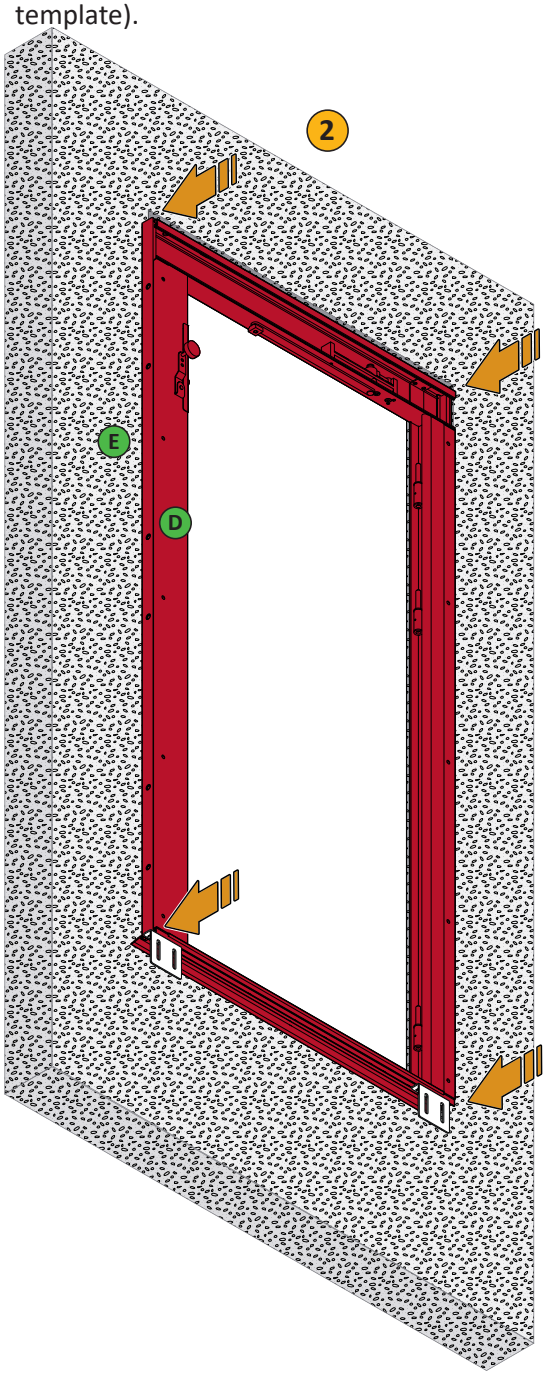
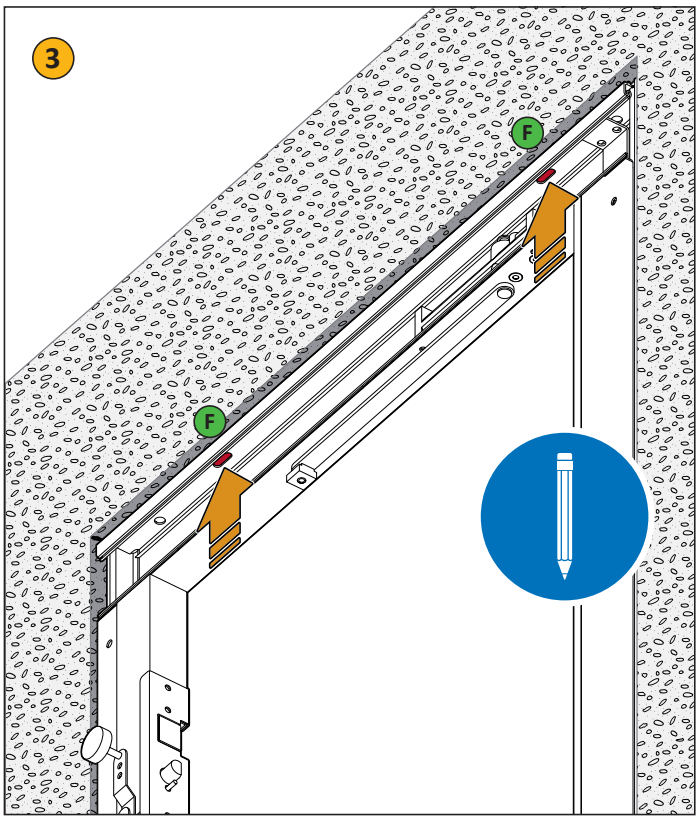
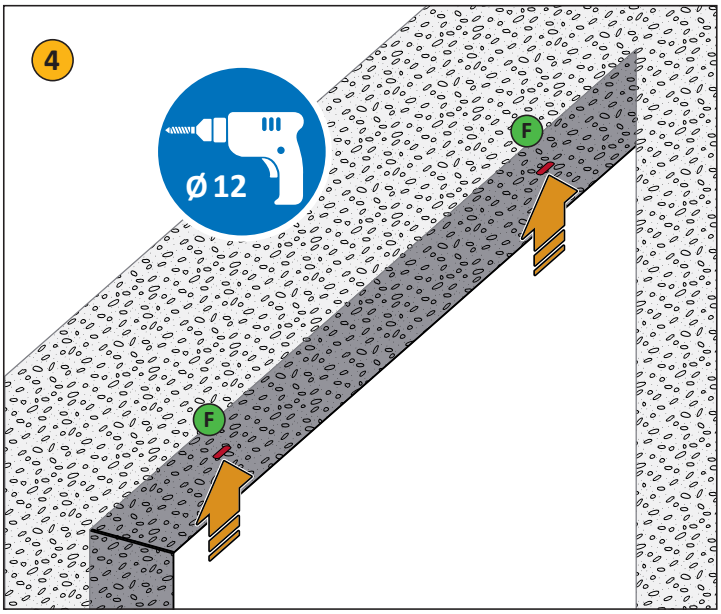


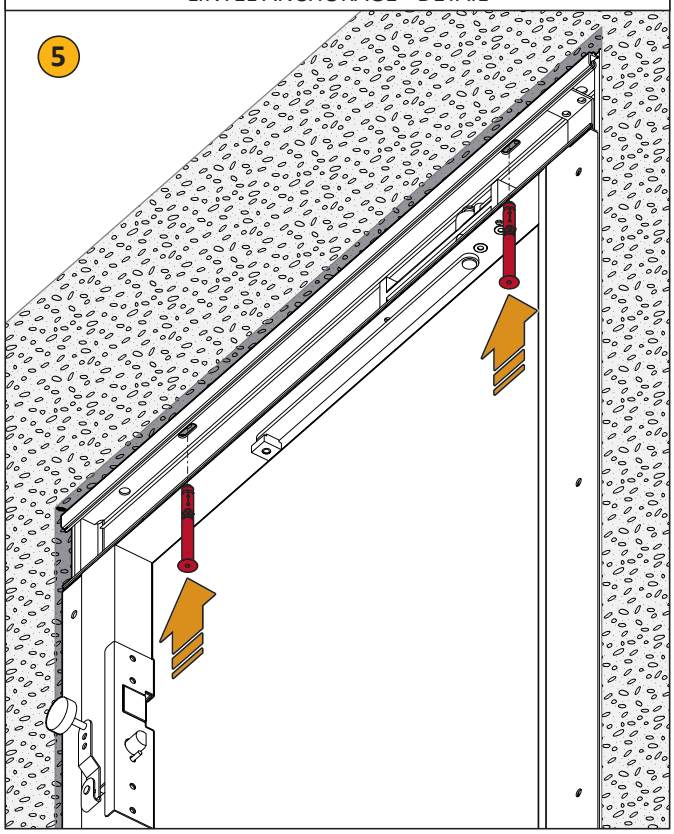


4 Remove the door D and drill the lintel at the anchoring points F.



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

LINTEL ANCHORAGE - DETAIL



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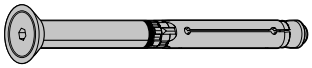
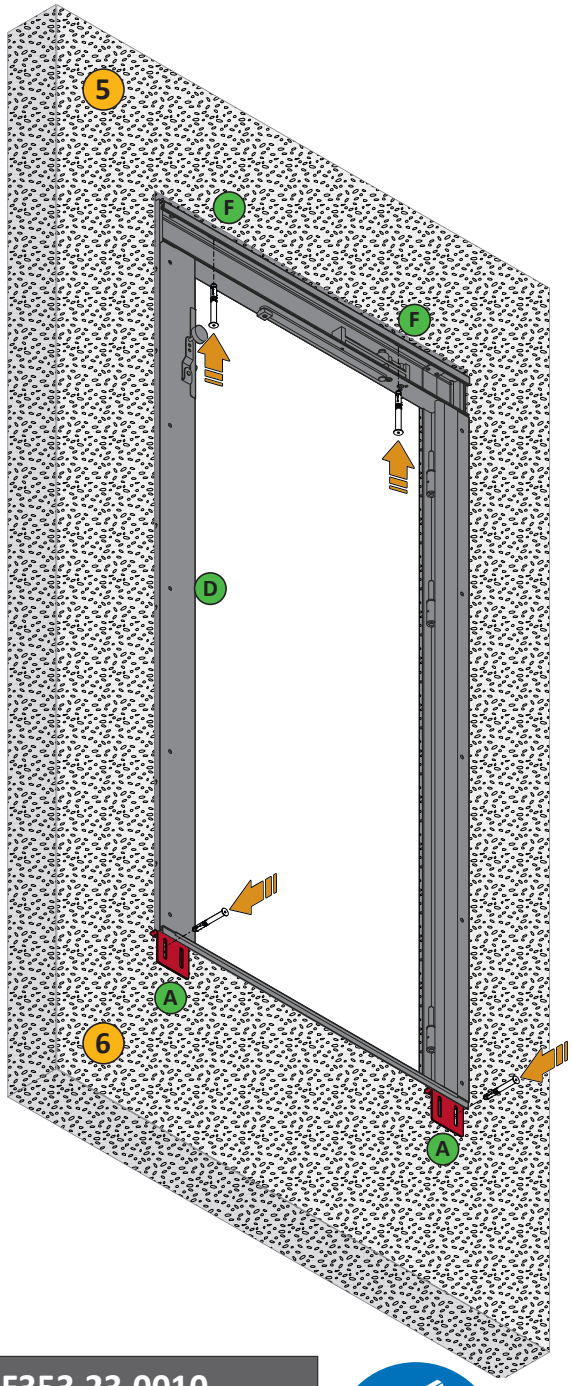
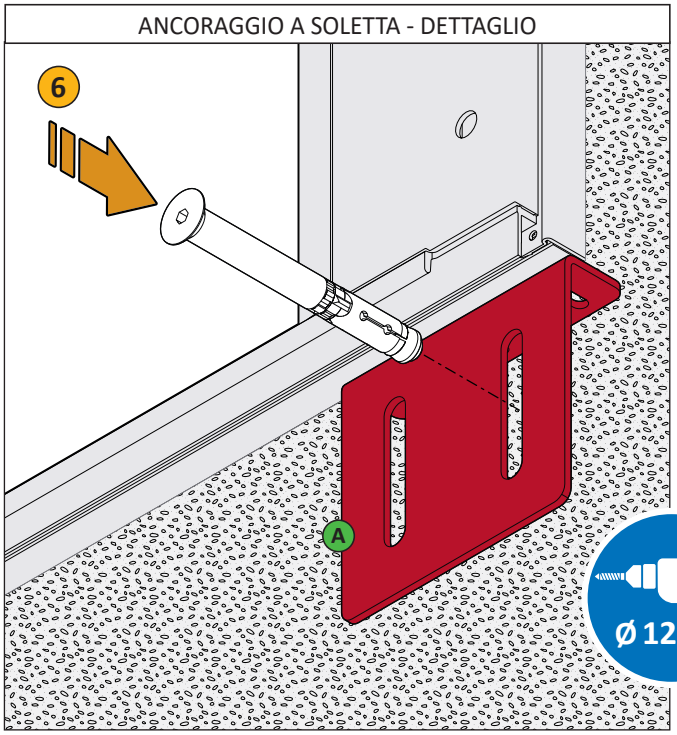




6 Drill the slab in the slots of the brackets A and anchor the door D to the slab with the expansion dowels.

ANCORAGGIO A SOLETTA - DETTAGLIO



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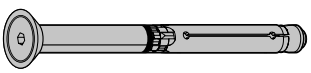
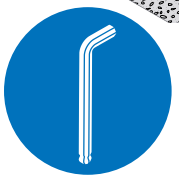
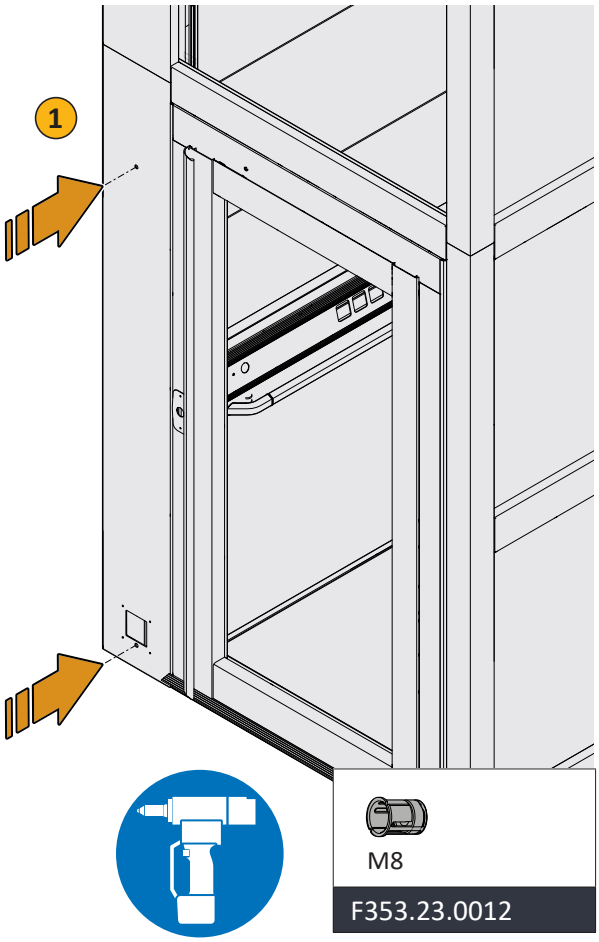


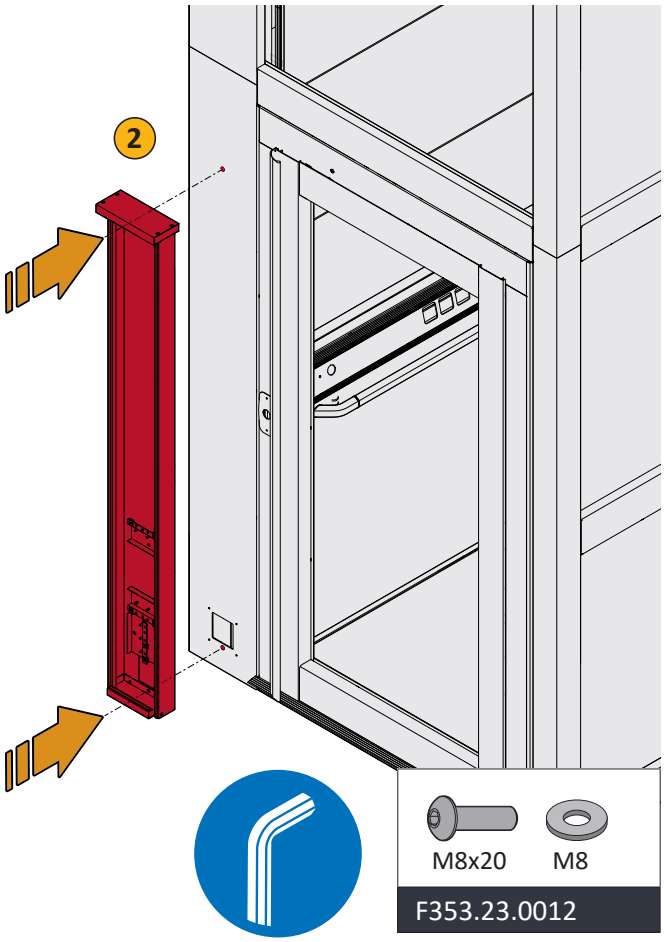


14.34. Control cabinet

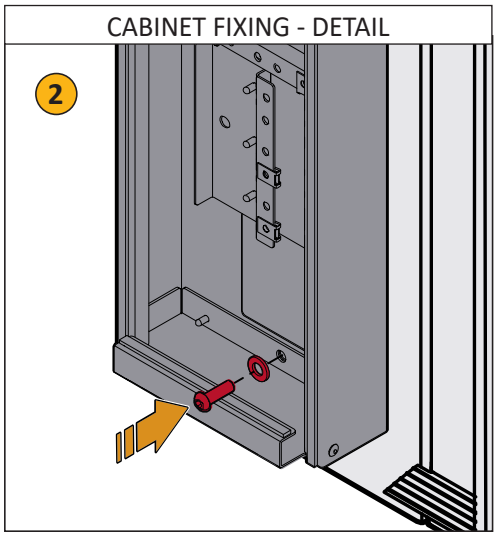
14.34.01 CONTROL CABINET - ASSEMBLY

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



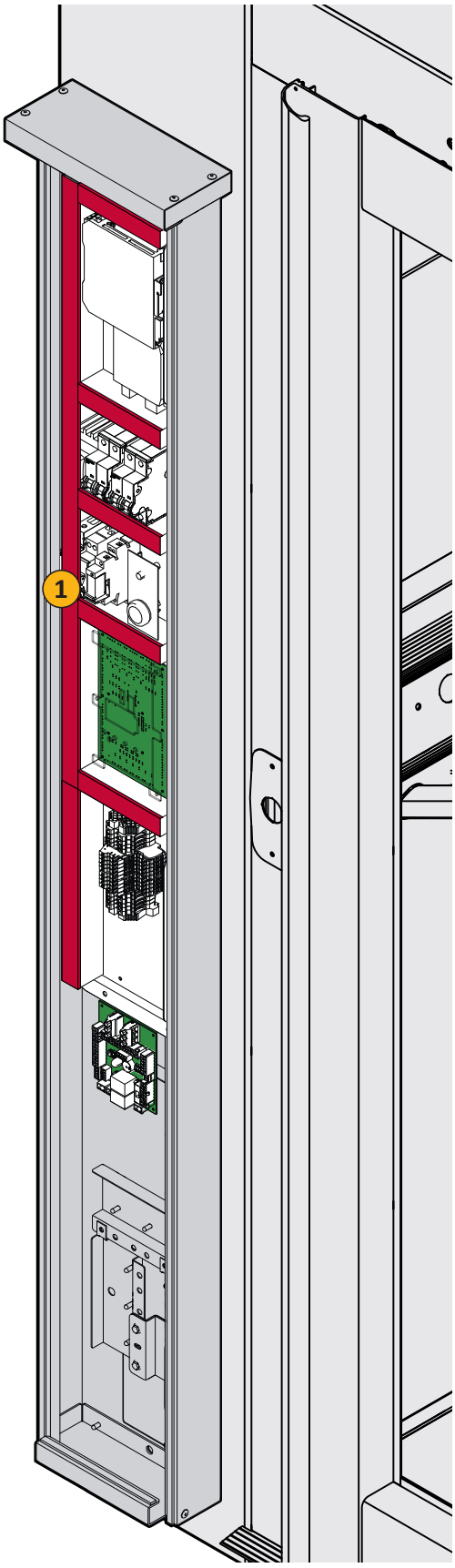


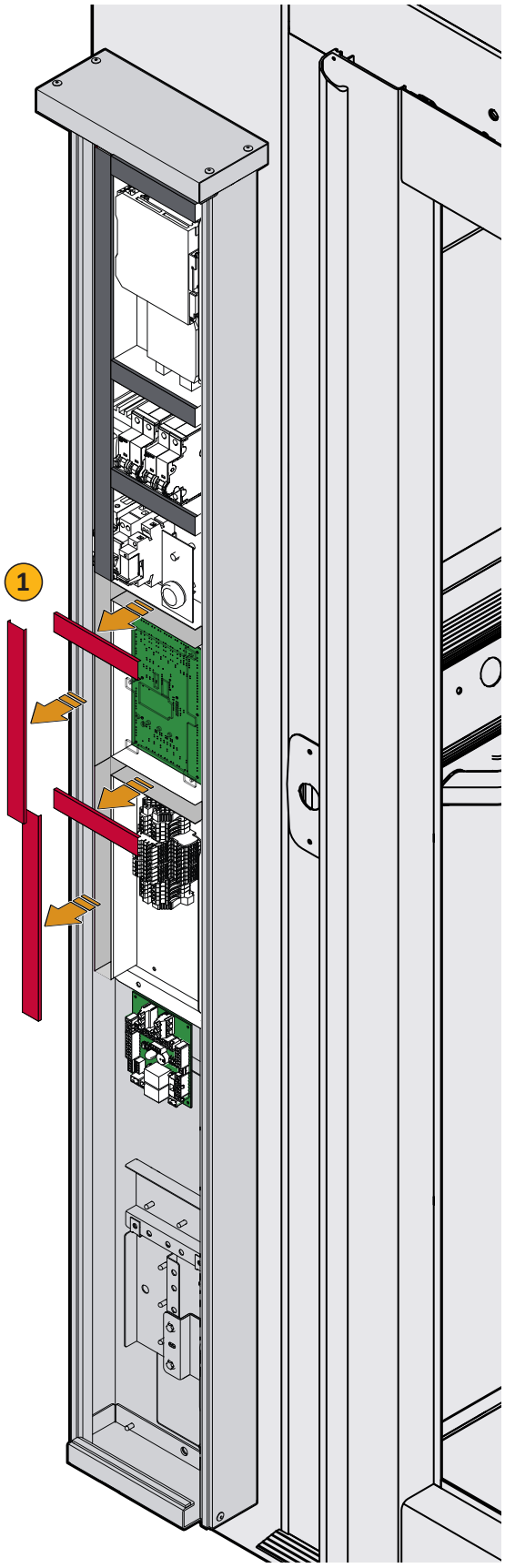
CABINET FIXING - DETAIL



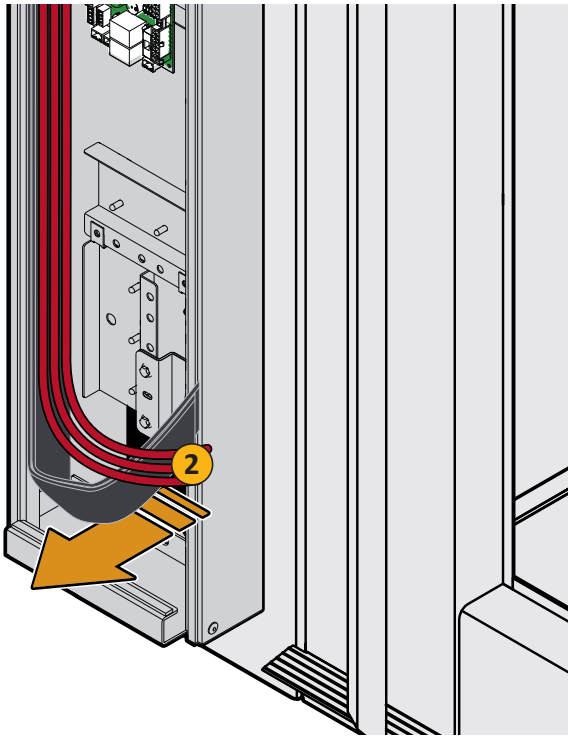
14.34.02 CONTROL CABINET - CABLE ROUTING

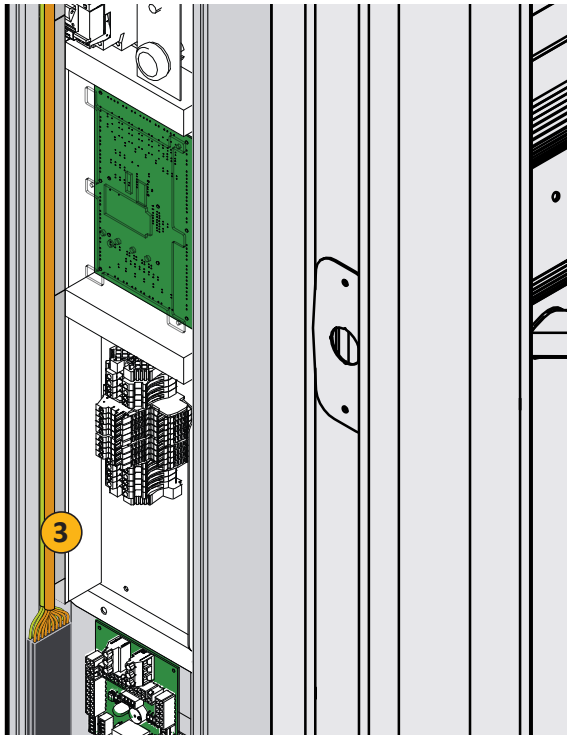
- Remove cable tray covers (1).



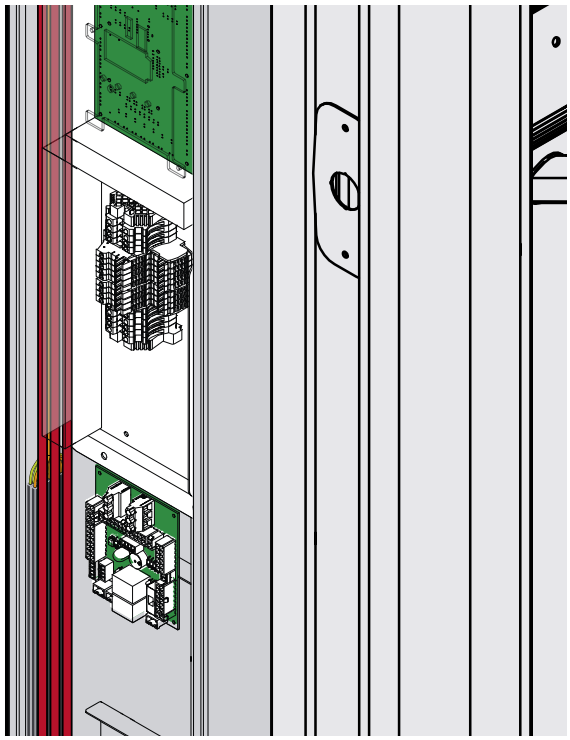


- From the shaft, insert the cables into the control cabinet through the opening provided (2).





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

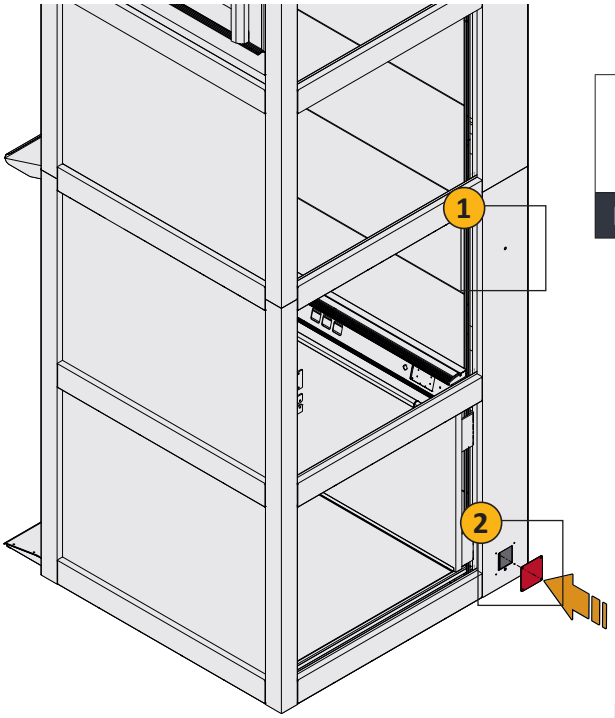


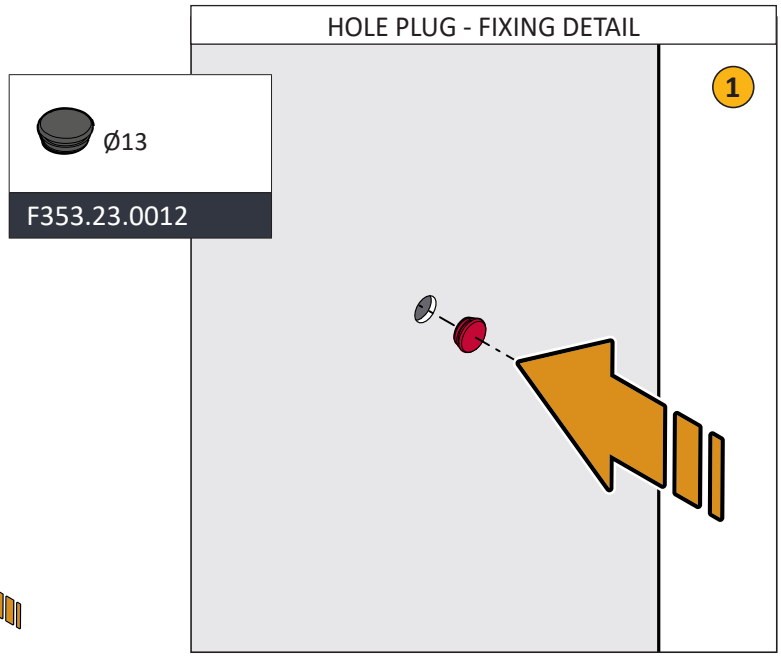
- After making the necessary connections, secure with cable ties and close the cable tray.

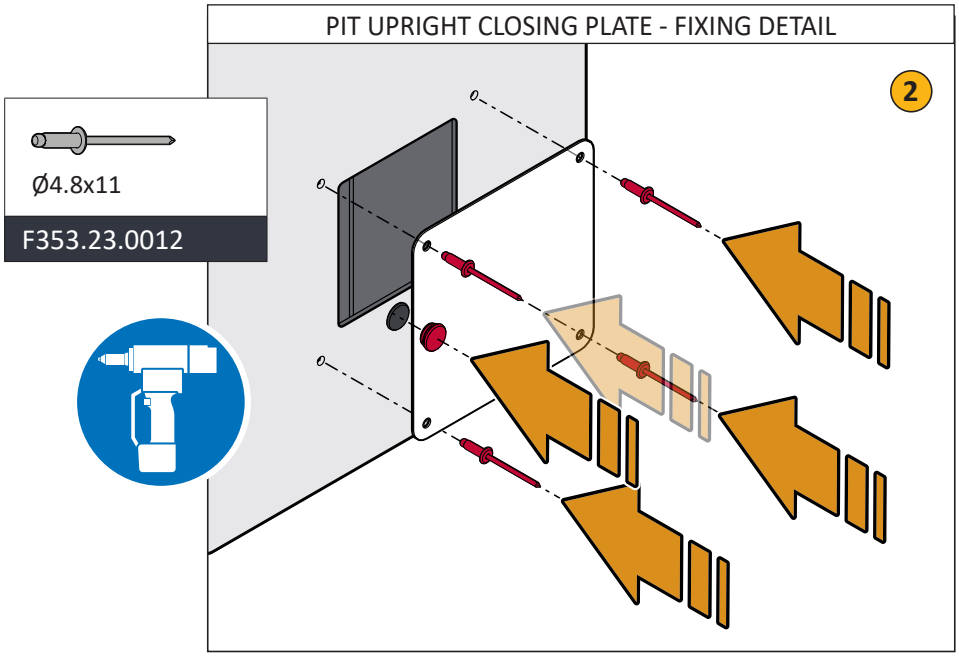
14.34.03 ARMADIO QUADRO ELETTRICO - CHIUSURA FORO MONTANTE

Entrambi i montanti sono preforati per consentire l'installazione dell'armadio quadro elettrico; pertanto i fori di accesso non utilizzati andranno chiusi con tappo in PVC (forniti nel kit) e piastra di chiusura in inox presente negli imballi struttura.

- Inserire nel foro Ø 13 l'apposito tappo in PVC (1).
- Chiudere l'apertura con la piastra inox in ed i rivetti in dotazione (2).

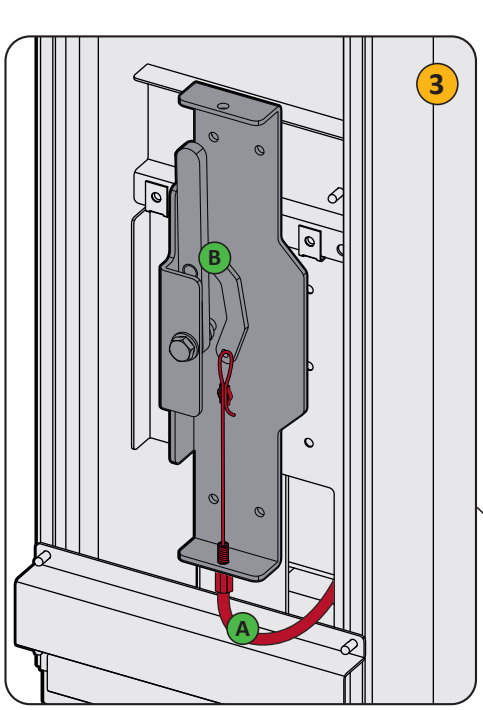


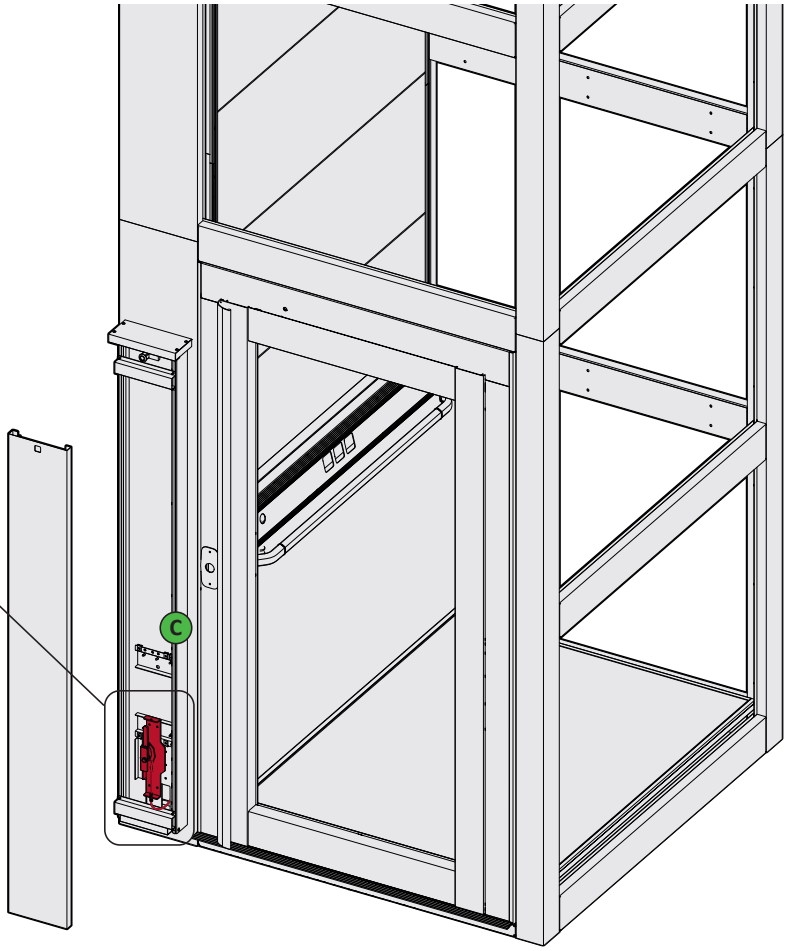


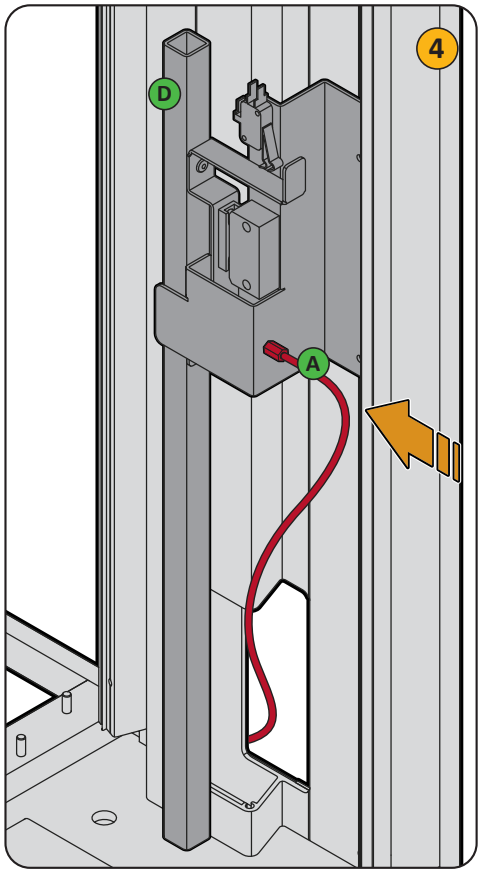


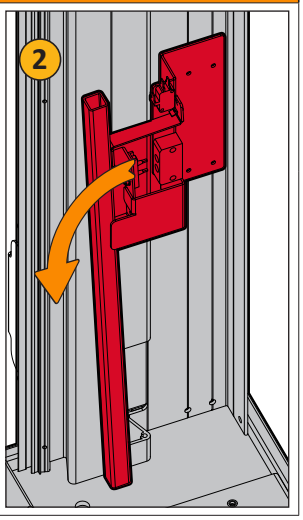
14.34.04 SAFE-PIT - EXTERNAL CONTROL LEVER CONNECTION

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







WARNING		
	**DANGER OF CRUSHING**	
	**MANUALLY OPEN THE SAFE PIT SAFETY DEVICE STRUT FROM OUTSIDE THE PIT (2).**	

15. Infills

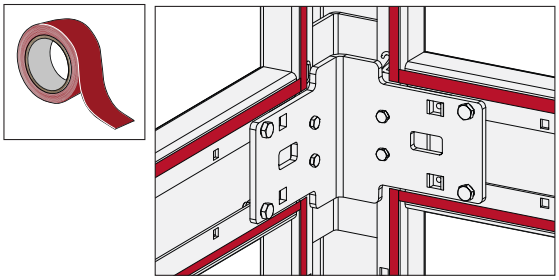
15.01. Infills - preliminary operations

The infills, the landing doors, and the guide rails (opposite to the mechanics), are installed in a circular sequence from the bottom upwards.
The following will describe the individual operations; it is up to the installer to take the correct reference for the installation of the components.

NOTICE

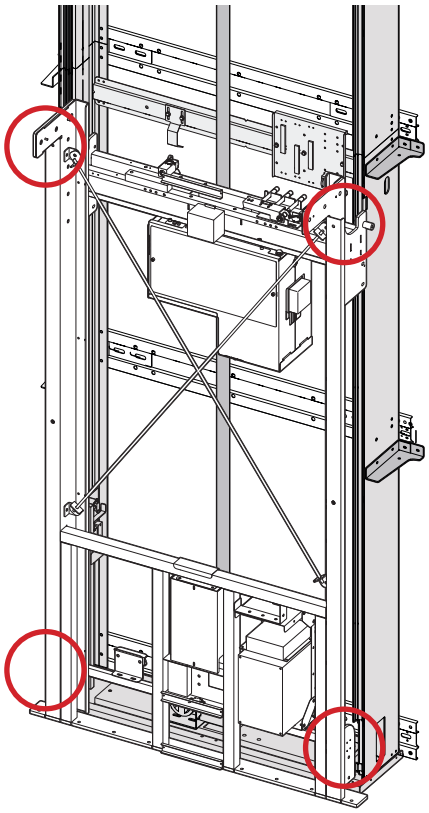
In outdoor shells, lay the adhesive seal or the silicone on the internal surface of jambs and transoms before installing the infill.

Install the infill on all sides before installing the system.

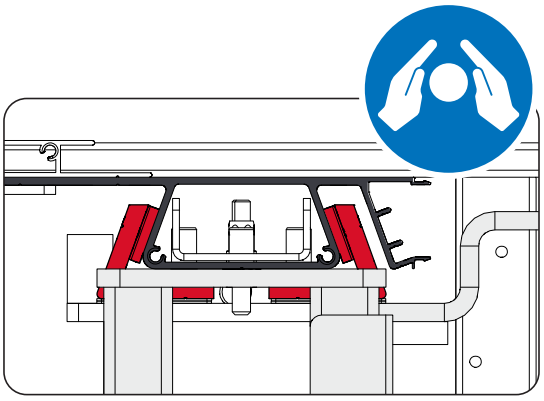


IMPORTANT!

RISK OF GUIDE RAIL DAMAGING.
The processing debris may damage the guide rails and shoes and cause the machine to malfunction.



Cover/protect the shoes from the processing debris that could seriously damage the guide rails and shoes.
CHECK THE CLEANLINESS OF THE SHOES AT EACH HOLE.



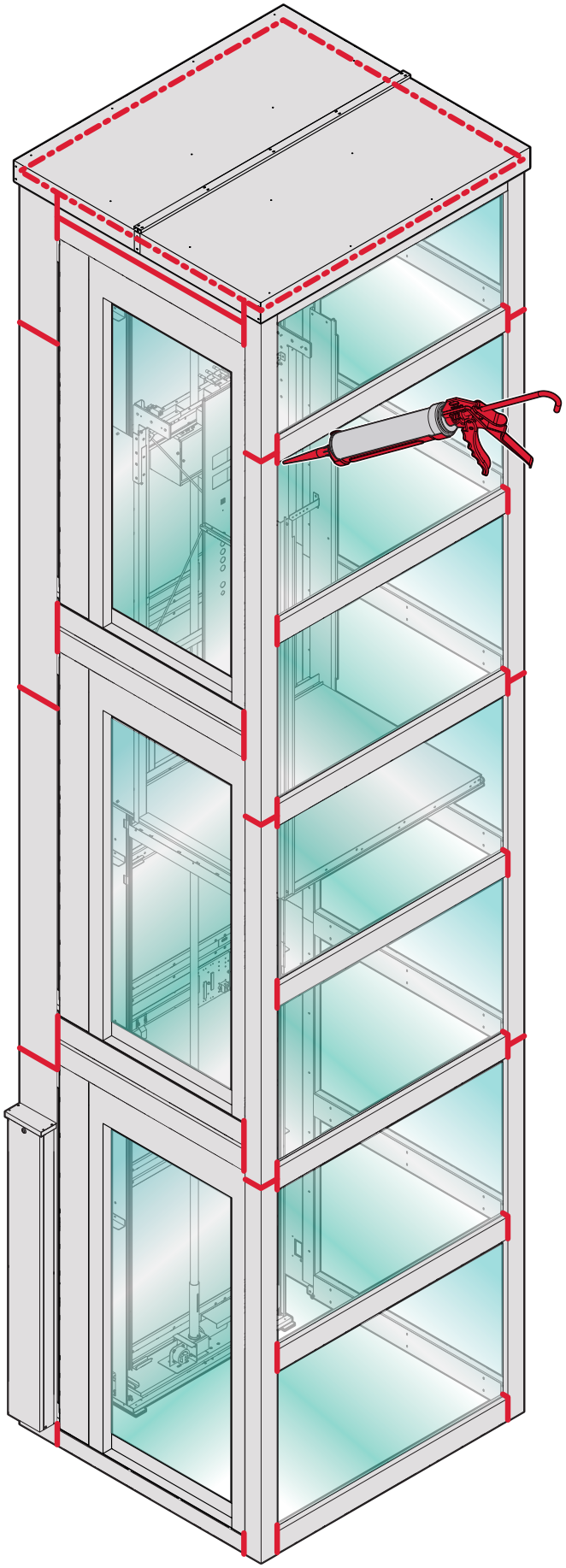
15.02. Infill - silicone application for outdoor use

IMPORTANT!

SEAL ALL THE JOINTS BETWEEN JAMBS AND TRANSOMS AND THE SHELL-ROOF INTERFACE.

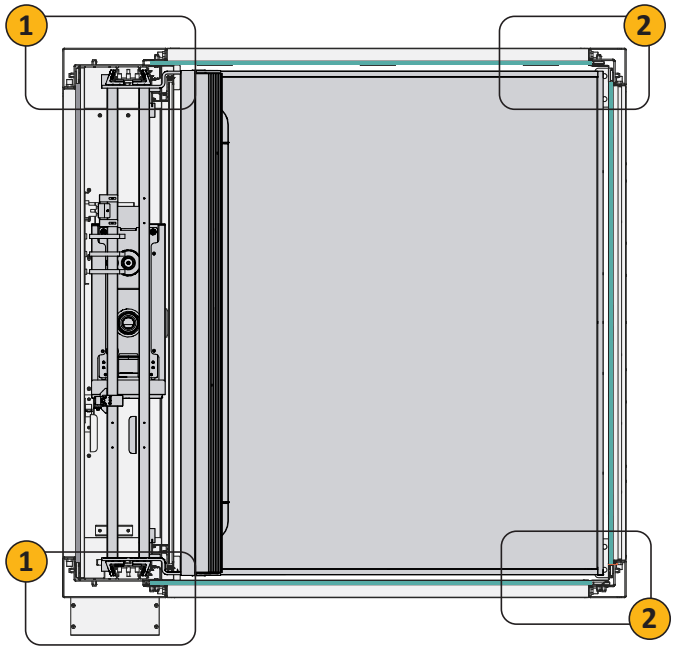
In ALL OUTDOOR SHELLS you need to carefully apply silicone for outdoor windows in the locations shown in the figure (in case of both glazed and blanking infill), to avoid possible seepages that would damage the shell.

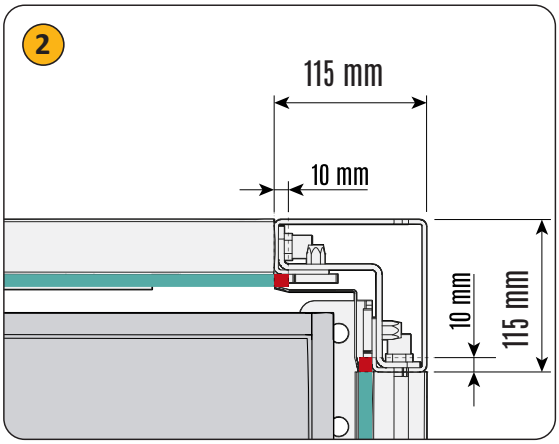
Use transparent neutral silicone suitable for use in outdoor environments. (non supplied).

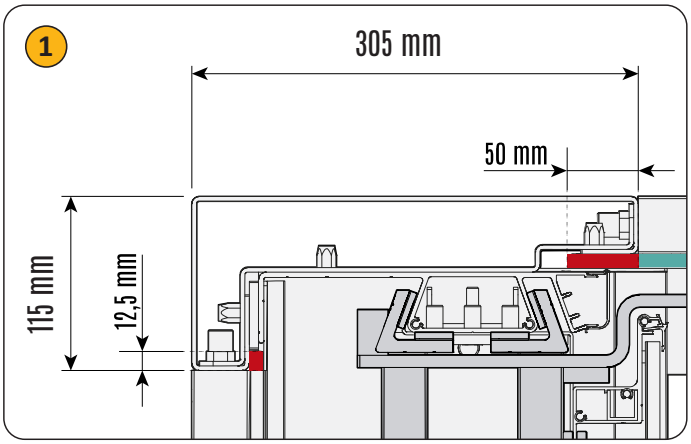


15.03. Structure infills - correct positioning

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

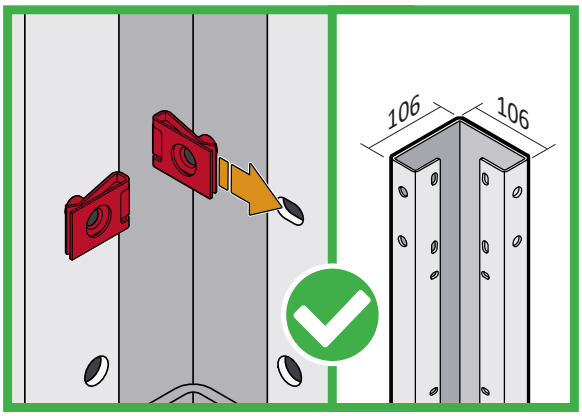


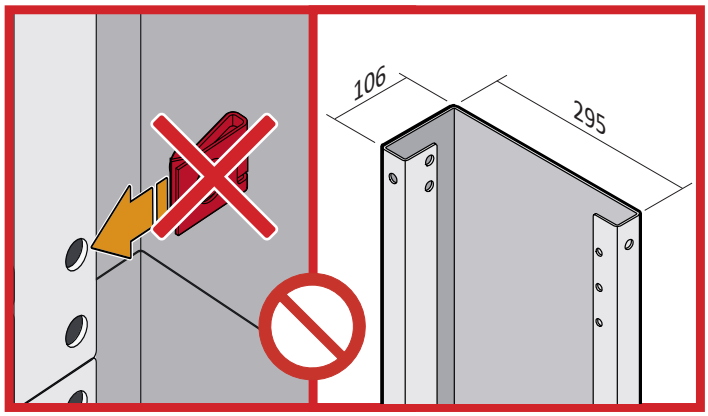




IMPORTANT!

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

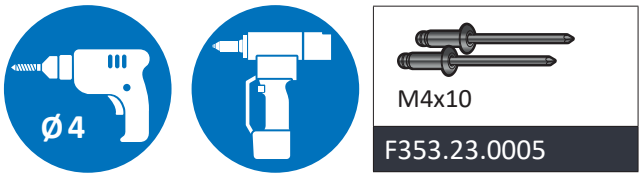


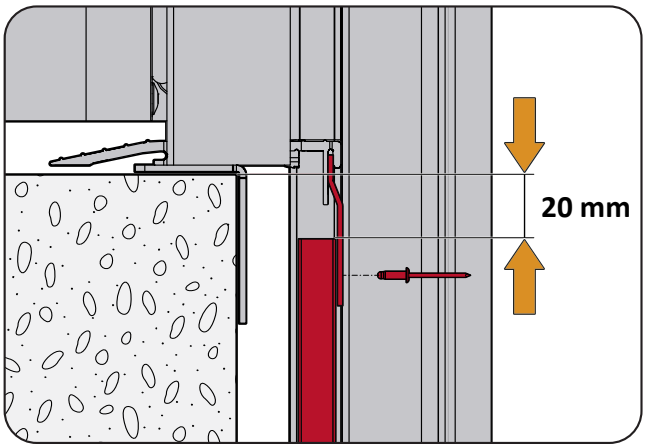


15.04. Infill under the floor door (different from ground floor)

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.





15.05. Structure and mechanics infills - assembling

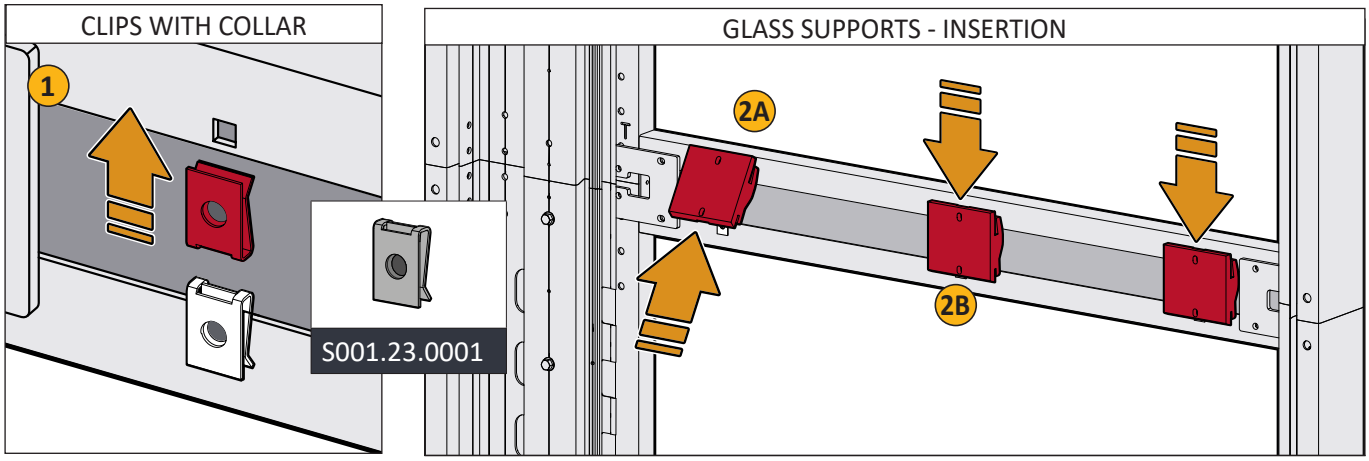
1.1.01 STRUCTURE INFILLS - PREPARATION AND ASSEMBLY

IMPORTANT!

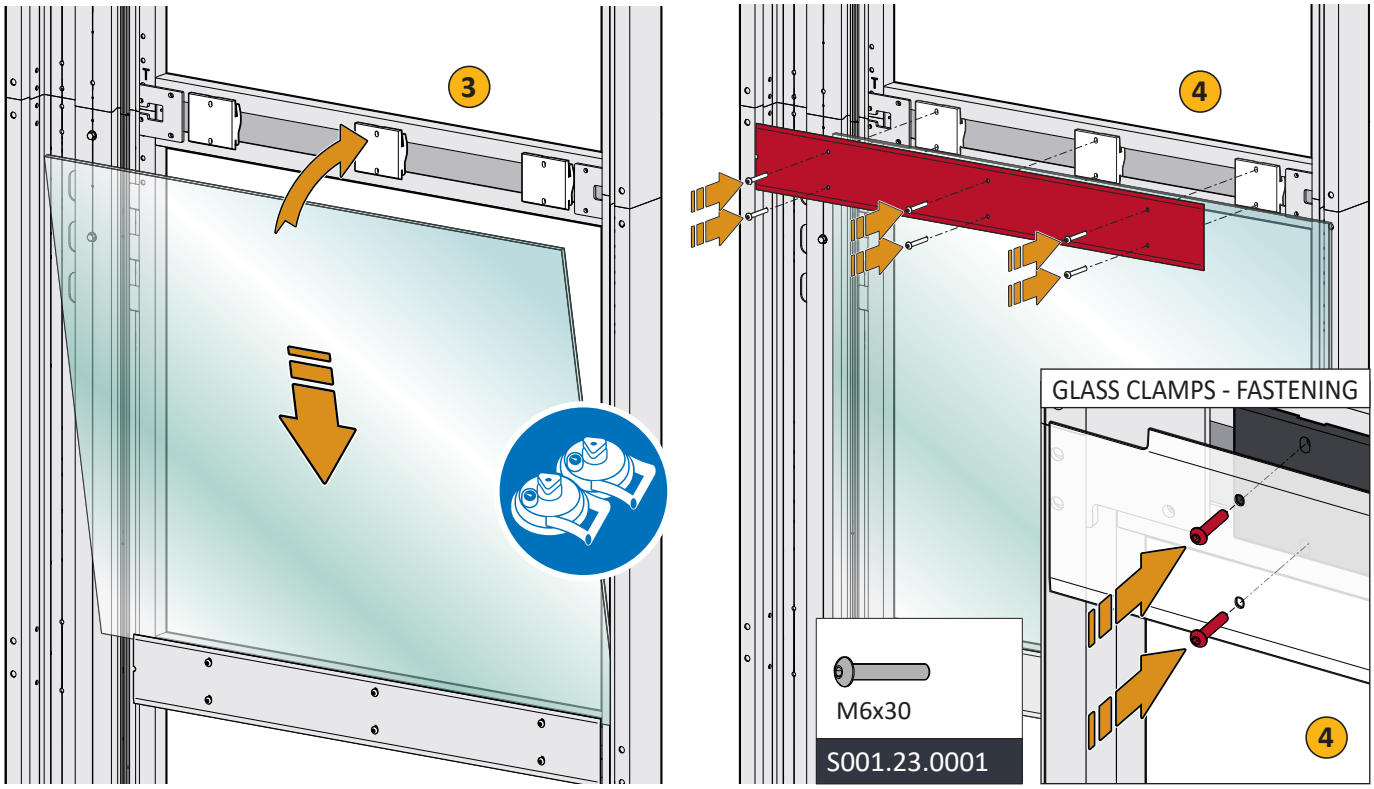
In outdoor structures, place adhesive sealant or silicone on the inside face of uprights and cross members before fitting the infill.

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).



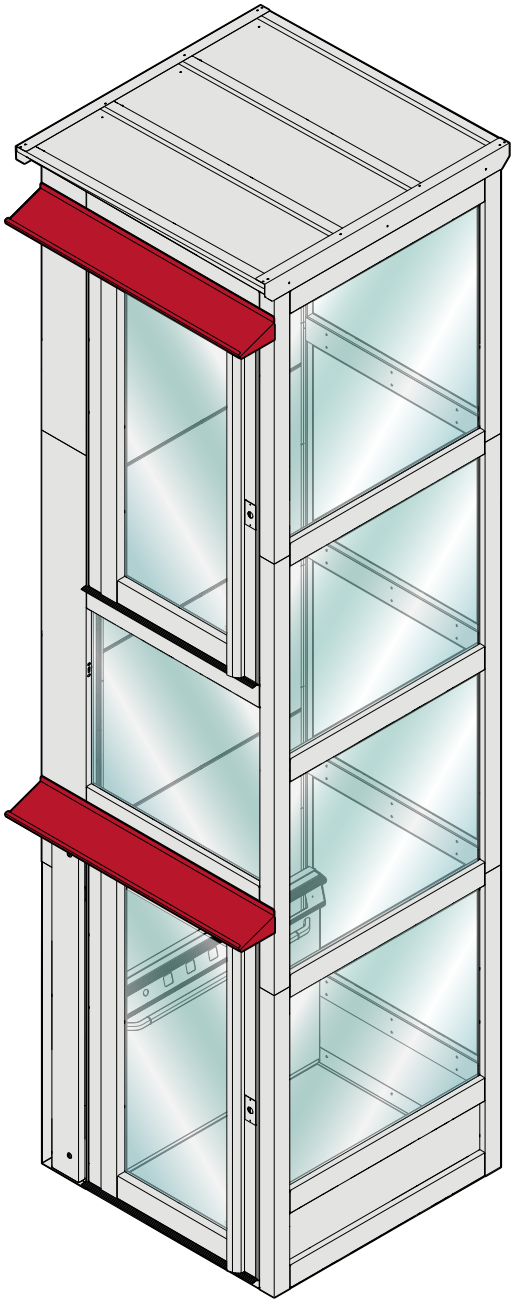
- Insert the glazing beads following the two steps indicated, at a position corresponding to pre-mounted cage nuts (2A) (2B).

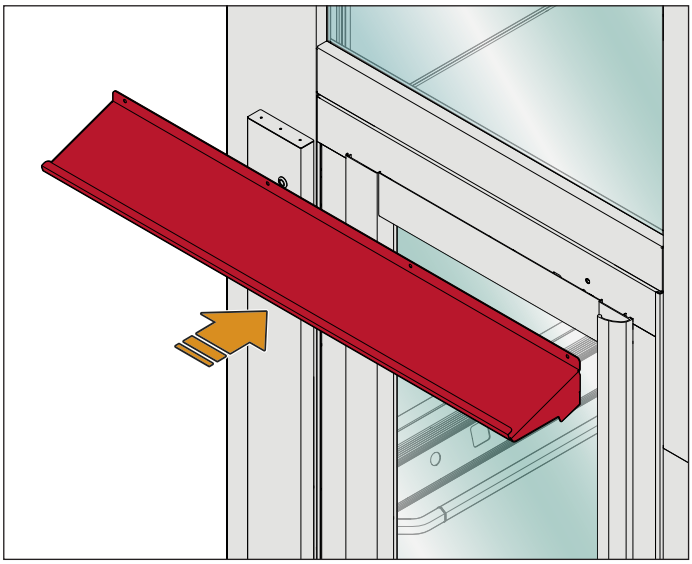


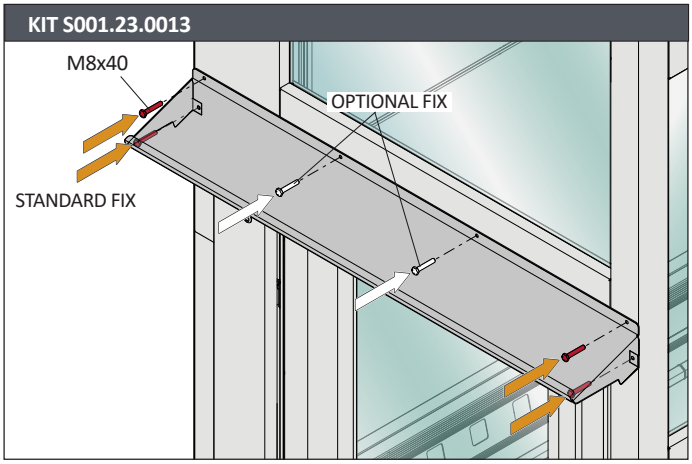
- Position the glass/panelling using the appropriate suction cups (3).
- Secure the glazing bead with the screws provided (4).

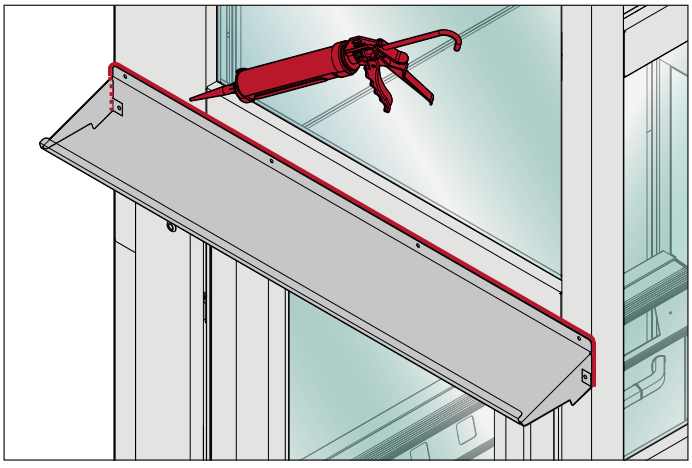
21. Additional installations

21.01. Protective canopy (if supplied)







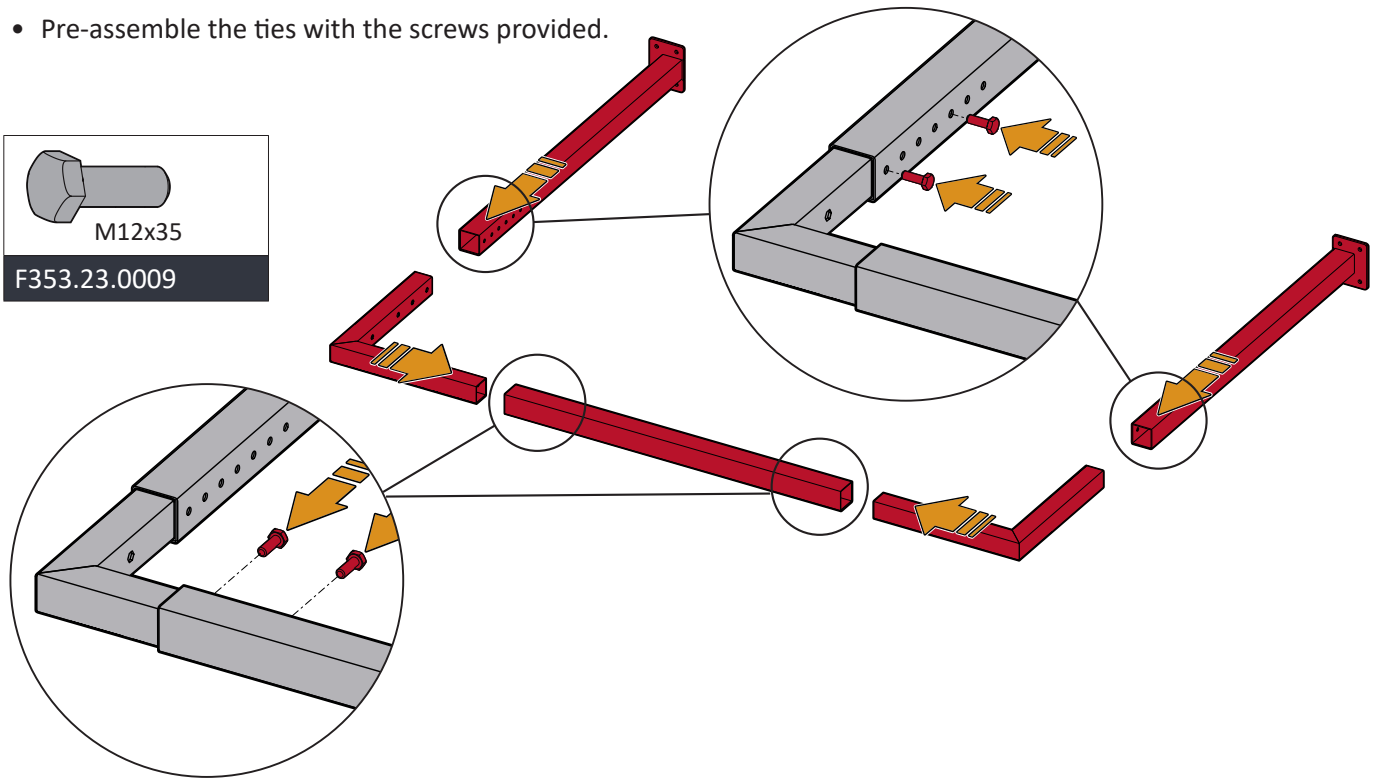


Apply silicone carefully on the three sides of the canopy in order to prevent water seepage.

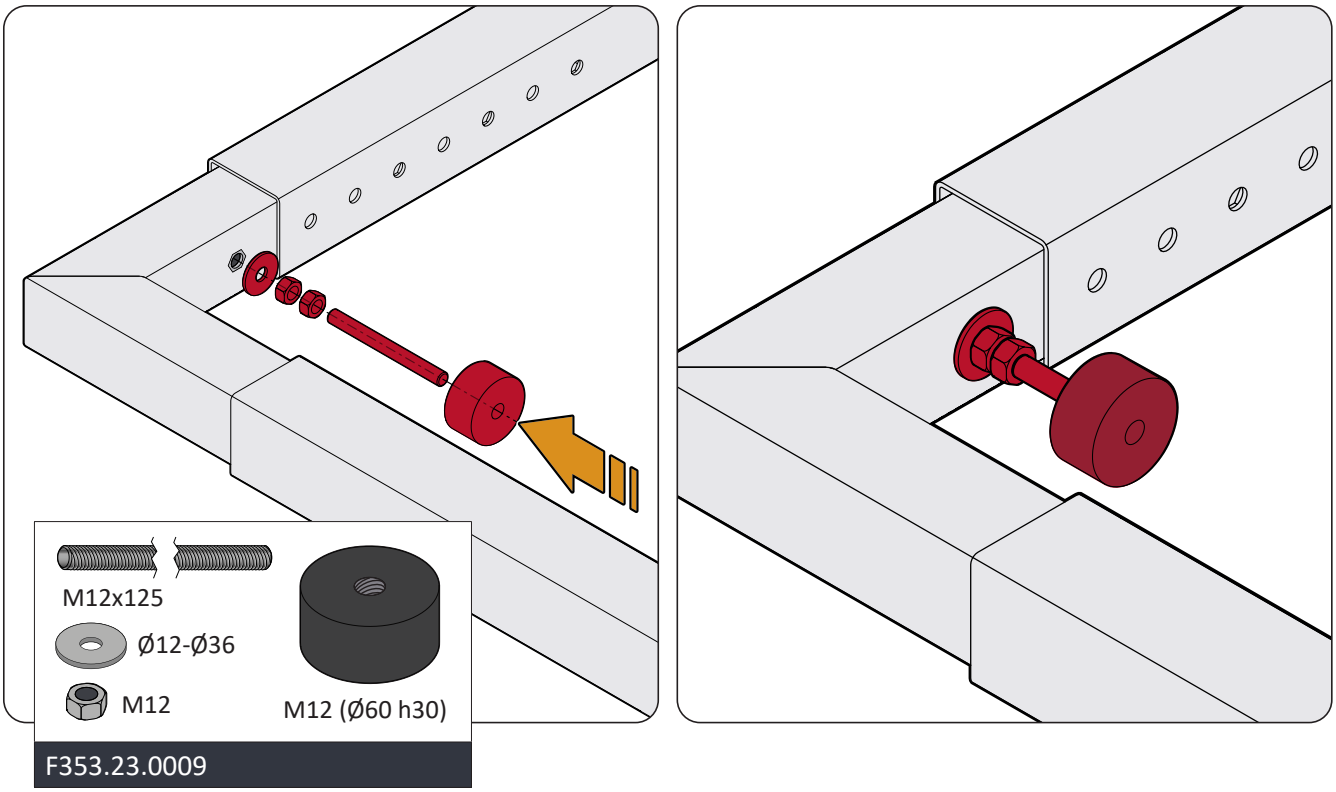
21.02. Structure - anchoring by ties (optional)

21.02.01 ANCHORING TIES - PREPARATION

- Pre-assemble the ties with the screws provided.



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



21.02.02 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).

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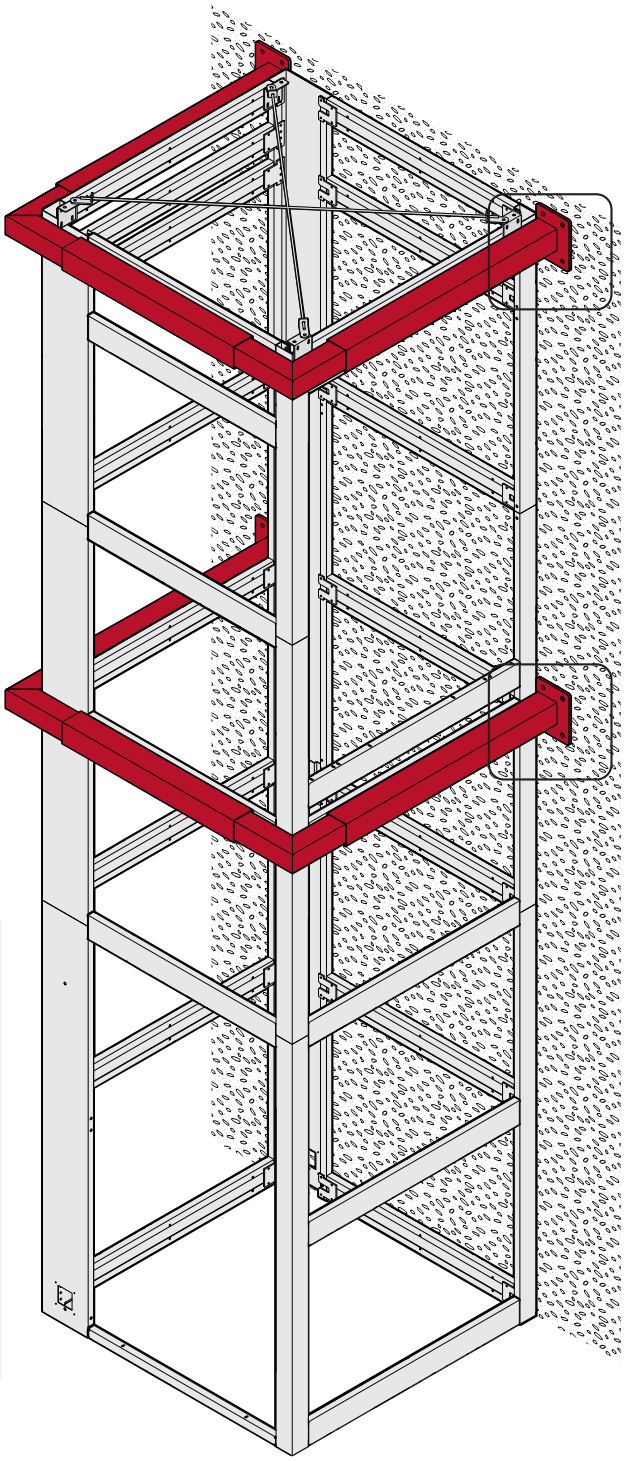
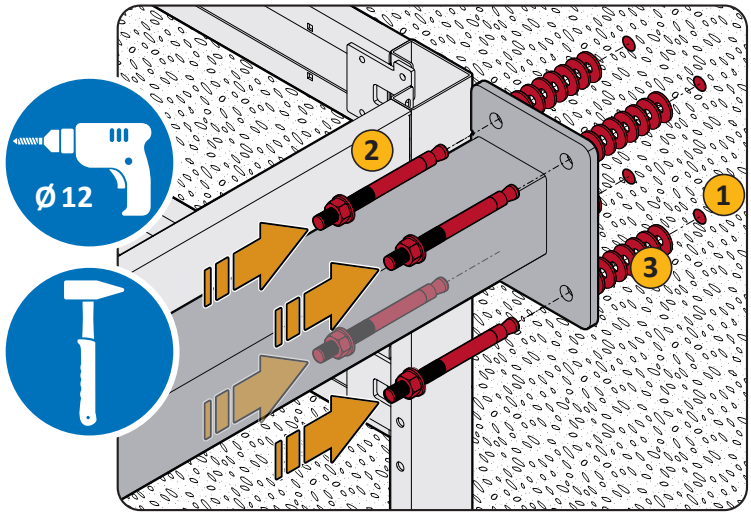




WARNING

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)").

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:

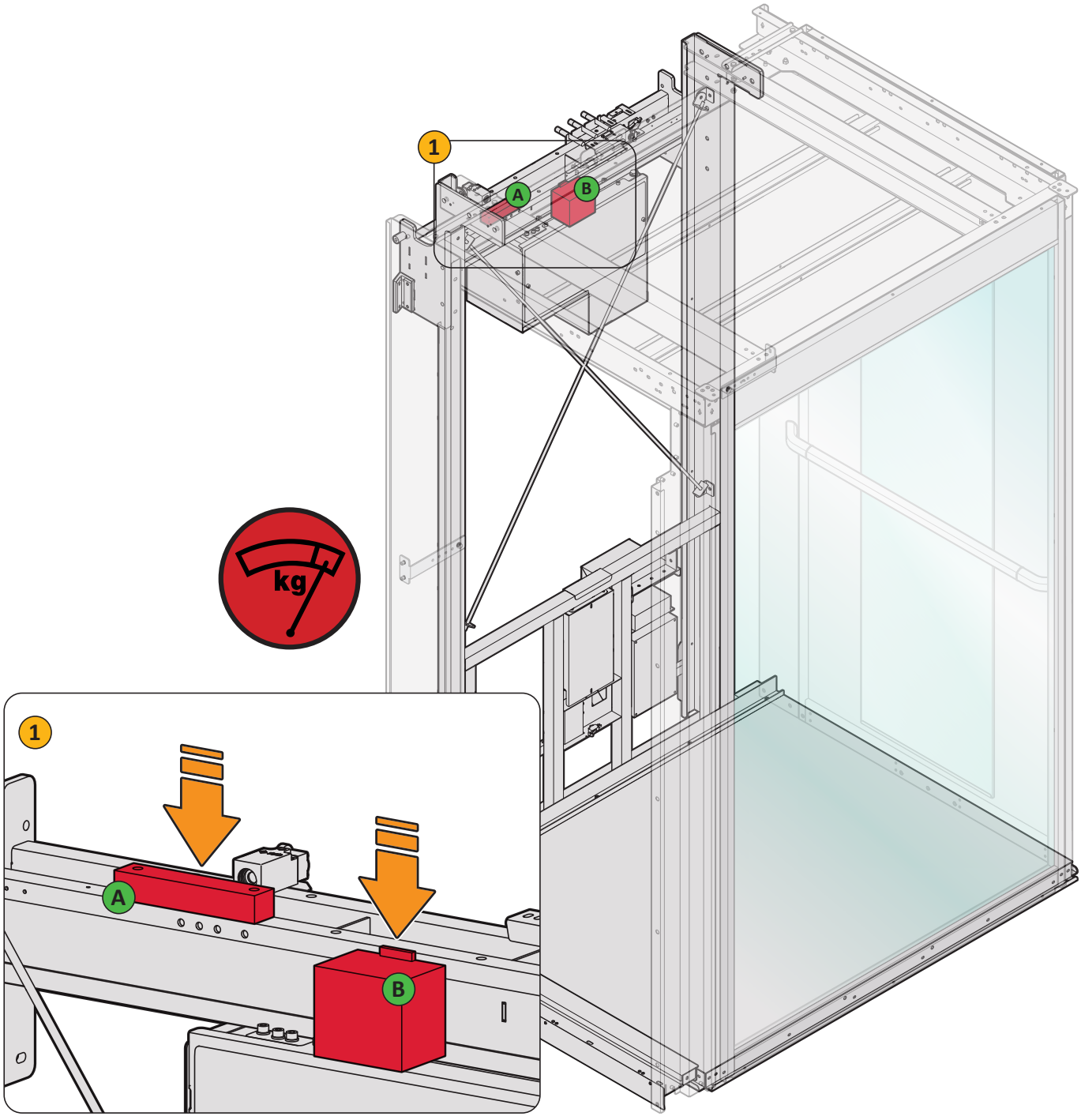
- Check that the sling upper travel margin on the guide rails corresponds to design drawing.
- Adjust the position of the limit switch so that it trips after a lifting of approximately 30mm above the floor.
- Lower the platform to the lowest floor.
- Pay close attention to travelling cable proper length 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. Assembly and completion adjustments of the platform

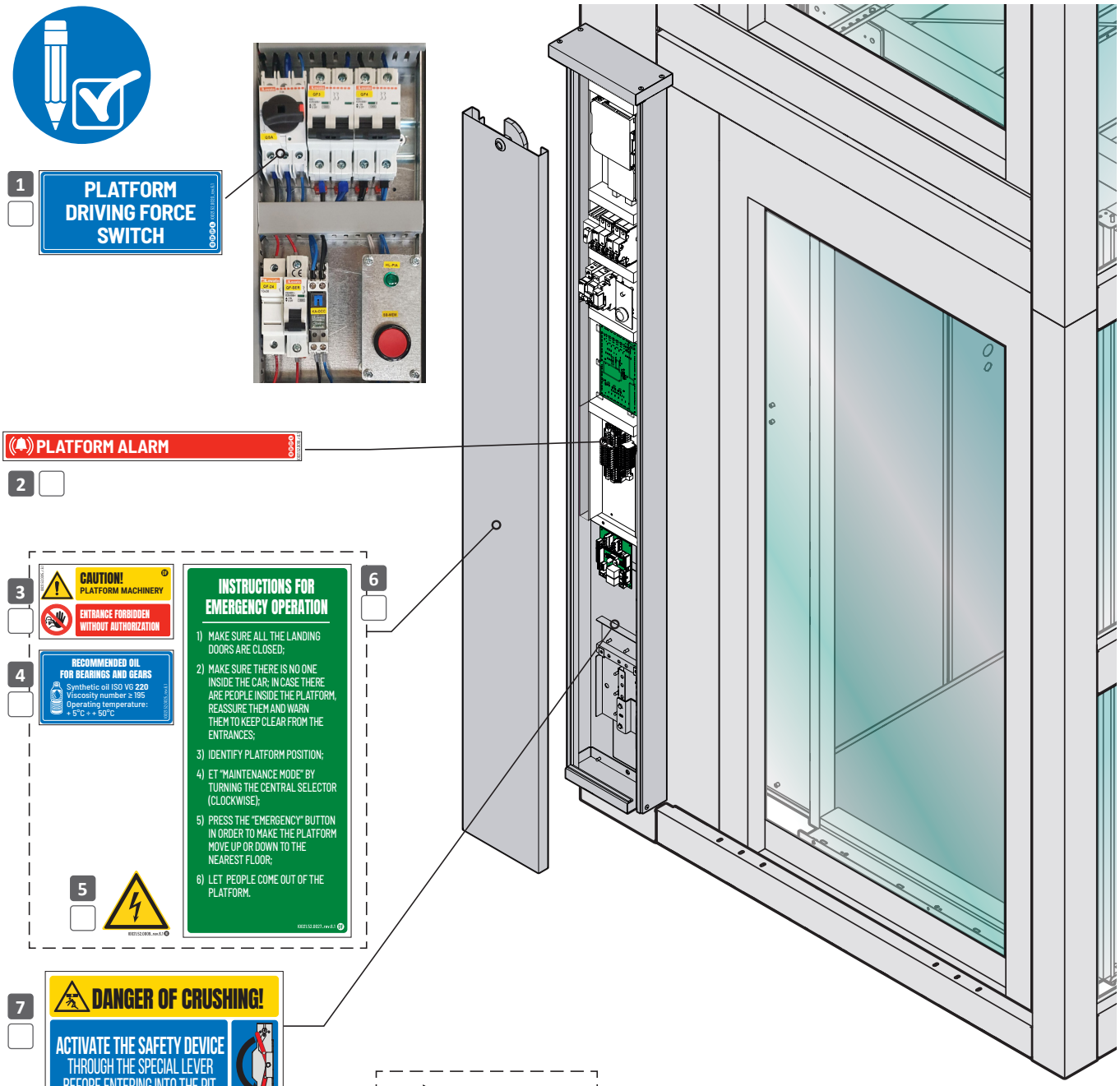
18.01. Overload - adjustment.

(1) The overload contact (A) is positioned on the arch, with the corresponding control unit (B).

For adjustment or maintenance work, always refer to the specific manual supplied with the part.



18. Safety signs to be applied on the platform lift



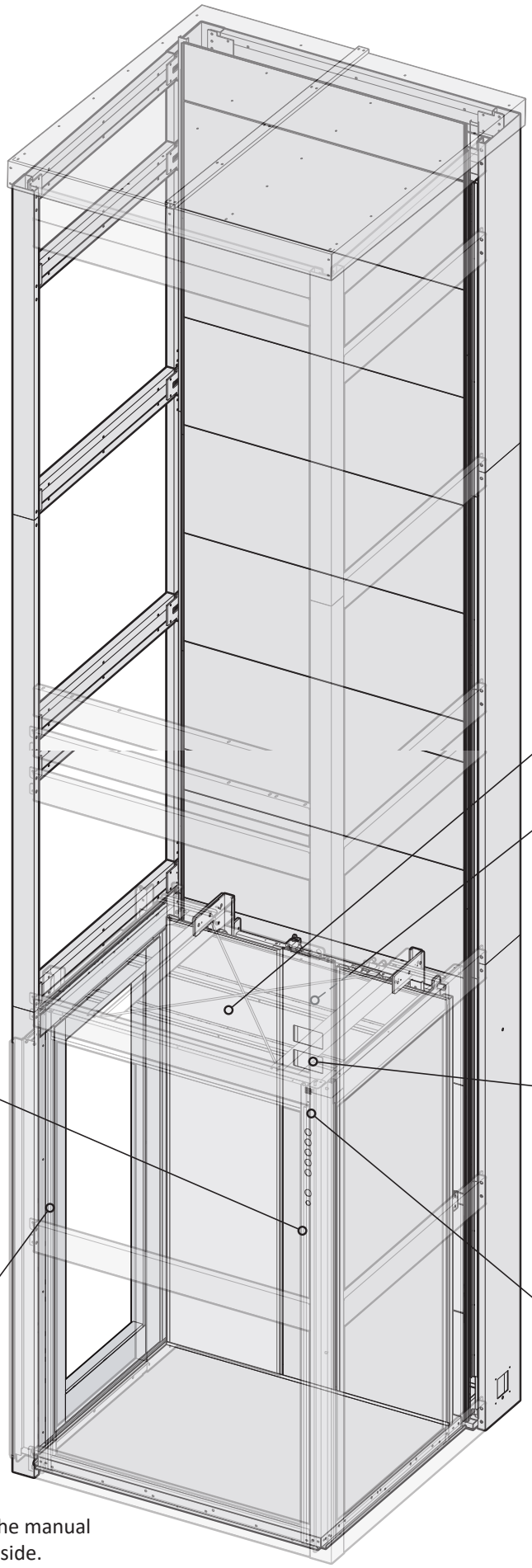
10

Apply on landing doors in case of platform installation in public buildings.

11

Apply on landing doors in case of platform out of service.

OUT OF SERVICE



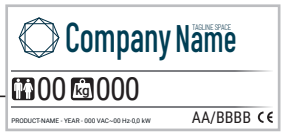
On the car roof

26 ☐

27 ☐

18 ☐

FILL IN THE NUMBER PLATE

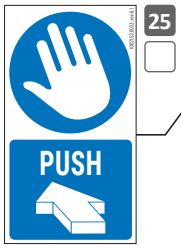


19 ☐

IMPORTANT!

Check the presence of the rating plate supplied with the hand control.

24 ☐

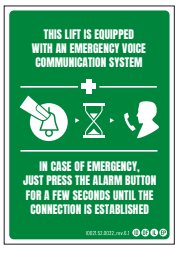


25 ☐

20 ☐

21 ☐

22 ☐



23 ☐

Attach it to the inside of the manual landing doors on the lock side.

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

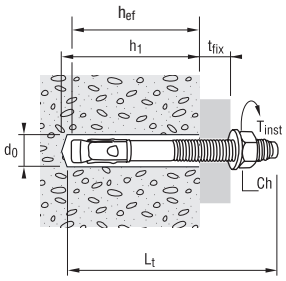
The sources of platform noise are the motor, the brake, and the shoes that slide on the guide rails, particularly during full load lifting (including maximum permissible overload).
The motor is located at the rear of the sling between the guide rails and behind the protective casing.
User position is 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).

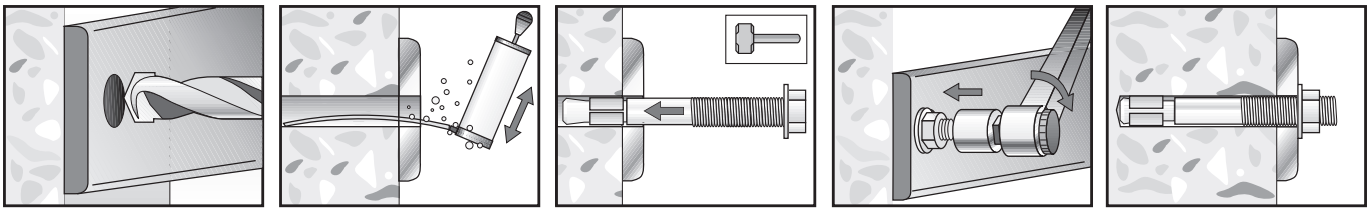
ANNEX 1
Anchoring to the shaft by means of plugs (mechanical or chemical)

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.

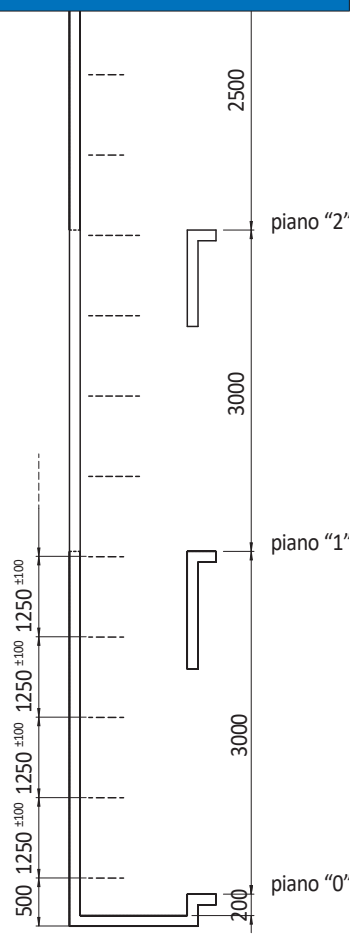
SHAFT IN LOAD-BEARING MASONRY

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

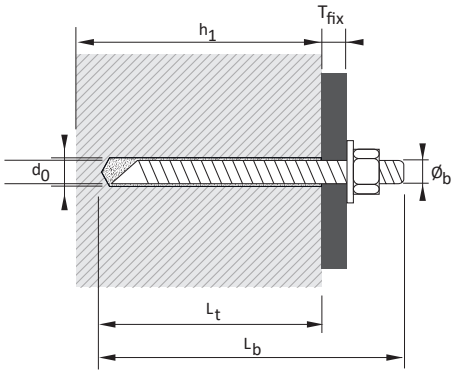
For the application of chemical anchors on load-bearing masonry with solid, compact elements, a special kit has been developed (code F350.23.0026V01), consisting of:

- 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.

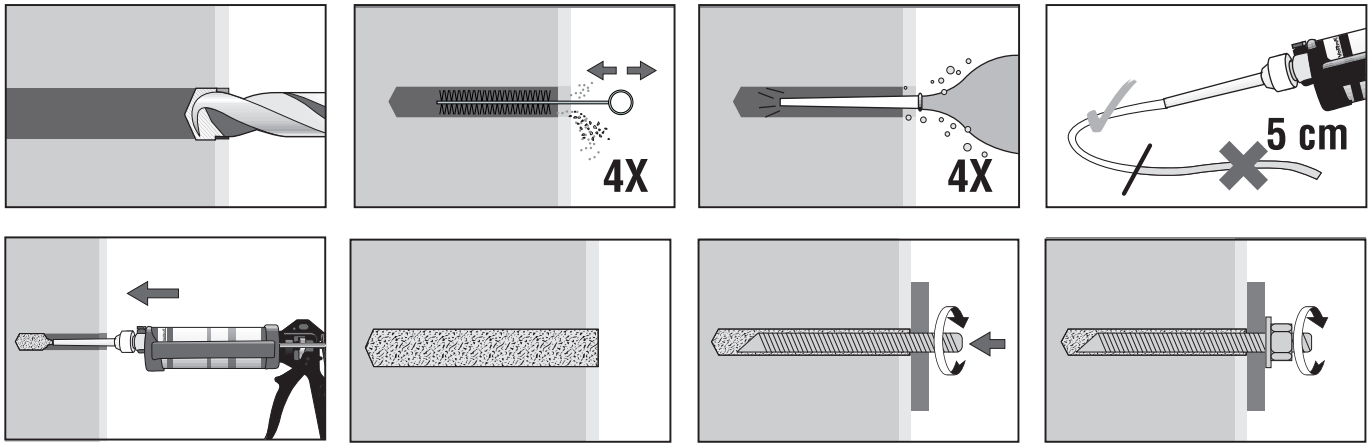
h_1	=	Hole minimum depth
L_b	=	Bar length
L_t	=	Plug length
d_0	=	Hole nominal diameter
$Ø_b$	=	Bar diameter
T_{fix}	=	Fixable shim



Calculation of the bar length:

$L_b = L_t + T_{fix}$

INSTALLATION SEQUENCE:



Carefully clean the hole before installation.

IMPORTANT INFORMATION

ANCHORAGE in a LOAD-BEARING MASONRY SHAFT WITH HOLLOW ELEMENTS

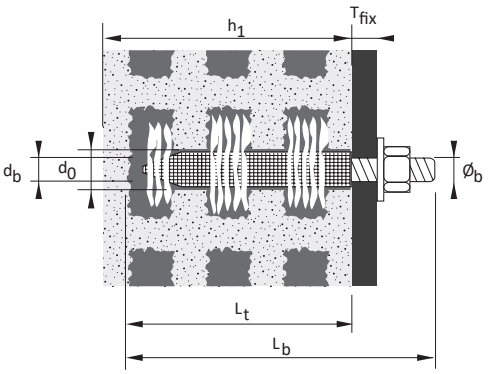
The special kit F350.23.0025V01 for chemical bolts application is composed of:

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

* 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 kitskits are required for a 3 stops' lift, the brackets being positioned as per the sample drawing.

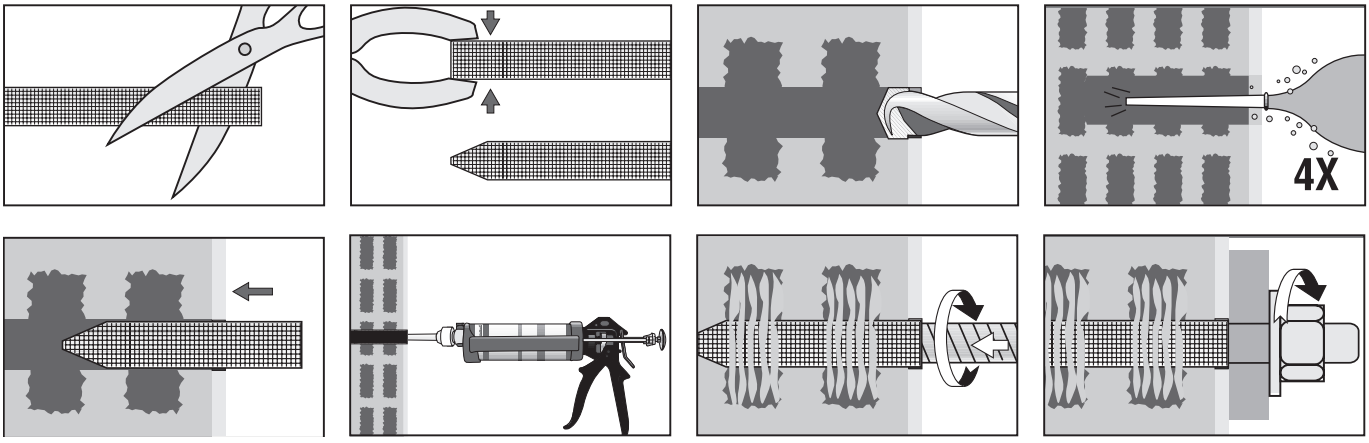
h_1	=	Minimum hole depth
L_b	=	Rods length
L_t	=	Dowel length
d_0	=	Hole diameter
d_b	=	Metal Mesh Sleeve diameter
$Ø_b$	=	Rods diameter
T_{fix}		Fixable thickness



Threaded rods length calculation:

$L_b = L_t + T_{fix}$

ASSEMBLY SEQUENCE



Carefully clean the hole before installation.

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