STACKDOOR®

Installation guide

INSTALLATION AND ADJUSTMENT OF
STACKDOOR® STANDARD DOORS

THIS INSTRUCTION GUIDE OR INSTALLATION MANUAL APPLIES TO

STACKDOOR® STRAIGHT MODELS

This notice complies with CE regulations.
The requirements outlined in this notice must be strictly followed to ensure that Stackdoor® grilles comply with the essential health and safety requirements set forth by CE regulations.

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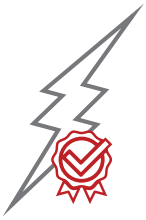
1. GENERALITIES AND ASSEMBLY SAFETY

AUTHORIZED STACKDOOR® INSTALLER

The assembly and installation of the Stackdoor® must be carried out by an authorized dealer and qualified personnel with the necessary expertise for Stackdoor® assembly operations. These personnel must be approved by Charter Global Ltd. Safety rules during assembly must be strictly followed.

The definition of approved personnel according to ISO 9001 procedures is as follows: the personnel have undergone and passed training enabling them to install a Stackdoor®, the training procedure is defined in Charter Global's Training Manual. The personnel are registered in a directory (training validation date, company name, contact details of the person, etc.). This directory is regularly updated, and in the event of product developments for Stackdoor®, all people in this directory are contacted to update their skills.



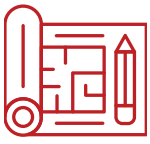
AUTHORIZED MOTORIZATION INSTALLER

The installation of the electric motorization must be carried out by qualified personnel authorized for this type of installation.

ADDITIONAL INSTRUCTIONS

Carefully read the instructions for all elements supplied with the Stackdoor® (motor, fall arrest system, etc.) before starting the installation.

ASSEMBLY PLAN



Ensure to refer to the technical sheet corresponding to the configuration of the Stackdoor® for the project to ensure its correct assembly.

IMPORTANT : SAFETY

Ensure to only implement the control and safety devices provided and compliant for the Stackdoor®. The manufacturer disclaims all liability for the use of any other unauthorized device.

Reminder: during any work at height, the area must be marked so that no one can pass underneath the working area. Ensure to use the necessary collective and individual protective measures.

2. PARTS REQUIRED FOR ASSEMBLY

Before starting the assembly, ensure that no parts or supplied materials are missing. Also, make sure you have all the tools necessary for installing the Stackdoor®.

The list of parts and materials is provided with the Stackdoor® in the package. Refer to the appendix to this manual, «References and designation of Stackdoor® parts,» to ensure the correct correspondence of the elements.

2.1. PROVIDED INSTRUCTIONS

Check the presence of all manuals according to the type of door as indicated in the table. If a manual is missing, contact Charter Global and provide the serial number of the Stackdoor® shown on its CE nameplate.

<table>
<tr><th>STACKDOOR® TYPE</th><th>SDT6</th><th>SDT6C</th><th>SDT8</th><th>SDT8C</th><th>SDME</th><th>SDMEC</th></tr>
<tr><td>INSTALLATION GUIDE</td><td colspan="6">Installation guide of the Stackdoor®</td></tr>
<tr><td>MOTOR MANUAL</td><td colspan="2">SIMU T6 motor manual</td><td colspan="2">SIMU T8 motor manual</td><td colspan="2">Manual for GFA SI 14.15 or SI 17.15 or SI 25.15 or SI 40.15 or SI 55.15 or SI 17.24 or SI 40.24</td></tr>
<tr><td>FALL PROTECTION MANUAL</td><td colspan="4">SIMU fall arrest system manual</td><td colspan="2">Fall arrest system integrated into the motor</td></tr>
<tr><td>CONTROL PANEL MANUAL</td><td colspan="2">Required if automated and protected control and optional with maintained action control: MO713NE control panel manual</td><td colspan="2">Required if automated and protected control and optional with maintained action control: MO713NE control panel manual</td><td colspan="2">Manual for TS-971 or TS-970 or TS-981 control panel</td></tr>
<tr><td>MANUAL FOR SENSITIVE ELECTRICAL PROTECTION</td><td colspan="6">Required if automated with safety device and optional with maintained action control: Gridscan/PRO 2000-44 or Gridscan/PRO 2500-52 or LZR-I110 or LZR-I100 or Flatscan-W manual</td></tr>
</table>

There are two additional manuals to this installation guide:
- User guide
- Maintenance manual

Model designations for Stackdoor® standard:
- **SDT6** = **S**TACKDOOR® **D**ROIT (STRAIGHT) MOTOR **T6** (SHAFT Ø 70 MM)
- **SDT6C** = **S**TACKDOOR® **D**ROIT (STRAIGHT) MOTOR **T6** WITH **C**ABLES (SHAFT Ø 70 MM)
- **SDT8** = **S**TACKDOOR® **D**ROIT (STRAIGHT) MOTOR **T8** (SHAFT Ø 102 MM)
- **SDT8C** = **S**TACKDOOR® **D**ROIT (STRAIGHT) MOTOR **T8** WITH **C**ABLES (SHAFT Ø 102 MM)
- **SDME** = **S**TACKDOOR® **D**ROIT (STRAIGHT) **M**OTOR **E**XTERNAL (SHAFT Ø 102 MM)
- **SDMEC** = **S**TACKDOOR® **D**ROIT (STRAIGHT) **M**OTOR **E**XTERNAL WITH **C**ABLES (SHAFT Ø 102 MM)

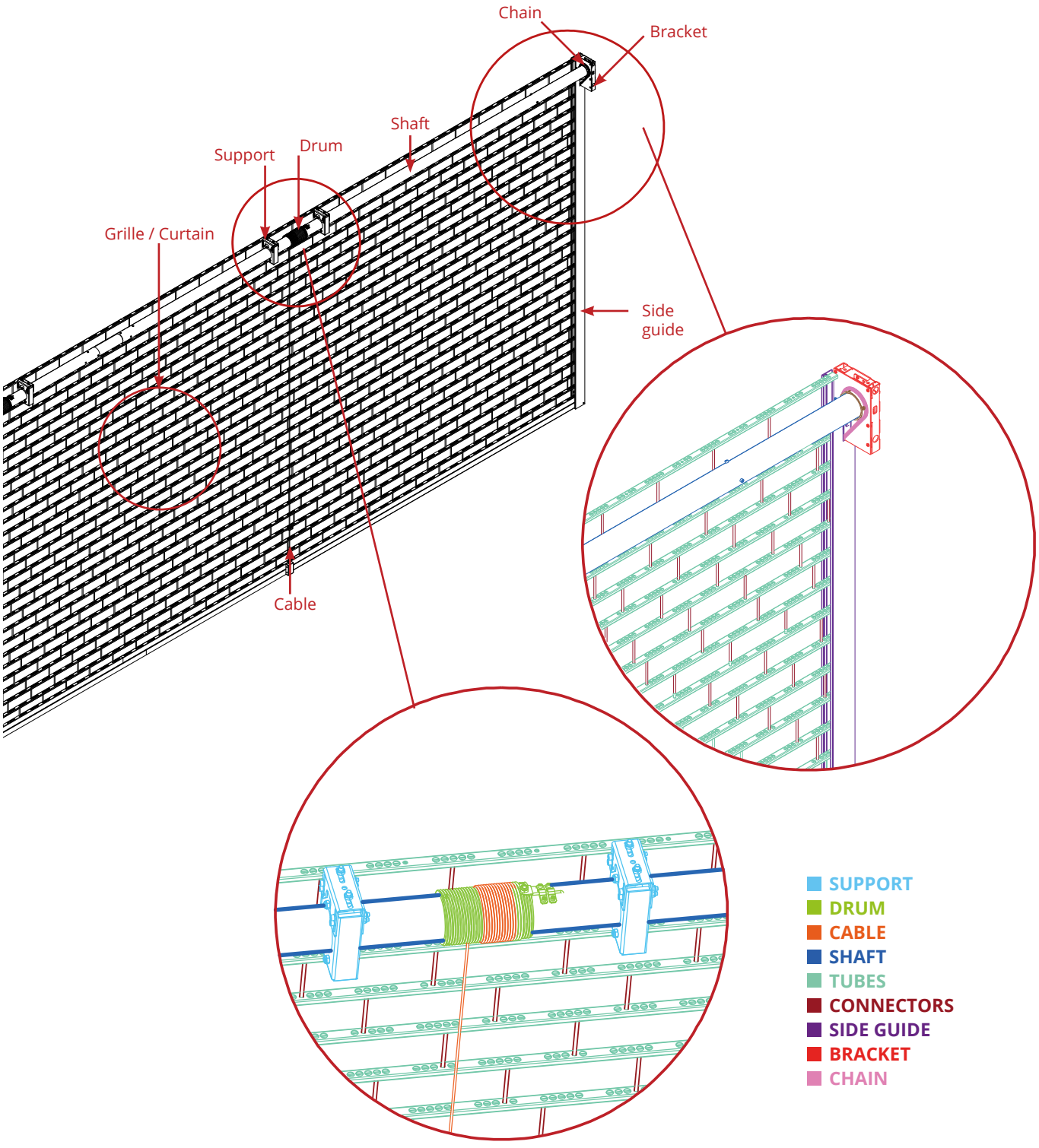
2.2. SUPPLIED STACKDOOR® PARTS

The screws specific to the Stackdoor® structure are provided.

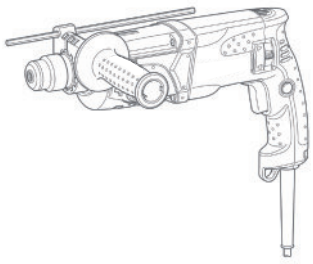
The general plan is provided each time, along with the list of delivered Stackdoor® components. This list of elements will be useful for identifying the components in this installation manual. Before proceeding with the actual assembly, verify the presence and identification of each of the Stackdoor® elements.

Below is an indicative plan of a Stackdoor® (with internal motor) after installation, along with the various main components.

The cables (with their drums and supports) are only provided with the SDT6C, SDT8C, and SDMEC models.

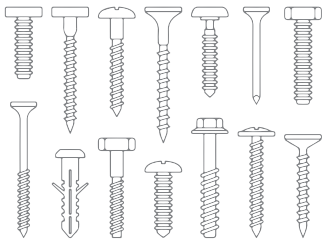


2.3. REQUIRED TOOLS AND MATERIAL (NOT PROVIDED)



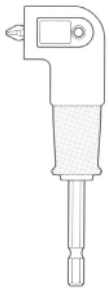
Percussion drill

Taps and drills suitable
for drilling into the masonry

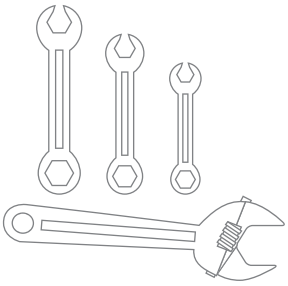


Appropriate screws for anchoring
to the masonry

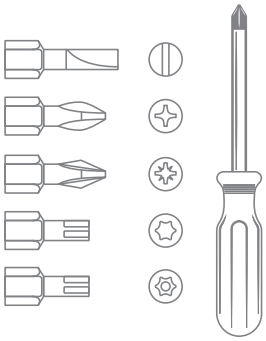
Drill driver



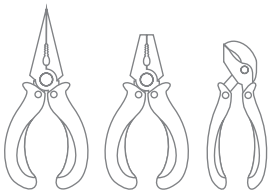
Angle adapter



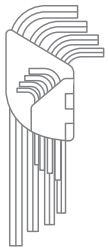
Set of flat and adjustable
wrenches



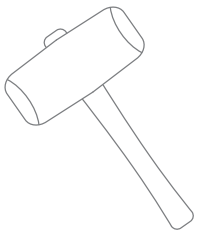
Set of screwdrivers



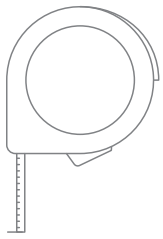
Set of pliers



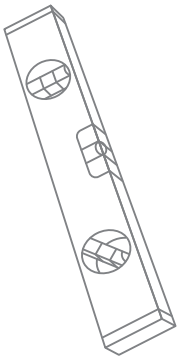
Set of Allen keys



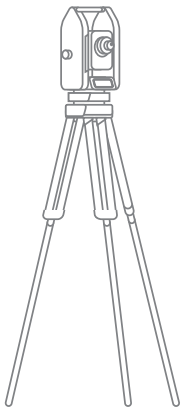
Mallet



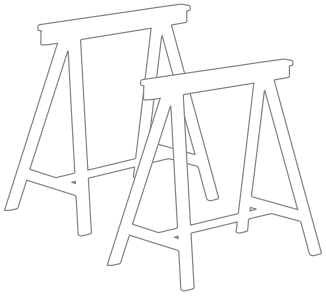
Tape measure



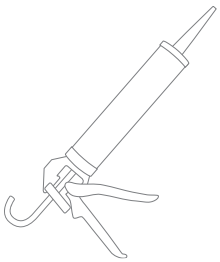
Spirit level



Cross-line laser



Trestles

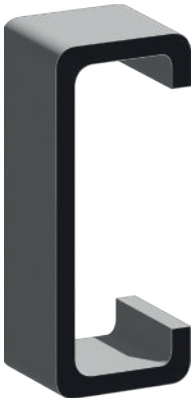


Supplies for the proper
finishing
of the work
(sealant, finishing profiles, ...)

2.4. INSTALLATION KIT

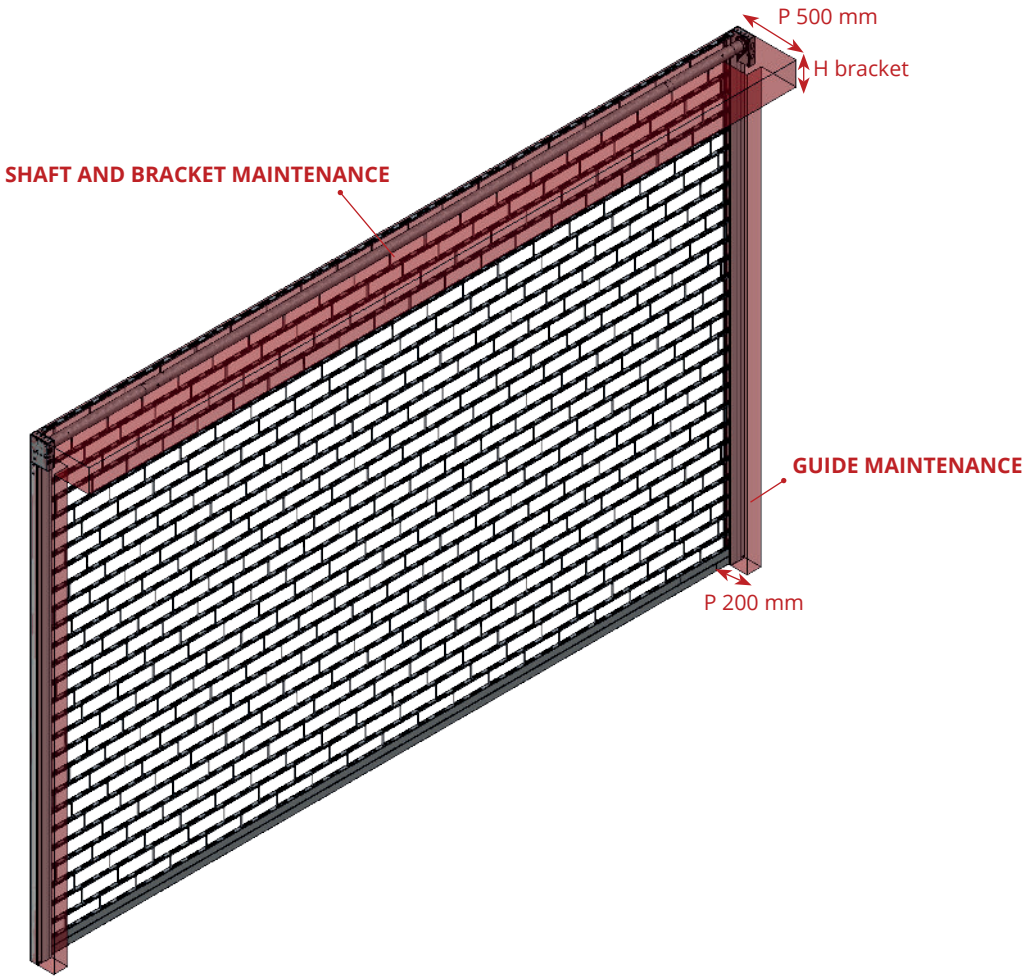
The partner installers must equip themselves before assembly with a Stackdoor® installation kit.
This kit contains:

A 3 cm slice of profile A of the side guide, reversible for marking the ground location of the side guides on the right and left.



«Suspension C» brackets for assembly assistance: one piece per meter of Stackdoor® length, for suspending the tubes before attaching the connectors.

Fig. 1



3. ON-SITE INSTALLATION CONDITIONS

3.1. STRUCTURAL WORK

The structure of the site (walls and ceiling) must be sufficiently strong (concrete, metal, etc.) to support the weight of the Stackdoor® via the brackets, guides, top tube, shaft supports, etc.

The structure (ceiling + walls) must be perfectly leveled. If not, additional rigid supports should be provided. The assembly tolerances are as follows:

- Ceiling height differences tolerance: +/- 2mm
- Level differences tolerance for each wall: +/- 2mm

3.2. ELECTRICAL SUPPLY

The installation site must provide access to a 50 Hz single-phase 230V supply (internal motor) or three-phase 230V or 400V supply (external motor). Similarly, the electrician responsible for installing the motorization must ensure that all conditions in terms of power, amperage, etc. are compliant before proceeding with the installation.

3.3. ACCESS ZONE (INSTALLATION AND MAINTENANCE)

3.3.1 TUBES

Ensure there are suitable access conditions around the installation area to maneuver the tubes in their full length: there must be sufficient space on the ceiling and walls to allow the tubes to pass both at the bottom and top.

3.3.2. SHAFT

Leave the shaft and bracket accessible (Fig.1) over an area equivalent to:

- the height of the bracket (see bracket dimensions in chapter 3.3.4)
- a depth of 500 mm (on the shaft side)
- along the entire length of the Stackdoor®.

3.3.3. SIDE GUIDES

The profile B of the side guides must remain removable (along its entire height) for chain maintenance or tube replacement. On the shaft side:

- Minimum 200 mm of access facing the curtain along the entire height (Fig.1)
- Maximum recess of 70 mm.

3.3.4. MOTOR AND BRACKETS

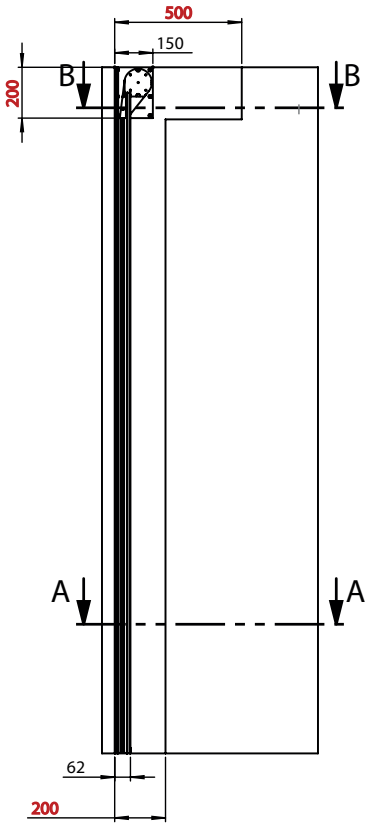
Provide an access area for maintenance of the internal or external motor, which are specific to each motor.

(Note: the optional top cover at the top of the Stackdoor® is designed to be removed for maintenance, also provide a clearance area to access it)

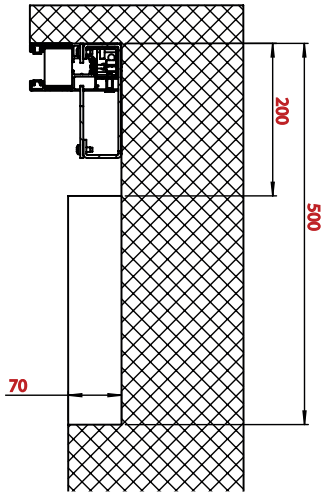
The dimensions are specified for each type of motor, shaft, and bracket on the following pages.

INTERNAL MOTOR: T6

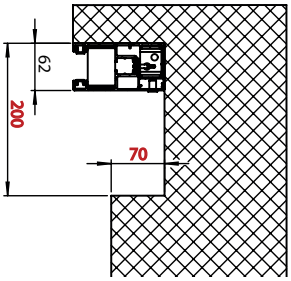
MOTOR SIDE



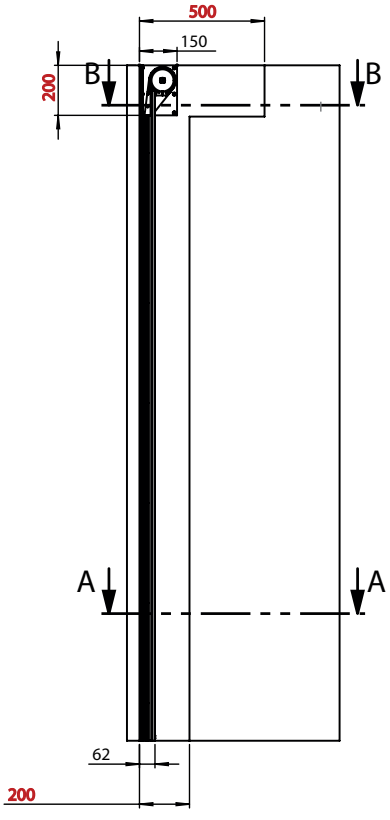
SECTION B-B



SECTION A-A



OPPOSITE SIDE OF THE MOTOR



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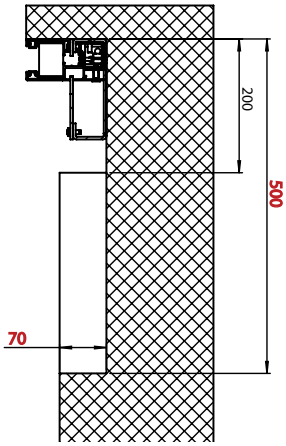

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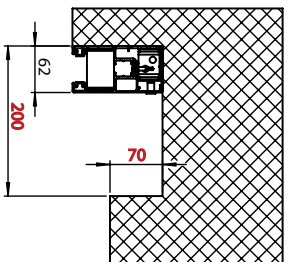
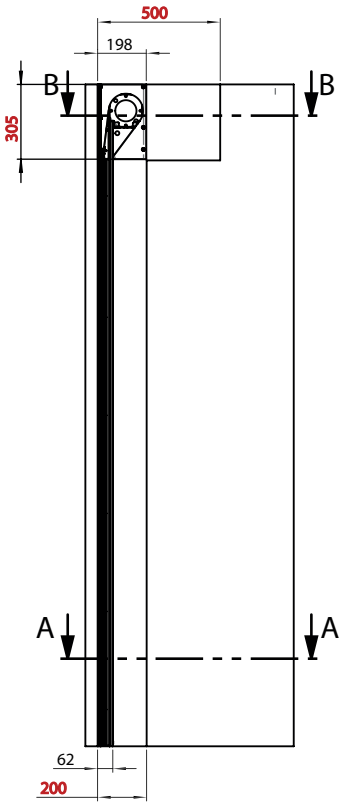


SPACE REQUIRED FOR INSTALLATION AND MAINTENANCE

INTERNAL MOTOR: T8

MOTOR SIDE



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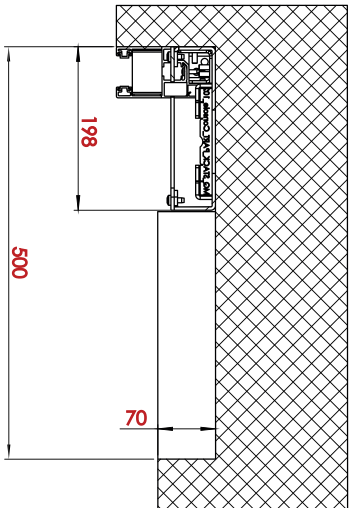

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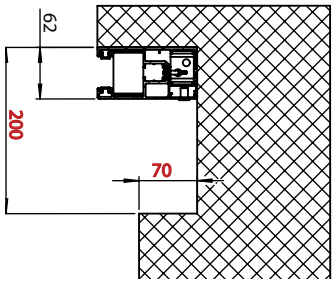
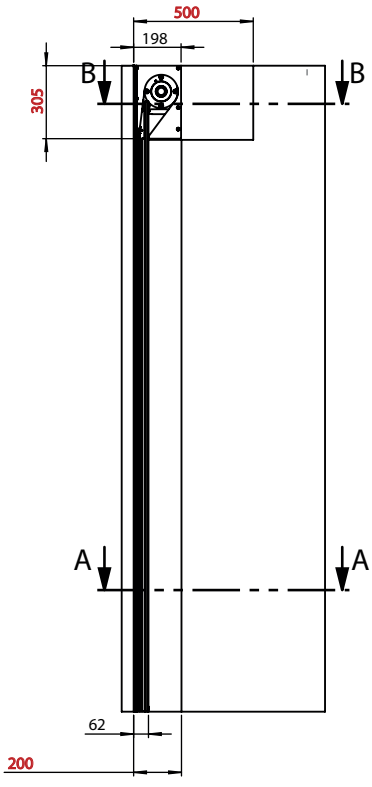


OPPOSITE SIDE OF THE MOTOR



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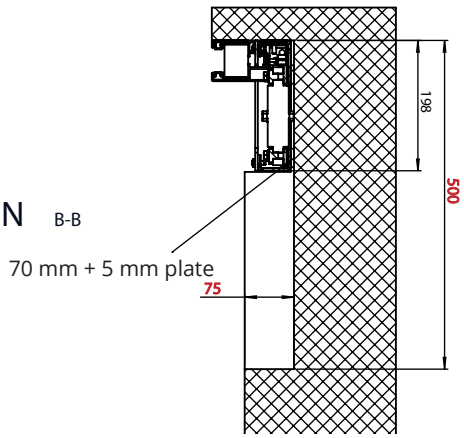

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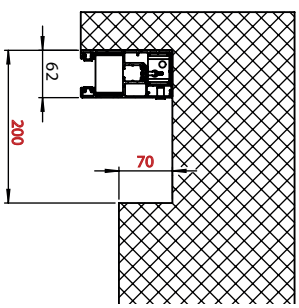
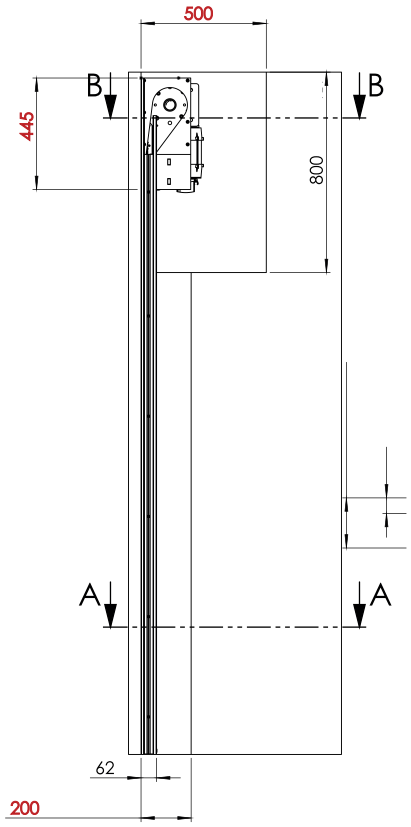


■ SPACE REQUIRED FOR INSTALLATION AND MAINTENANCE

EXTERNAL MOTORS : SI 14.15 / SI 17.15 / SI 25.15 / SI 17.24

MOTOR SIDE



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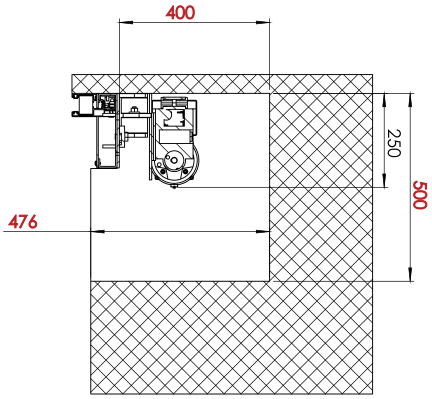

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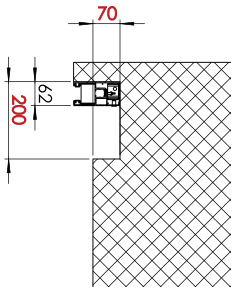
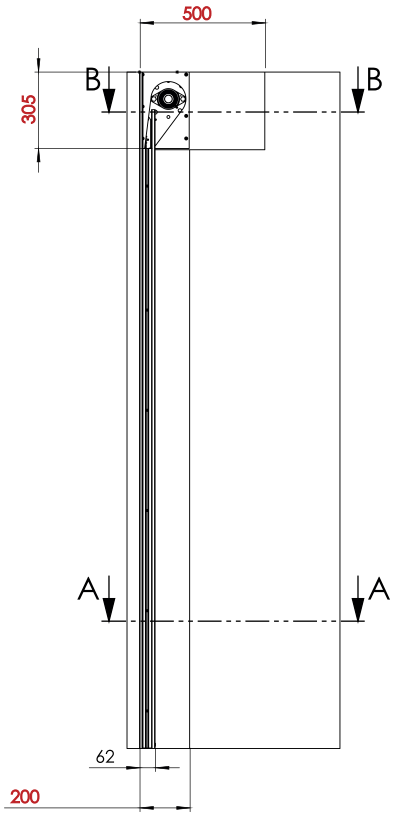


OPPOSITE SIDE OF THE MOTOR



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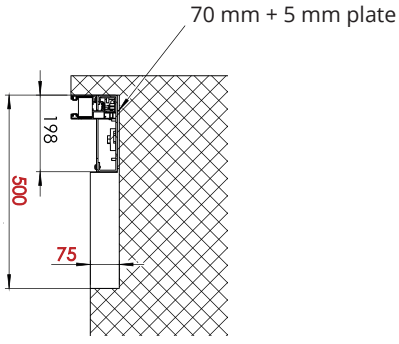

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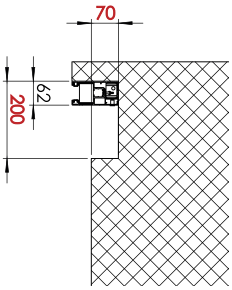
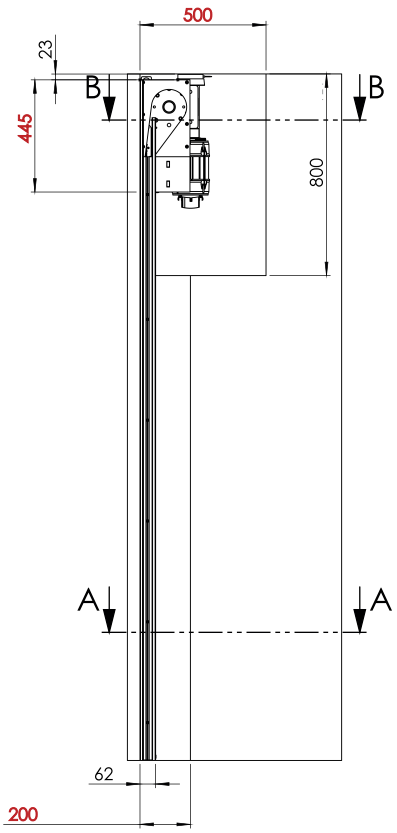


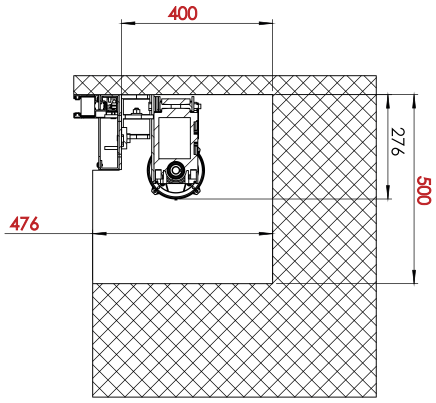
SPACE REQUIRED FOR INSTALLATION AND MAINTENANCE

EXTERNAL MOTORS : SI 40.15 / SI 55.15 / SI 40.24

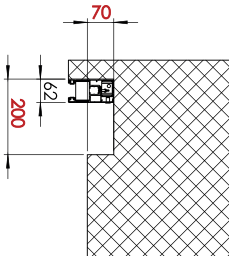
MOTOR SIDE



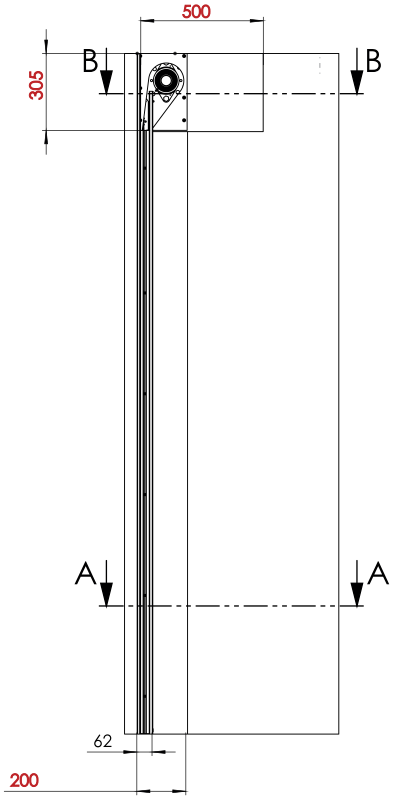
SECTION B-B



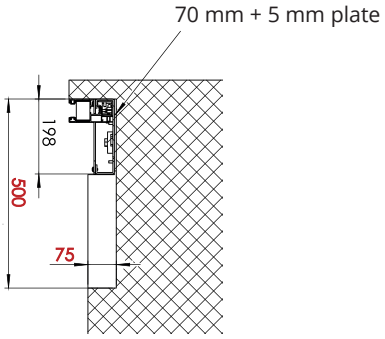
SECTION A-A



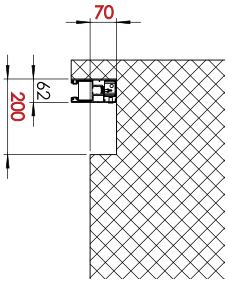
OPPOSITE SIDE OF THE MOTOR



SECTION B-B



SECTION A-A



SPACE REQUIRED FOR INSTALLATION AND MAINTENANCE

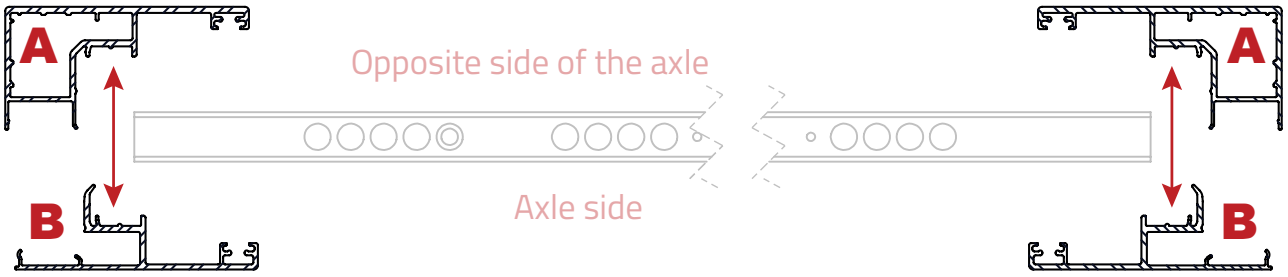
4. ASSEMBLY OF THE STACKDOOR® FRAME

4.1. ASSEMBLY OF THE SIDE GUIDES (PART A) WITH BRACKETS

Each of the 2 side guides consists of 2 profiles (A and B). Profile A is topped with a bracket.

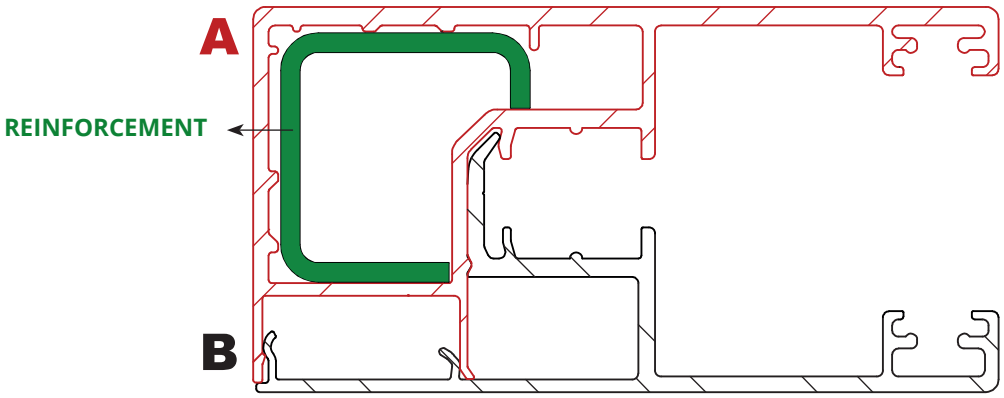
1 / SEPARATE PROFILE A FROM PROFILE B FOR EACH OF THE 2 GUIDES *(FIG.2)*.

Fig. 2



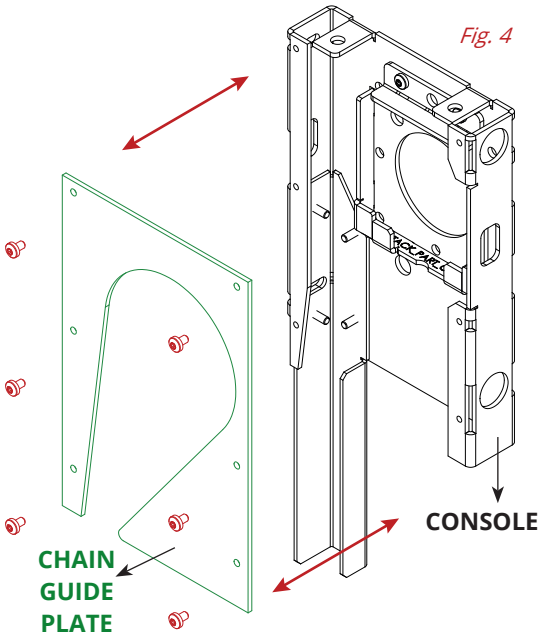
Only for Stackdoor® models without cables (SDT6, SDT8, and SDME): check the presence of the reinforcement in profile A. *(Fig.3)*.

Fig. 3



2 / UNSCREW THE CHAIN GUIDE PLATE FROM EACH OF THE 2 BRACKETS. *(FIG.4)*.

Fig. 4

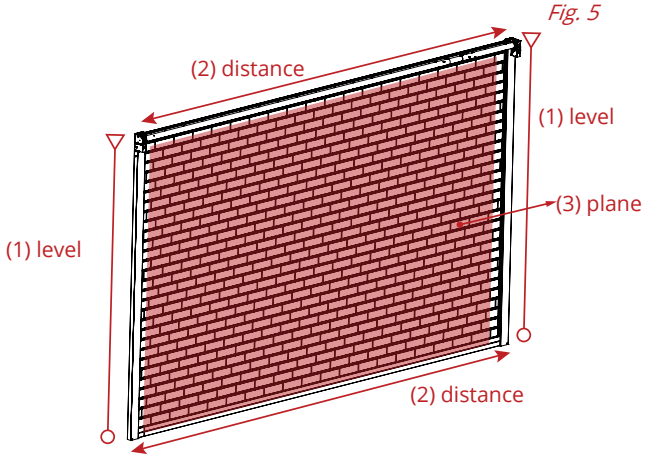


After unscrewing, it is imperative to temporarily place the 2 chain guide plates on the shaft, otherwise, the assembly of the chain guide plates for the rest of the assembly will be impossible! Be sure to keep the 6 screws for the rest of the assembly.

3 / POSITION THE ASSEMBLY «BRACKET + PROFILE A» AGAINST THE WALL, ON THE LEFT AND RIGHT, AND CHECK THESE VARIOUS CONTROL POINTS. *(FIG.5)*:

1. Brackets at the same level (horizontal plane)
2. Distance between the 2 high points and between the 2 low points of the side guides, specified in the technical sheet provided for the project (daylight dimensions or external dimensions)
3. Side guides in the same plane

Fig. 5



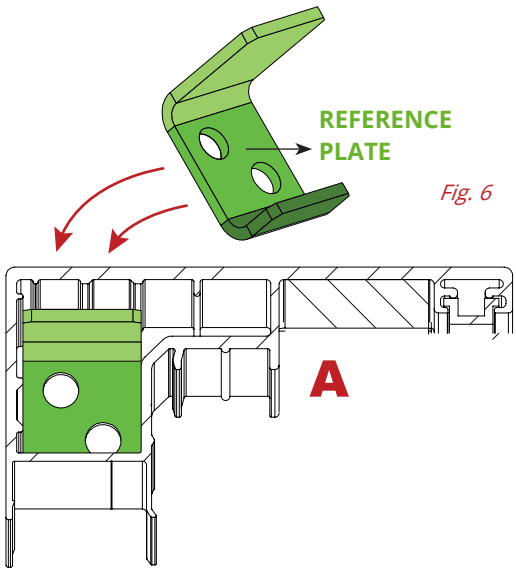


Fig. 6

4 / TRACE THE POSITION OF THE GUIDES ON THE GROUND AND REMOVE THE GUIDES.

5 / PLACE THE REFERENCE PLATE IN THE SLICE OF PROFILE A PROVIDED IN THE INSTALLATION KIT AND MARK THE LOCATION OF THE 2 ANCHOR POINTS OF THE REFERENCE PLATE ON THE GROUND (FIG. 6).

6 / REMOVE THE SLICE OF PROFILE A AND FIX THE REFERENCE PLATE IN ITS FINAL LOCATION ON THE GROUND.

7 / USE THE REFERENCE PLATE TO POSITION THE ASSEMBLY «PROFILE A + BRACKET» AGAINST THE WALL IN THE CORRECT LOCATION. TO DO THIS, RECHECK THE 3 CONTROL POINTS (FIG. 5).

8 / DRILL THE WALL IN LINE WITH THE PRE-DRILLED HOLES ON THE GUIDES AND SECURE THE PROFILES TO THE WALL USING Ø8 OR M8 SCREWS SUITABLE FOR THE TYPE OF WALL.

- The guides are already drilled every 400 mm.
- Refer to the technical sheet of the Stackdoor® to determine the type of mounting of the guides: either recessed or surface-mounted.

9 / FIX THE BRACKETS TO THE STRUCTURE USING Ø8 OR M8 SCREWS SUITABLE FOR THE MATERIAL. A MINIMUM OF 2 FIXING POINTS IS REQUIRED, EITHER ON THE WALL AND/OR CEILING, DEPENDING ON WHETHER IT IS RECESSED OR SURFACE-MOUNTED INSTALLATION. *(FIG.7 & 8)*

Fig. 7

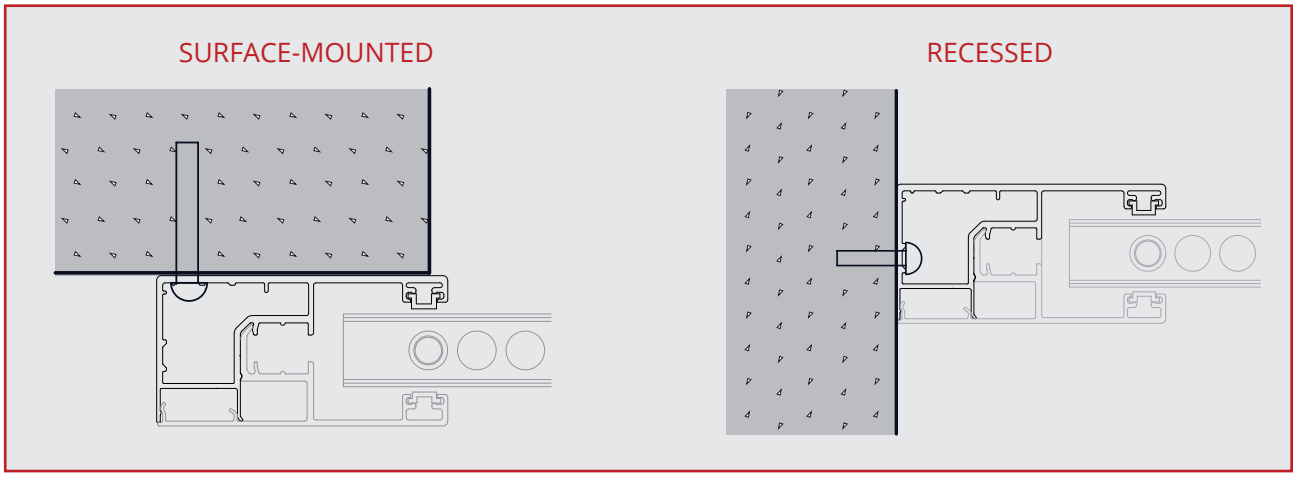
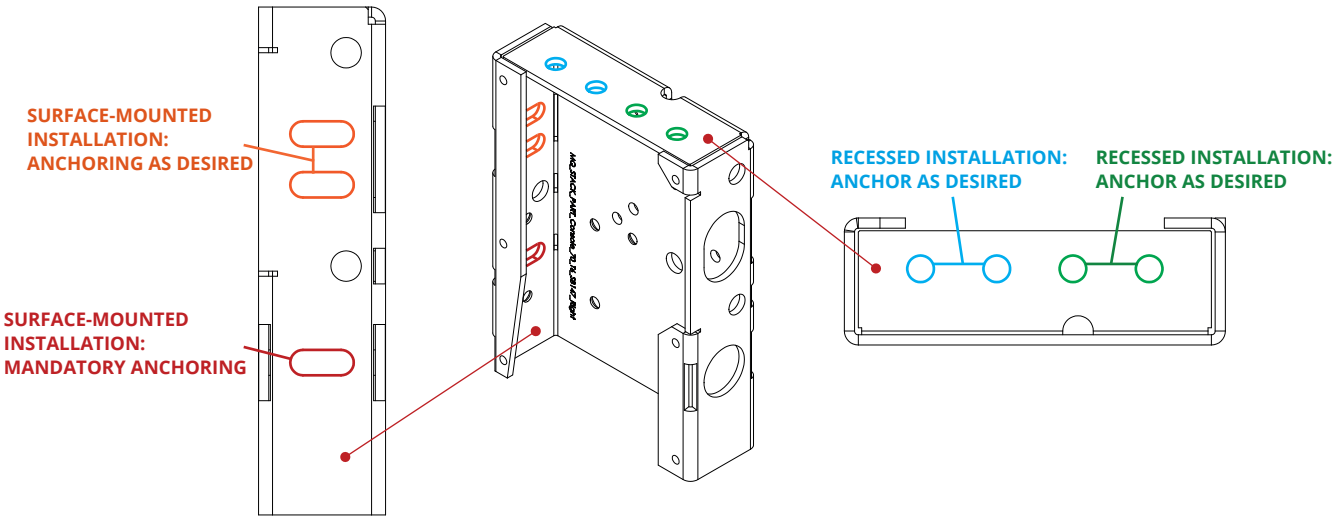


Fig. 8

MOTOR T6

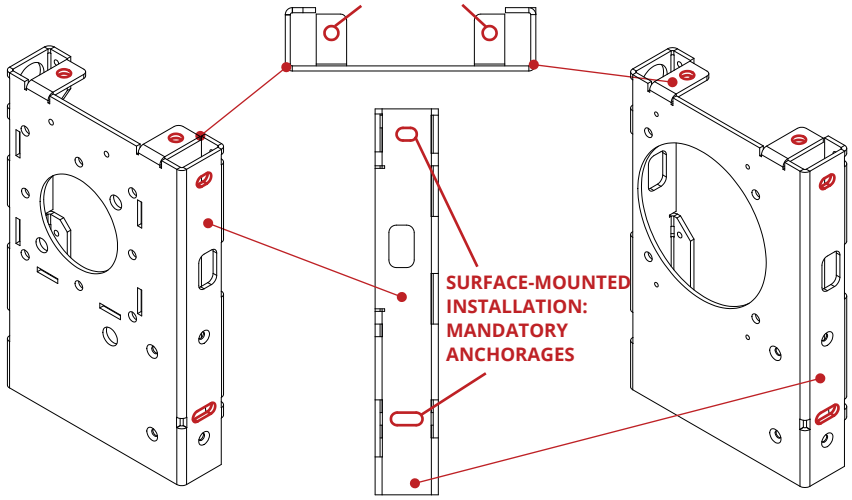
MOTOR SIDE & OPPOSITE SIDE OF THE MOTOR:



MOTOR T8

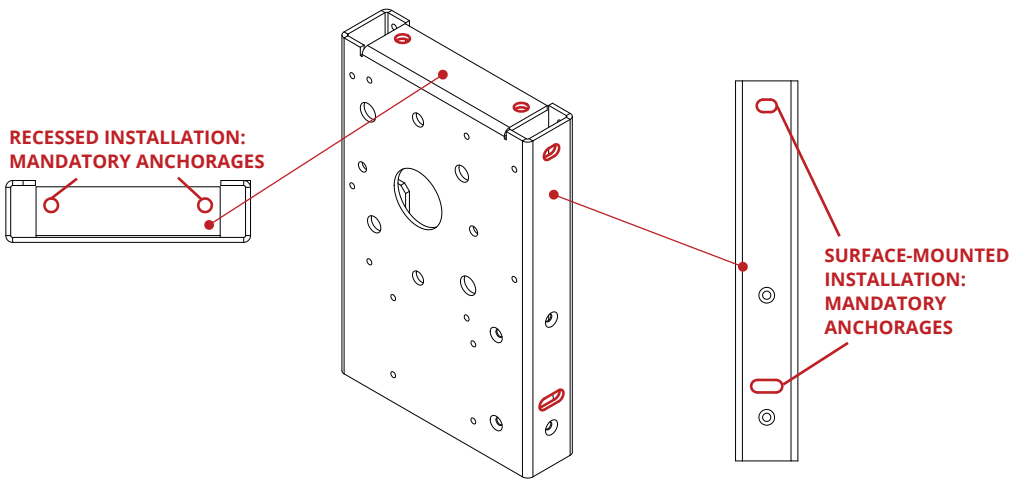
MOTOR SIDE:

OPPOSITE SIDE OF THE MOTOR:



EXTERNAL MOTORS

MOTOR SIDE & OPPOSITE SIDE OF THE MOTOR:



4.2. ASSEMBLY OF THE SHAFT AND MOTOR

4.2.1. SHAFT PREPARATION

VERIFY THAT THE SPROCKETS ARE PROPERLY FITTED ONTO THE SHAFT AT THE ENDS. ***(FIG.9)***

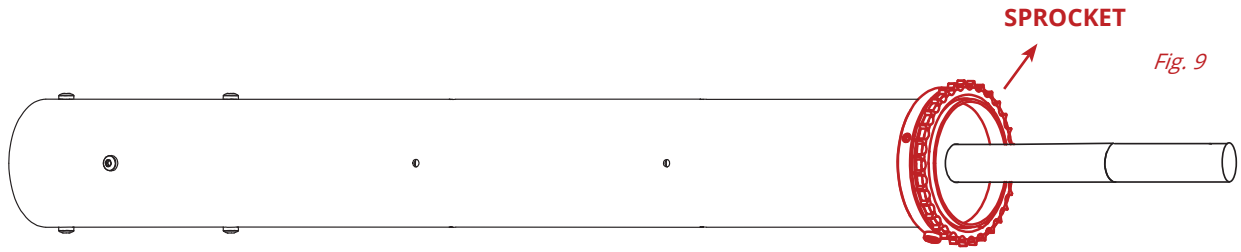


Fig. 9

IF THE STACKDOOR® MODEL HAS CABLES (SDT6C, SDT8C, OR SDMEC), VERIFY THAT THE DRUMS + SUPPORTS ARE PROPERLY FITTED ONTO THE SHAFT AND IN THE CORRECT DIRECTION ***(FIG.10)***

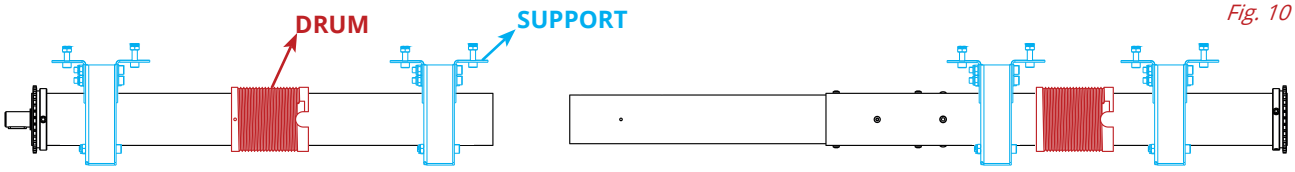
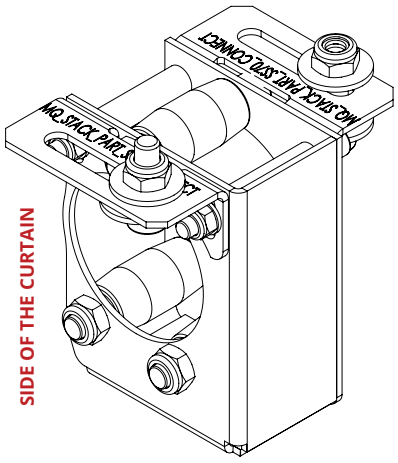
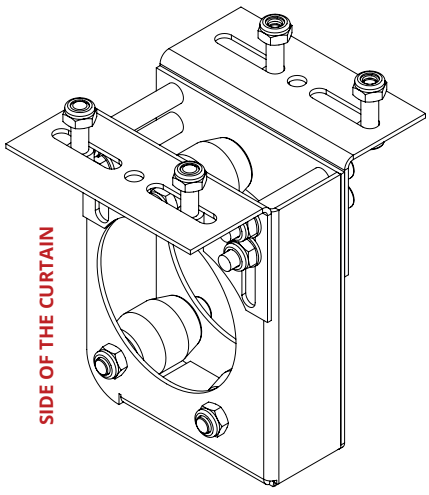


Fig. 10

SUPPORT FOR SHAFT Ø70MM:



SUPPORT FOR SHAFT Ø102MM:



FIT THE 2 SHAFT PARTS TOGETHER. INSERT THE SLEEVE AS DEEPLY AS POSSIBLE INTO THE SHAFT TO ACHIEVE THE SHORTEST POSSIBLE SHAFT LENGTH. ***(FIG.11)***

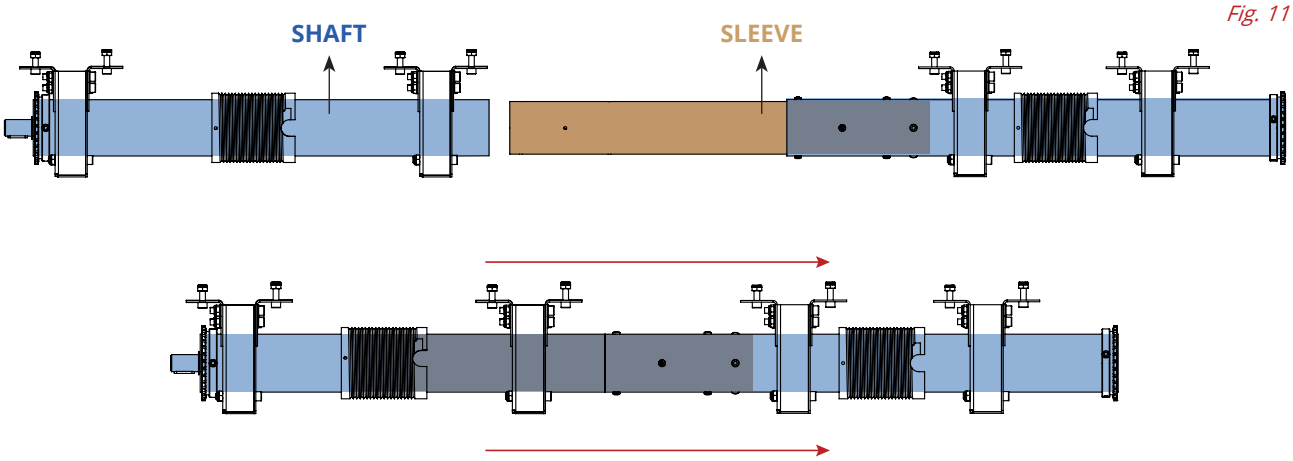
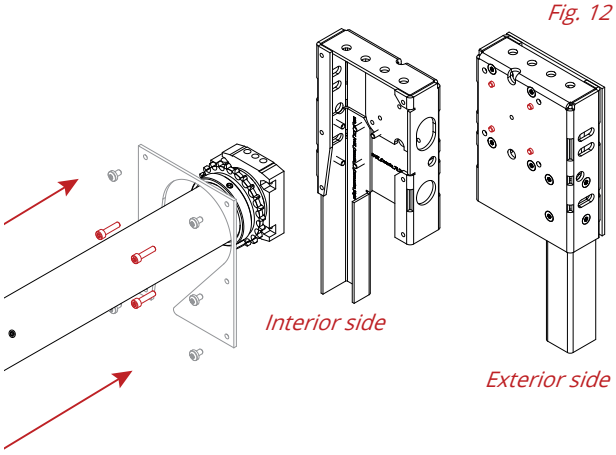


Fig. 11

4.2.2. T6 MOTOR ASSEMBLY

For this step, 2 people are required.

Fig. 12

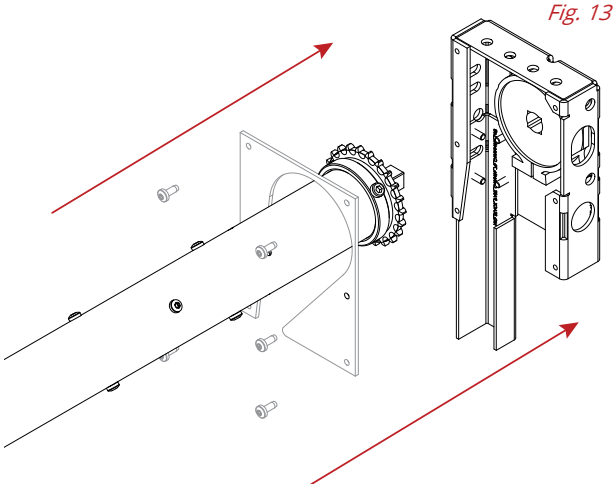


1 / ON THE MOTOR SIDE: UNSCREW THE 4 PRE-FIXED SCREWS ON THE BRACKET. POSITION THE SHAFT ON THE MOTOR SIDE AGAINST THE APPROPRIATE BRACKET AND SECURE THE MOTOR TO THE BRACKET USING THE 4 SCREWS. ***(FIG. 12)***

2 / ON THE OPPOSITE SIDE OF THE MOTOR: EXTEND THE SHAFT ON THE MOTOR'S OPPOSITE SIDE AGAINST THE APPROPRIATE BRACKET UNTIL THE SQUARE FITS INTO THE SPEED LIMITER. ***(FIG. 13)***

3 / VERIFY THAT THE DISTANCE BETWEEN THE END OF THE SHAFT AND THE BEARING IS INDEED 42 MM ON THE SIDE OPPOSITE TO THE MOTOR. ***(FIG. 14)***

Fig. 13

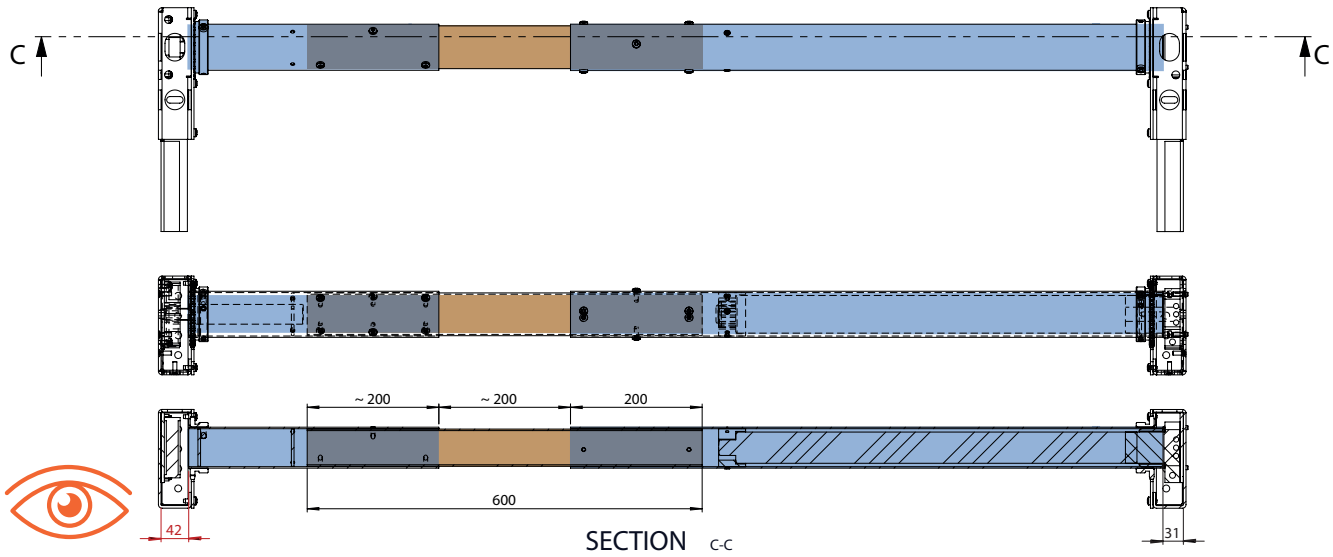


4 / LOCK BOTH PARTS OF THE SHAFT: DRILL THE SLEEVE AT THE LOCATION OF THE SHAFT HOLES (OPPOSITE THE MOTOR SIDE) AND PASS THE SELF-TAPPING SCREWS OF THE SLEEVE THROUGH THE SHAFT HOLES. IN THE FINAL POSITION, THE VISIBLE PART OF THE SLEEVE SHOULD BE 200 MM. ***(FIG. 14)***

If you need to unscrew the self-tapping screws of the sleeve, it is imperative to move their position to avoid reusing the same holes. The risk is that the thread may be damaged, causing the screws not to grip anymore and fall out.

At this stage, the sprockets, drums, and supports are still free, suspended on the shaft.

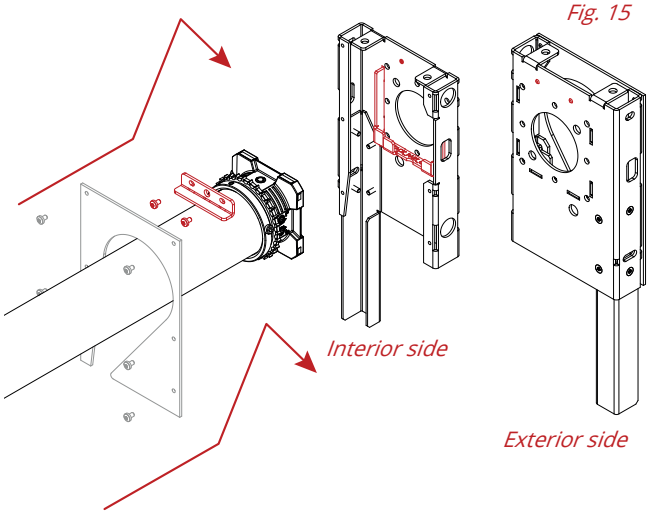
Fig. 14



4.2.3. T8 MOTOR ASSEMBLY

For this step, 2 people are required.

Fig. 15



1 / ON THE MOTOR SIDE: UNSCREW THE 2 PRE-FIXED SCREWS ON THE LOCKING BRACKET OF THE BRACKET. PLACE THE T8 MOTOR SHAFT IN ITS HOUSING WELDED TO THE APPROPRIATE BRACKET *(FIG. 15)*.

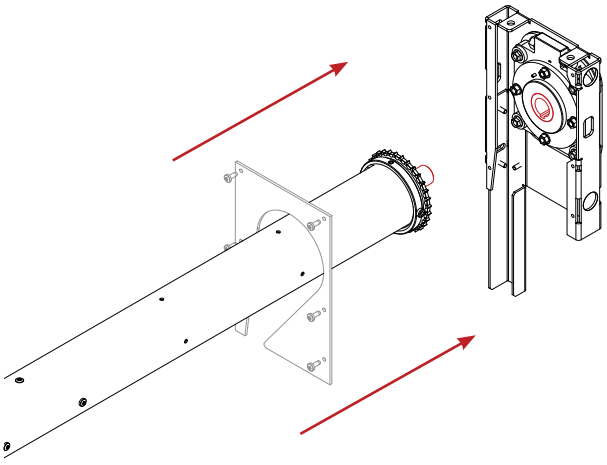
2 / REPLACE THE LOCKING BRACKET AND SECURE IT USING THE 2 SCREWS TO LOCK THE MOTOR POSITION.

3 / ON THE OPPOSITE SIDE OF THE MOTOR: EXTEND THE SHAFT ON THE MOTOR'S OPPOSITE SIDE AGAINST THE APPROPRIATE BRACKET UNTIL THE END OF THE SHAFT FITS INTO THE SPEED LIMITER *(FIG. 16)*.

4 / VERIFY THAT THE DISTANCE BETWEEN THE END OF THE SHAFT AND THE BEARING IS INDEED 42 MM ON THE SIDE OPPOSITE TO THE MOTOR *(FIG. 17)*.

5 / LOCK THE TWO SHAFT PARTS: DRILL THE SLEEVE AT THE LOCATION OF THE HOLES ON THE SHAFT (OPPOSITE MOTOR SIDE) AND PASS THE SELF-TAPPING SCREWS FROM THE SLEEVE INTO THE HOLES ON THE SHAFT. IN THE FINAL POSITION, THE VISIBLE PART OF THE SLEEVE SHOULD BE 300 MM *(FIG. 17)*.

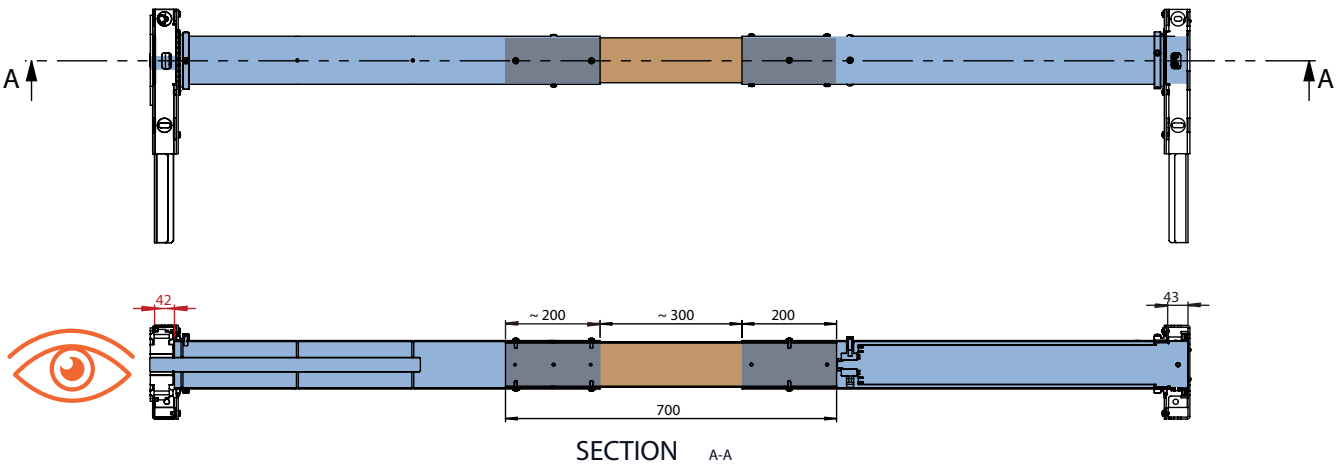
Fig. 16



If you need to unscrew the self-tapping screws of the sleeve, it is imperative to move their position to avoid reusing the same holes. The risk is that the thread may be damaged, causing the screws not to grip anymore and fall out.

At this stage, the sprockets, drums, and supports are still free, suspended on the shaft.

Fig. 17



SECTION A-A

4.2.4. ASSEMBLY OF EXTERNAL MOTORS SDME AND SDMEC

For this step, 2 people are required.

1/ SPACE REQUIRED FOR THE INSTALLATION OF EXTERNAL MOTORS (MOTOR SIDE)

Reminder: it is imperative to temporarily place the 2 chain guide plates on the shaft before fitting the shaft into the bracket, otherwise, the assembly of the chain guide plates for the rest of the assembly will be impossible!

Make sure to have the necessary space on the wall and ceiling to work under good conditions and to properly install the motor. The required spaces for each motor are indicated in Chapter 3.3.4.

2 / INSTALLATION OF THE SHAFT ON THE BRACKET - MOTOR SIDE

- The bearing is mounted on the outer side of this bracket.
- Remove the shaft key, washer, circlip, and axial screw from the shaft and keep them until the motor assembly step *(Fig.18)*.
- Insert the shaft into the bracket *(Fig.19)* and verify that the space between the bottom of the bracket and the end of the shaft is indeed **42 mm** *(Fig.22)*.
- Tighten the two bearing pressure screws (on the outer side of the bracket) to secure the shaft in the bracket *(Fig.21)*.

Fig. 18

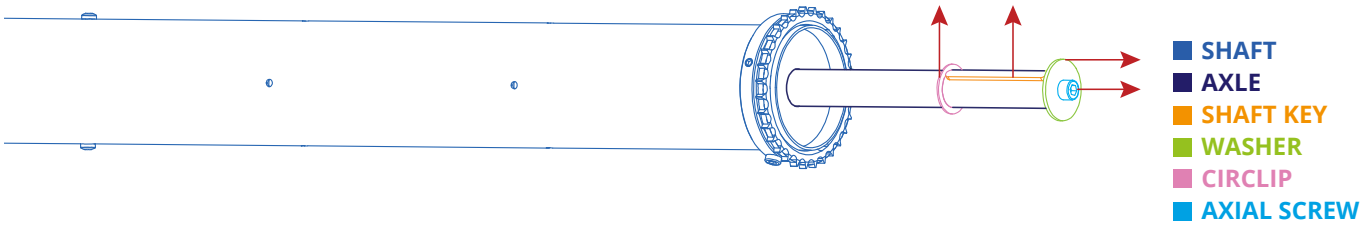
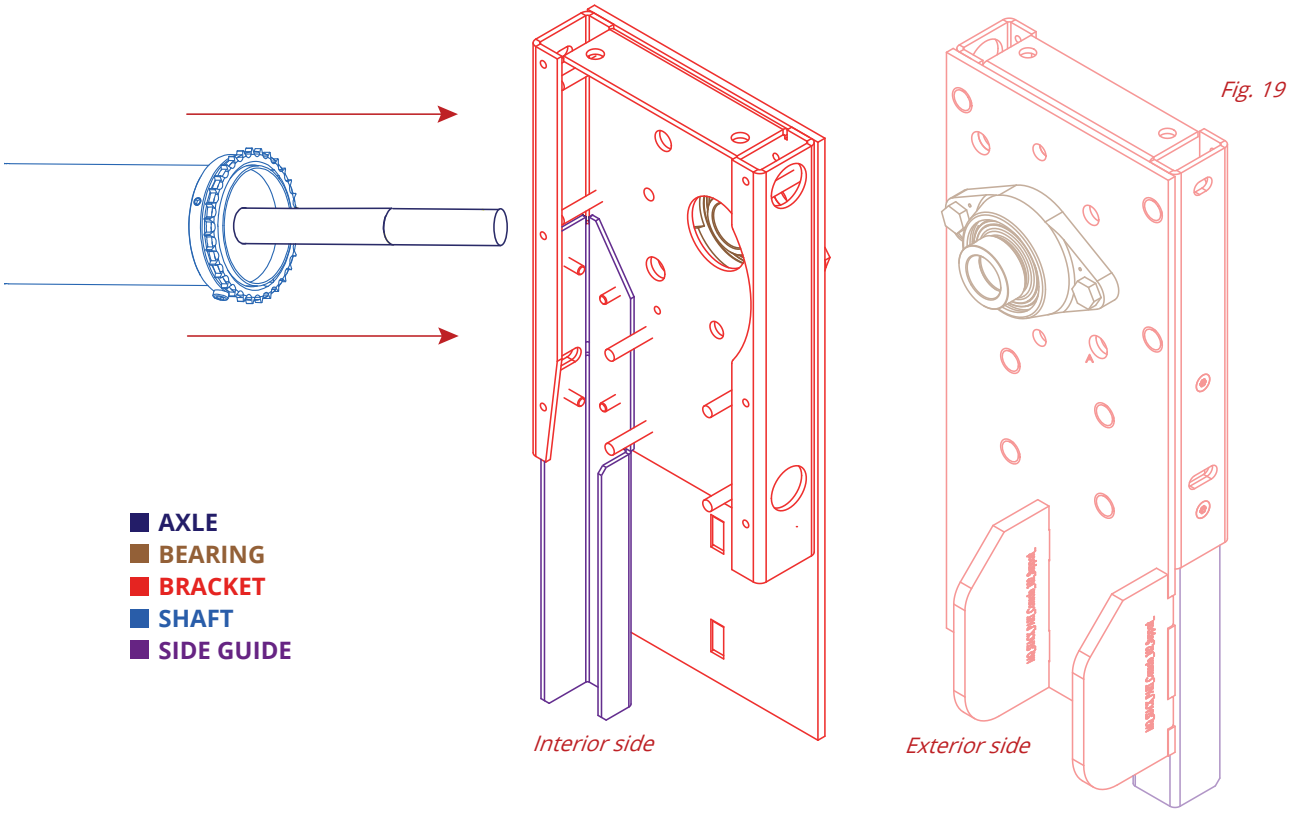


Fig. 19



3 / INSTALLATION OF THE SHAFT ON THE BRACKET - OPPOSITE SIDE OF THE MOTOR

- The bearing is mounted on the inner side of this bracket.
- Insert the shaft into the bearing *(Fig.20)*.
- Verify that the space between the bottom of the bracket and the end of the shaft is indeed **42 mm** *(Fig.22)*.
- Tighten the two bearing pressure screws to secure the shaft in the bracket *(Fig.21)*.

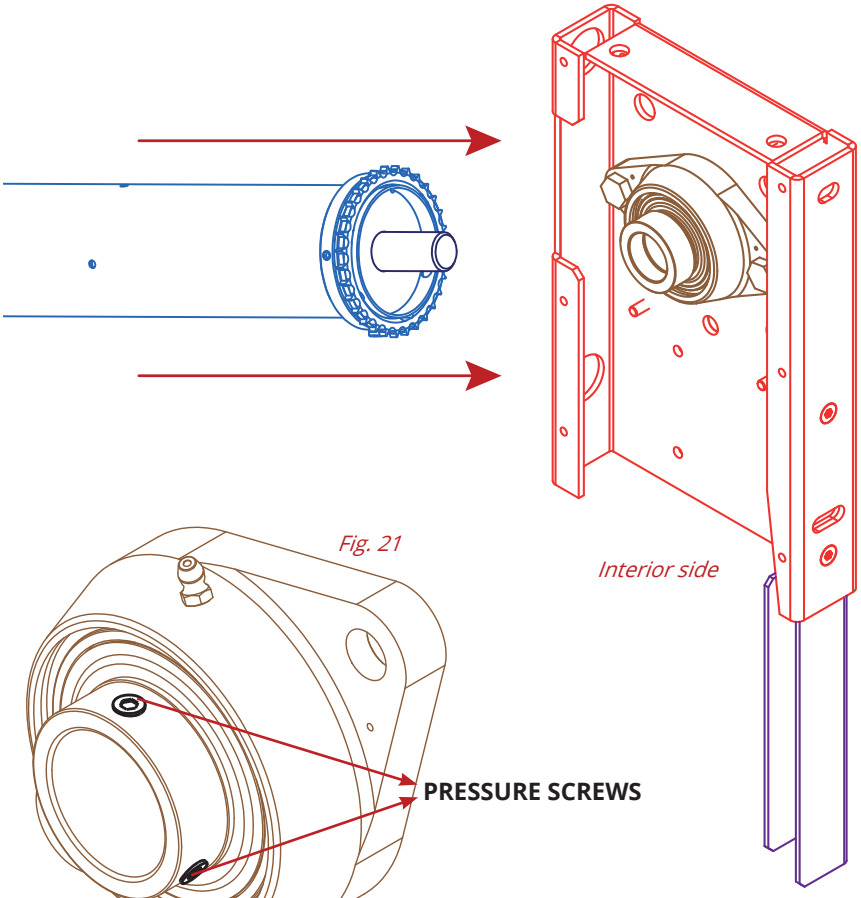


Fig. 20

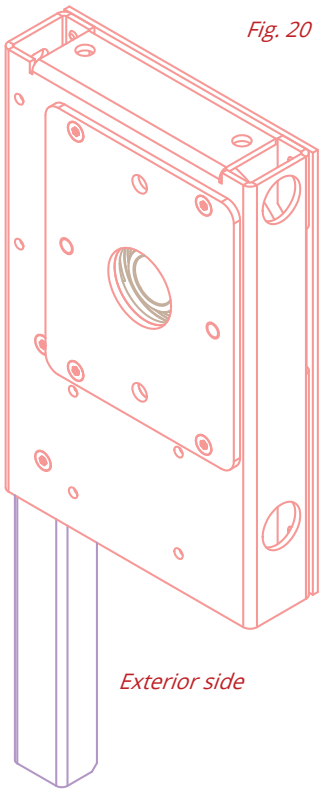
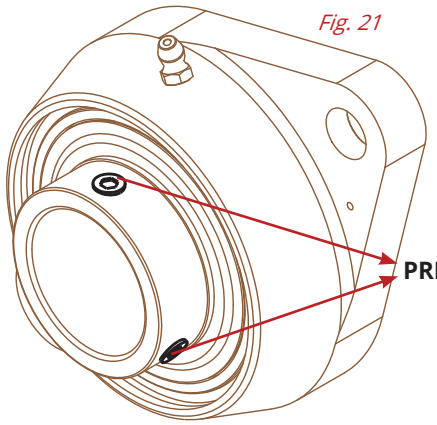


Fig. 21

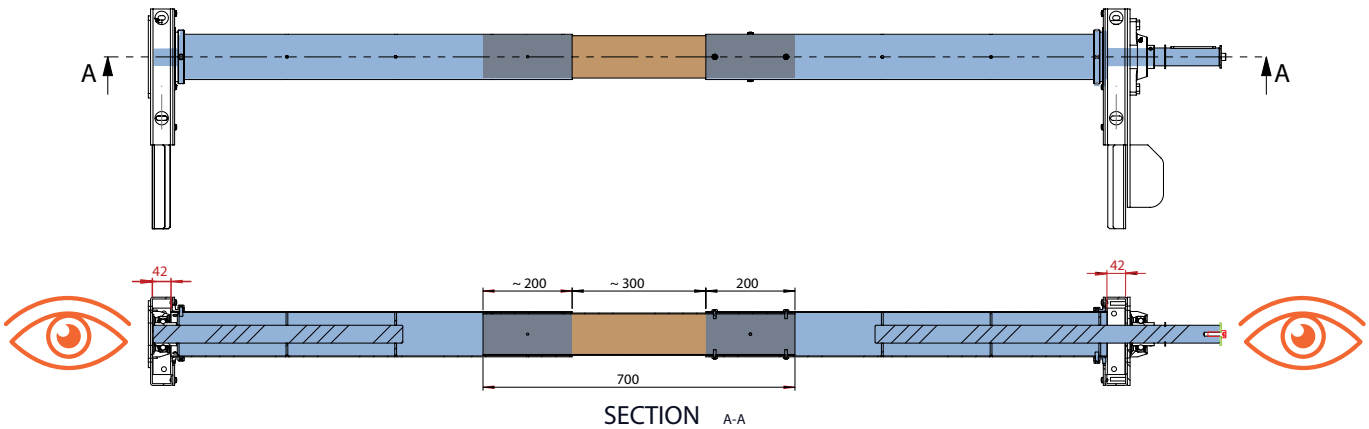


AXLE
BEARING
BRACKET
SHAFT
SIDE GUIDE

4 / SLEEVE FITTING ON THE SHAFT

- Lock the two parts of the shaft: drill the sleeve at the location of the holes on the shaft (opposite motor side) and pass the self-tapping screws from the sleeve into the holes on the shaft. In the final position, the visible part of the sleeve should be 300 mm, and the recessed parts of the sleeve should be 200 mm on each side.
- Before locking the sleeve, recheck that the distance between the end of the shaft and the bearing on the motor side is still **42 mm** *(Fig.22)*.

Fig. 22



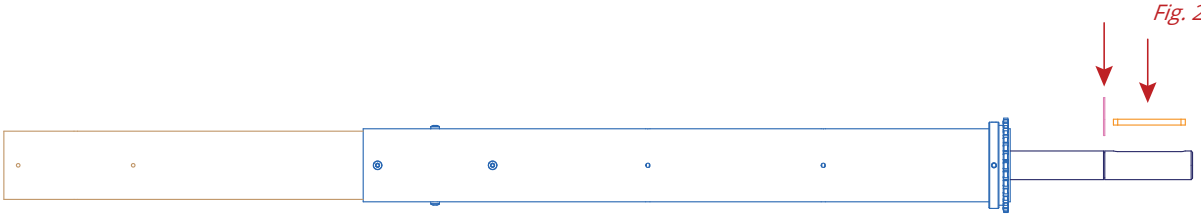
SECTION A-A

If you need to unscrew the self-tapping screws of the sleeve, it is imperative to move their position to avoid reusing the same holes. The risk is that the thread may be damaged, causing the screws not to grip anymore and fall out.

5 / INSTALLATION OF THE EXTERNAL MOTOR

- Replace the shaft key and the circlip removed previously. Keep the outer washer and its screw for reinstallation after securing the motor. *(Fig.23)*

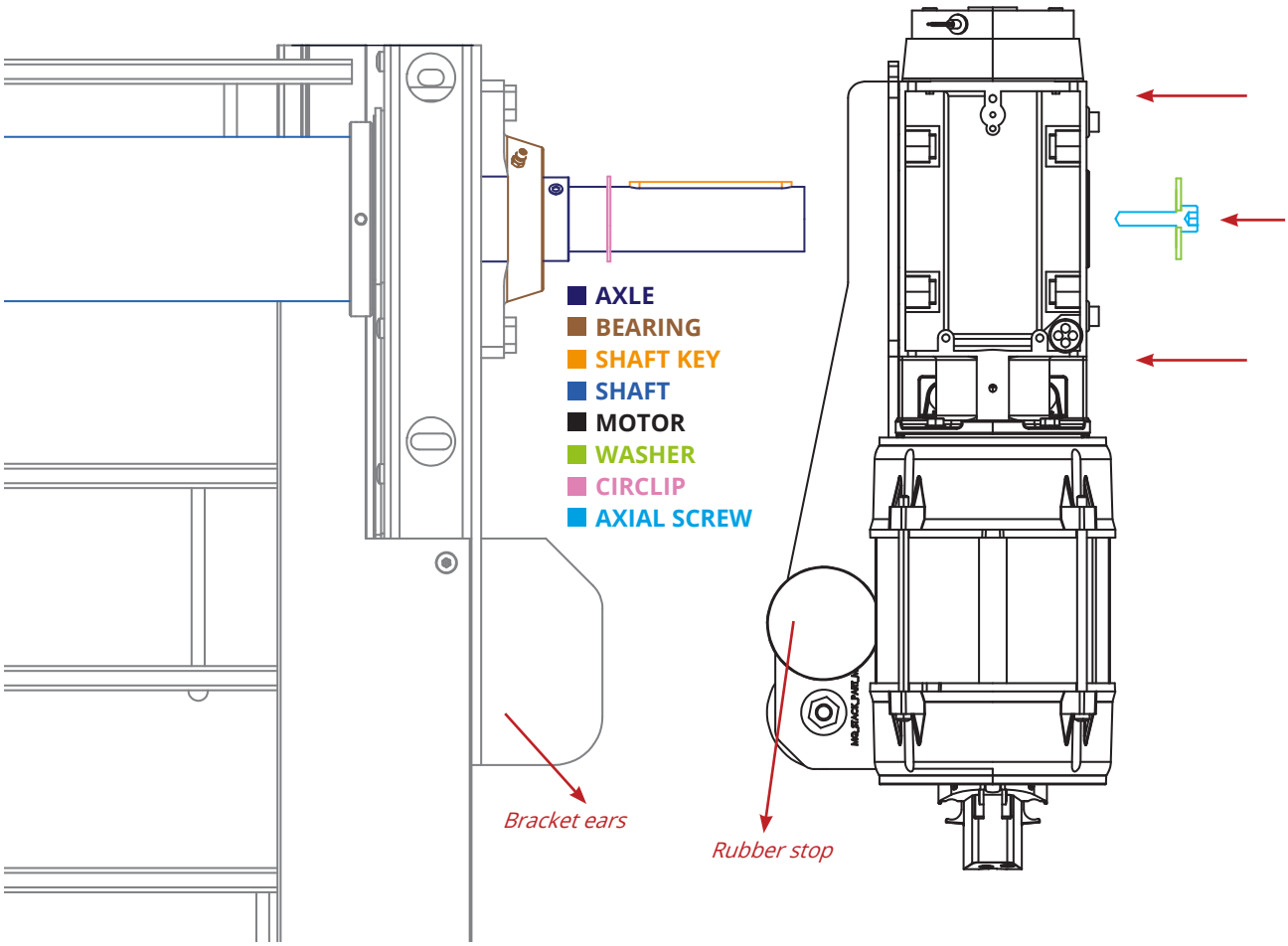
Fig. 23



- Install the motor on the shaft, ensuring that the rubber stops are properly positioned in their housing, between the ears of the bracket.

- After correctly positioning the motor, secure it using the washer and axial screw fixed at the end of the shaft and removed in step 2/. Tighten the screw to lock the motor axially with the shaft. *(Fig. 24)*

Fig. 24



5. PREPARATION OF THE STACKDOOR® CURTAIN

5.1. COMPONENTS OF THE CURTAIN

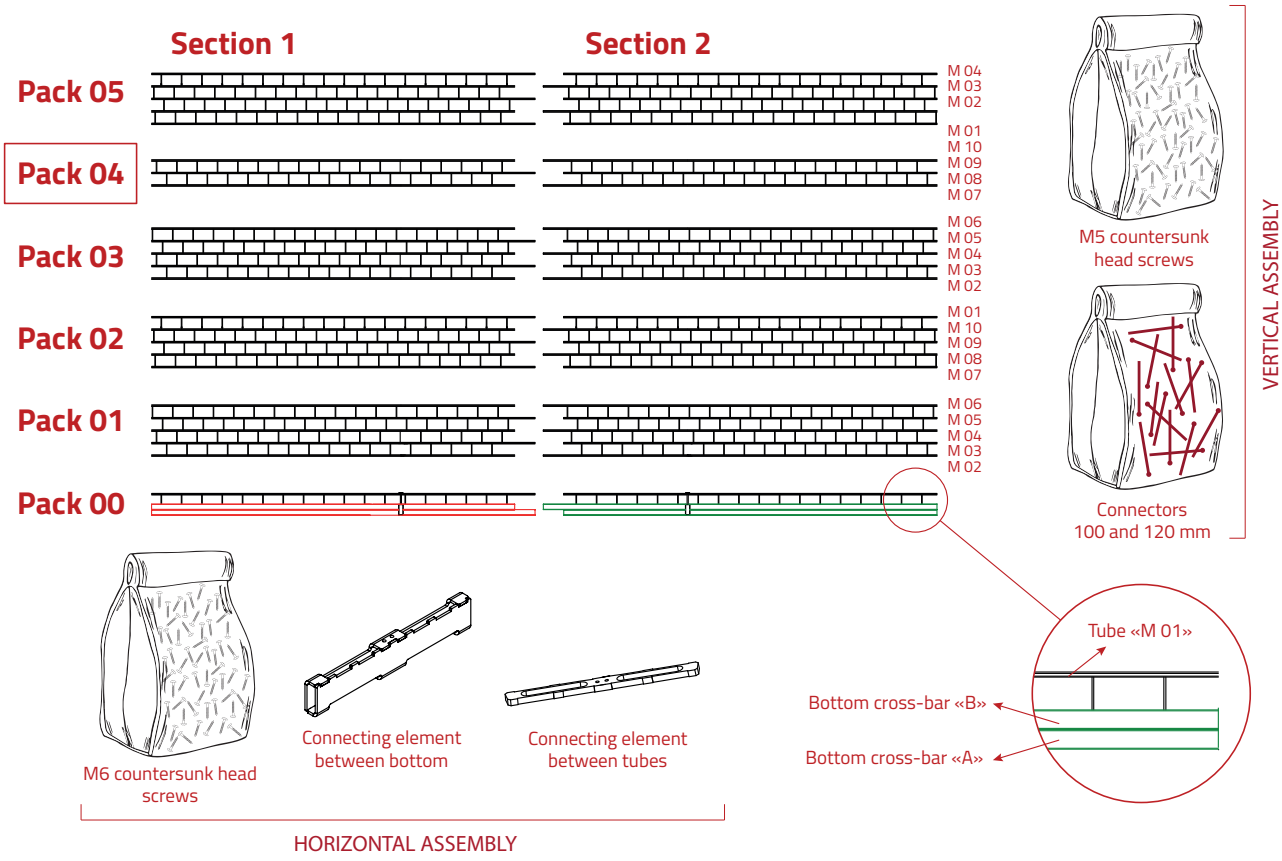
The Stackdoor® curtain is composed of «standard» packs of 5 horizontal tubes preassembled together with connectors. Two packs (non-standard) are exceptions to this rule:
- The bottom pack «Pack 00», at the bottom of the curtain, which contains the bottom cross member (elements A and B) and tube M01.
- The penultimate top pack, which contains the appropriate number of tubes to match the finished height of the curtain.

Stackdoor® curtains with a length of less than 6 m will consist of a single section, while all curtains with a length of more than 6 m will consist of 2 sections. These 2 sections can have different lengths. The joining elements are always delivered inserted and already fixed in section 1.

The assembly of the curtain will involve horizontally assembling the two sections together (using the joining elements) and vertically assembling the packs together (using connectors and screws).

This schematic diagram (view from the shaft side) illustrates the elements composing the curtain as well as the sequencing of their numbering *(Fig. 25)*.

Fig. 25



5.2. HORIZONTAL ASSEMBLY OF THE SECTIONS (ONLY FOR STACKDOOR® >6M)

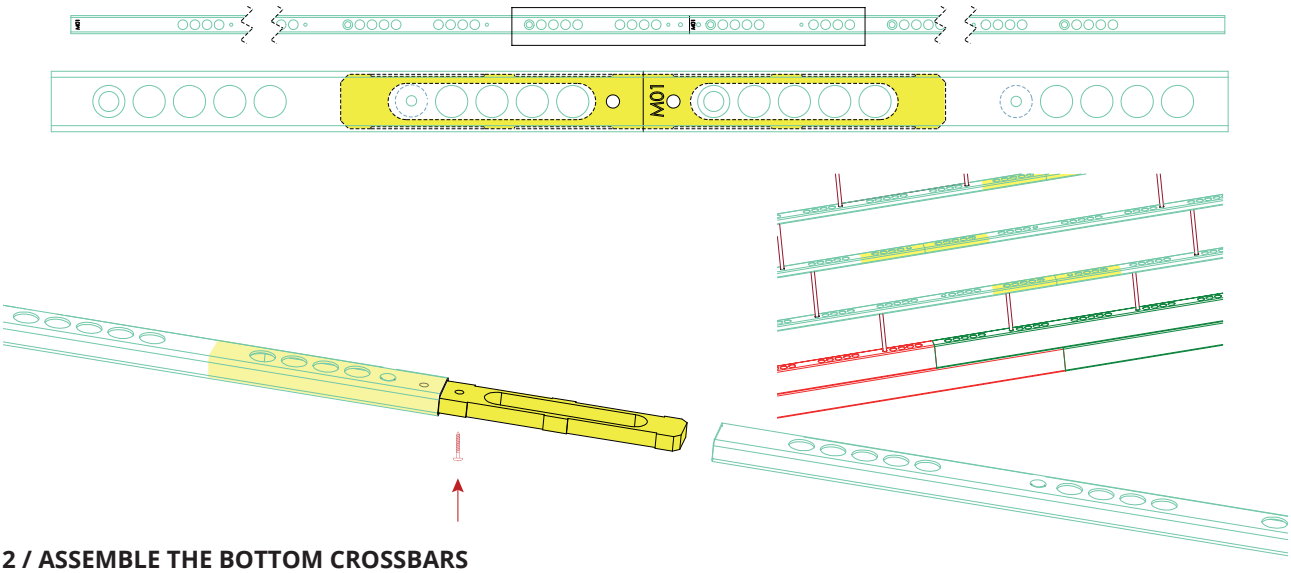
We recommend assembling the tubes and their connectors on protected trestles to avoid damaging the finish of the Stackdoor®.

This step only applies to curtains longer than 6 meters. If the curtain is shorter, proceed to step 5.3.

1/ ASSEMBLE THE LEFT AND RIGHT TUBE PACKS WITH MATCHING NUMBERS.

- For each tube, insert the pre-fixed joining element from section 1 into the corresponding tube of section 2 (on the side where they are perforated). *(Fig. 26)*
- Pass the pre-coated Loctite M6 countersunk head screw through the lower holes of the tubes and fasten it to the joining element.

Fig. 26



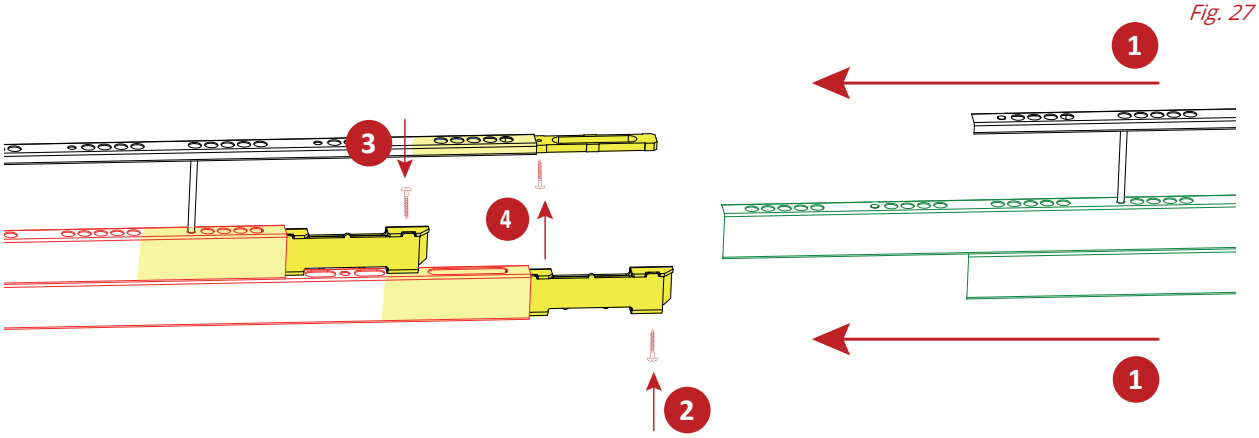
2 / ASSEMBLE THE BOTTOM CROSSBARS

- Proceed in the same way as the horizontal assembly of the tube packs, inserting the pre-fixed joining elements from section 1 of the bottom crossbars A and B into section 2 *(Fig. 27)*.
- Bottom crossbar A: Pass the pre-coated Loctite M6 countersunk head screw through the **lower** holes of the tubes and fasten it to the joining element.
- Bottom crossbar B: Pass the pre-coated Loctite M6 countersunk head screw through the **upper** holes of the tubes and fasten it to the joining element.

Check that no screws have been forgotten during assembly and ensure that no screws protrude from the tubes to avoid hindering the proper folding and unfolding of the curtain.

If you need to unscrew screws coated with Loctite, make sure to recoat them with Loctite 243 (blue) before screwing them back in.

Fig. 27



5.3. MOUNTING THE DRUMS (FOR STACKDOOR® SDT6C, SDT8C, AND SDMEC)

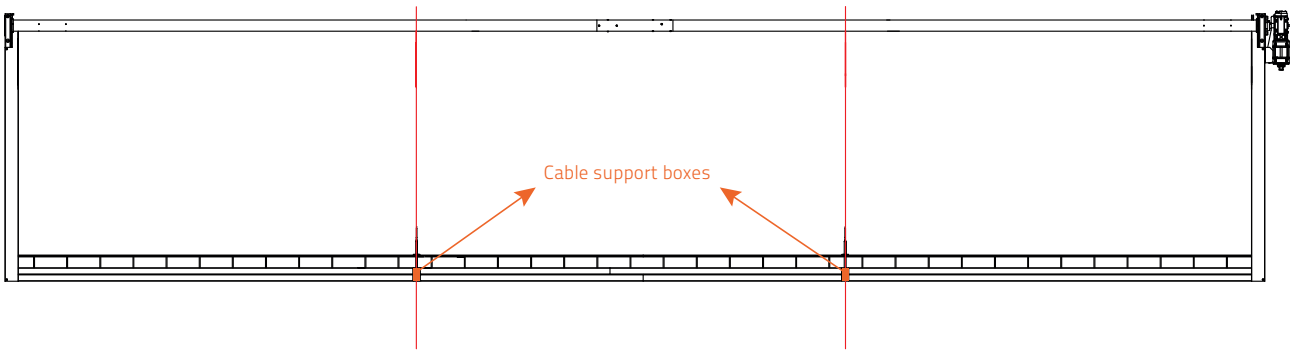
The operations described below are to be performed as many times as there are cables. If there is a curtain without cables, proceed directly to step 5.5.

1 / POSITION THE BOTTOM PACK (BOTTOM RAILS A + B AND TUBE M01) IN ITS HOUSING AT AN EQUAL DISTANCE BETWEEN THE SIDE GUIDES.

2 / USE THE VERTICAL LASER TO DEFINE THE POSITION OF THE CABLES ON THE SHAFT.

To do this, transfer the axis of the cable support boxes (on the bottom rails) to their position on the shaft *(Fig.28)*. After marking the axis of the cables, remove the bottom pack from its location.

Fig. 28



3 / POSITION EACH DRUM RELATIVE TO THE LOCATION OF ITS CABLE.

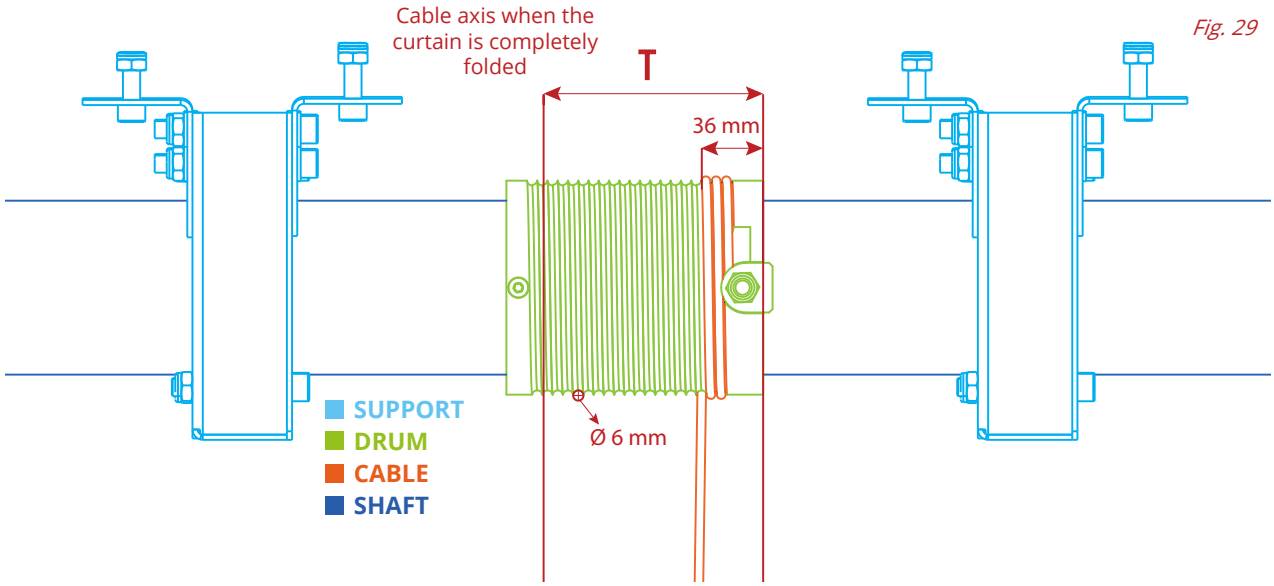
Position yourself on the side of the shaft and place the drum so that the distance «T» between the axis of the cable support box and the end of the drum (Fig. 29) corresponds to the following formulas.
The distance «T» is calculated and indicated in the technical plans provided with your Stackdoor®.

> **T** = *distance between the axis of the cable support box and the end of the drum*
> **C** = *curtain travel; indicated in the technical plans provided with the Stackdoor®. Corresponds to the distance between the lowest point of the curtain and the maximum opening height when the curtain is folded.*
> **36** = *distance between the right end of the drum and the position of the cable on the drum when the curtain is completely unfolded*

IN CASE OF A 70 MM DIAMETER SHAFT (T6 MOTOR): T(mm) = (6 x C / 292,8) + 36

IN CASE OF A 102 MM DIAMETER SHAFT (T8 MOTOR AND EXTERNAL MOTORS): T(mm) = (6 x C / 394,9) + 36

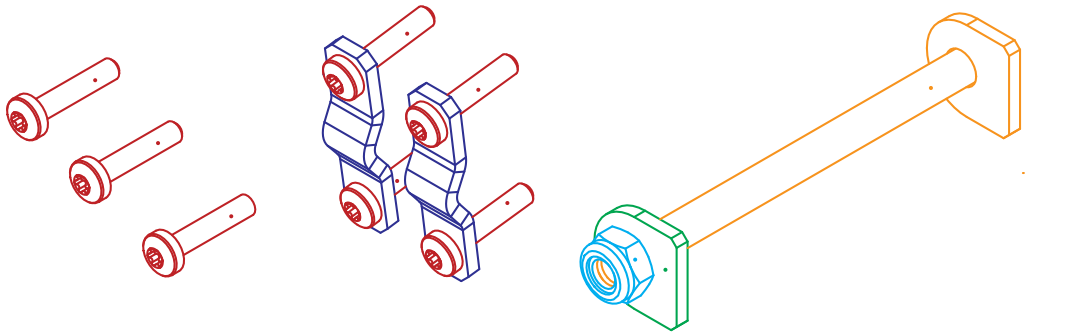
Fig. 29



4 / OBTAIN THE FIXING KIT FOR EACH DRUM *(FIG. 30)* INCLUDING:

- **7 COUNTERSUNK SELF-TAPPING SCREWS M6X30**
- **1 DRUM LOCKING PLATE**
- **2 CABLE LOCKING PLATE**
- **1 DRUM LOCKING AXLE M10**
- **1 NUT**

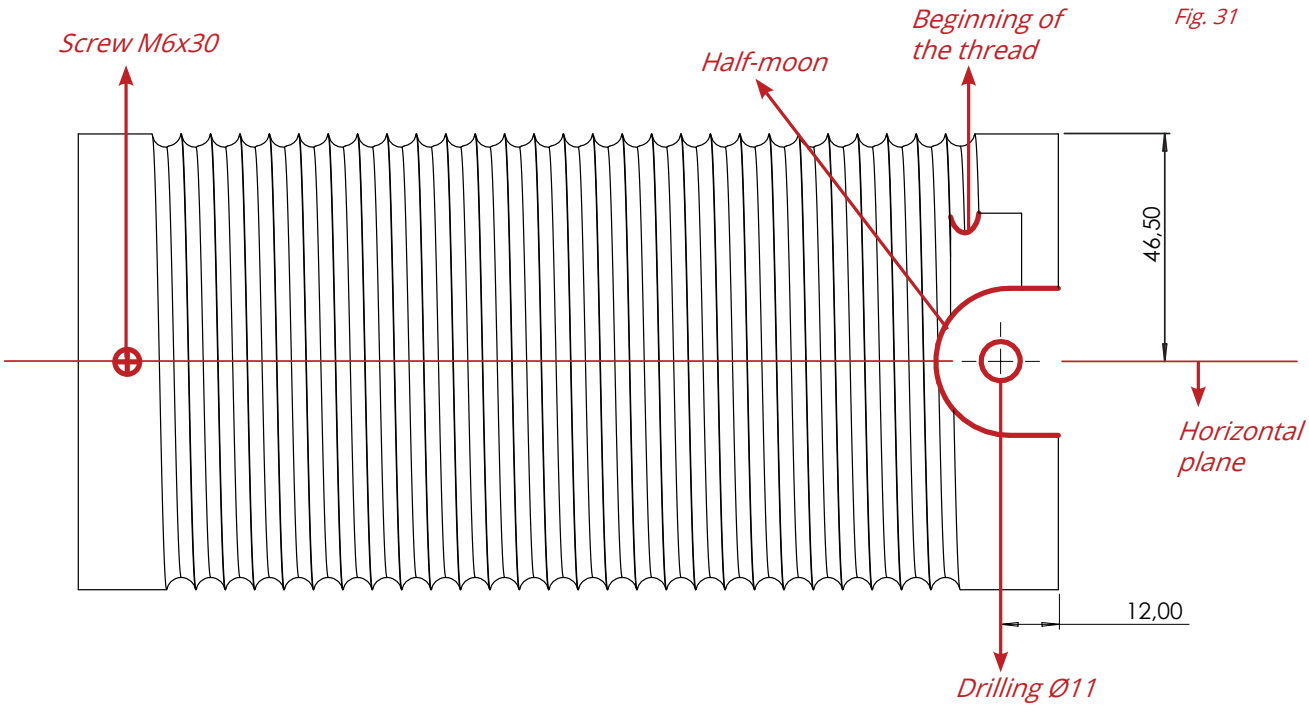
Fig. 30



5 / PARTIAL FIXATION OF THE DRUM

- Position the drum so that the half-moon of the drum and the beginning of the thread that will receive the cable are horizontal facing you. *(Fig. 31)*
- Drill through the drum's hole on the left side on the same plane as the half-moon into the shaft and fasten the M6x30 button head self-tapping screw to attach the drum to the shaft.
- Drill the shaft with an Ø11 drill bit at the center of the drum's half-moon, i.e., 12 mm from the right end of the drum.

Fig. 31

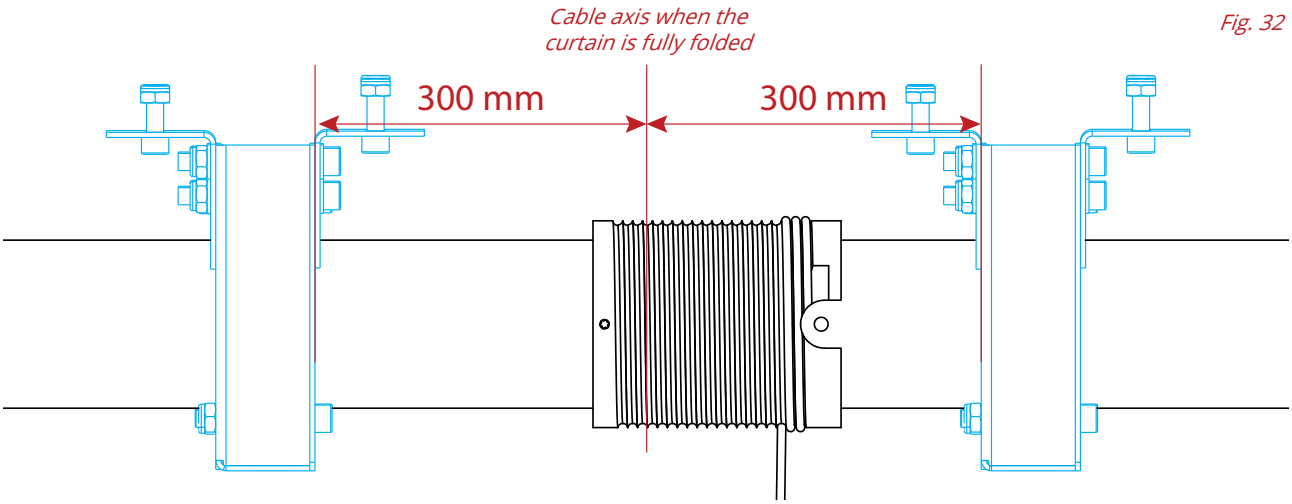


5.4. INSTALLATION OF SHAFT SUPPORTS (FOR STACKDOOR® SDT6C, SDT8C, AND SDMEC)

1 / ATTACH THE SHAFT SUPPORTS TO THE CEILING OF THE STRUCTURE, 300 MM ON EACH SIDE OF THE AXIS OF THE CABLE SUPPORT BOX, USING APPROPRIATE ANCHORS FOR THE STRUCTURE. ***(FIG. 32)***

2 / CHECK THE LEVEL AND FLATNESS OF THE SHAFT, ADJUSTING THE TIGHTENING OF THE SUPPORT ANCHORS IF NECESSARY.

Fig. 32



5.5. INTRODUCTION TO THE CURTAIN ASSEMBLY

5.5.1. GENERALITIES ON THE VERTICAL ASSEMBLY OF THE TUBES

The profiles should be mounted with the engraved side on the left (viewed from the side of the axis).

The tubes have holes with different diameters, each serving a specific function:
- Ø 6.2 mm: used for securing the connector with M5 screws
- Ø 10 mm: holds the connector ball and suspends the lower tube from the upper tube
- Ø 16 mm: free connector that slides through an intermediate tube

The connectors are spaced 300 mm apart on each tube. If more than 300 mm of distance is observed between two connectors, it indicates missing connectors.

Standard connectors measure 120 mm. Connectors linking tube M01 with the bottom crosspiece measure 100 mm.

Most of the curtain connectors are already fixed inside the packs. The next step describes how to assemble the missing connectors, namely:
- Connectors for vertically joining two tube packs
- Missing connectors at the junction between two sections (for Stackdoor® > 6m).

5.5.2. CHOICE OF CURTAIN ASSEMBLY METHOD

Two assembly methods are available: choose the one that suits the site and equipment (see table below).

METHODS	METHOD 1: ASSEMBLY OF THE CURTAIN FROM TOP TO BOTTOM	METHOD 2: ASSEMBLY OF THE CURTAIN ON THE GROUND
THE GENERAL TECHNIQUE	The assembly of the tubes and connectors is done at height and progressively (on scaffolding or a platform).	The assembly of the tubes and connectors is done on the ground, and the curtain is mounted all at once after assembly.
NEED FOR SPECIFIC TOOLS	Yes: Suspension C	Yes: Vertical support structure to be fabricated (see section 6.2.2: fabrication technique for the support structure)
ADVANTAGES	+ Easier technique, no need for lifting equipment + Doesn't require motor connection and usage before putting into service	+ Faster technique
DISADVANTAGES	- At the end of assembly, the curtain is unfolded and obstructs any passage until the motor is put into service - Recommended for use with an internal motor	- Heavier loads (likely use of a lifting device) - Requires experience in installation as more care must be taken in handling the elements, and detailed knowledge of the motor is useful
SECURITY	Reminder: when working at height, the area should be marked off so that no one can pass beneath the work zone.	

A third assembly method is available as an option when ordering: we assemble the curtain at the factory and deliver it in the vertical support structure, ready to be fixed. Contact us for more information.

5.5.3 TYPES OF HIGH FIXING TO THE STRUCTURE:

Three types of high fixing to the structure are possible, selected at the time of ordering to adapt to the different configurations of the site. (Fig. 33) Refer to the technical sheet corresponding to the Stackdoor® configuration to know the mounting case. By default in this manual, we will refer to the «classic ceiling» mounting, but all three cases are possible and the installer will adapt the operations accordingly.

1 / CLASSIC MOUNTING (TOP TUBE DIRECTLY MOUNTED ON THE CEILING)
Use Ø 8 mm or M8 screws suitable for the ceiling structure. Pass the screws through the holes in the tube provided for the passage of the connectors to assemble the tube to the ceiling.

2 / MOUNTING WITH ANGLE BRACKET
A support the length of the door must be screwed to the wall with screws suitable for the wall (height of placement of the support defined in the technical sheet corresponding to the Stackdoor® configuration). Pass an Ø 8 mm or M8 screw through the holes in the tube provided for the passage of the connectors to assemble the tube to the support.

3 / MOUNTING WITH OFFSET
This mounting is imposed based on specific dimensions of the Stackdoor® and requires the addition of angle brackets, which are different depending on whether it is surface-mounted or installed in a recess. Consult the technical sheet corresponding to the Stackdoor® configuration for more details.

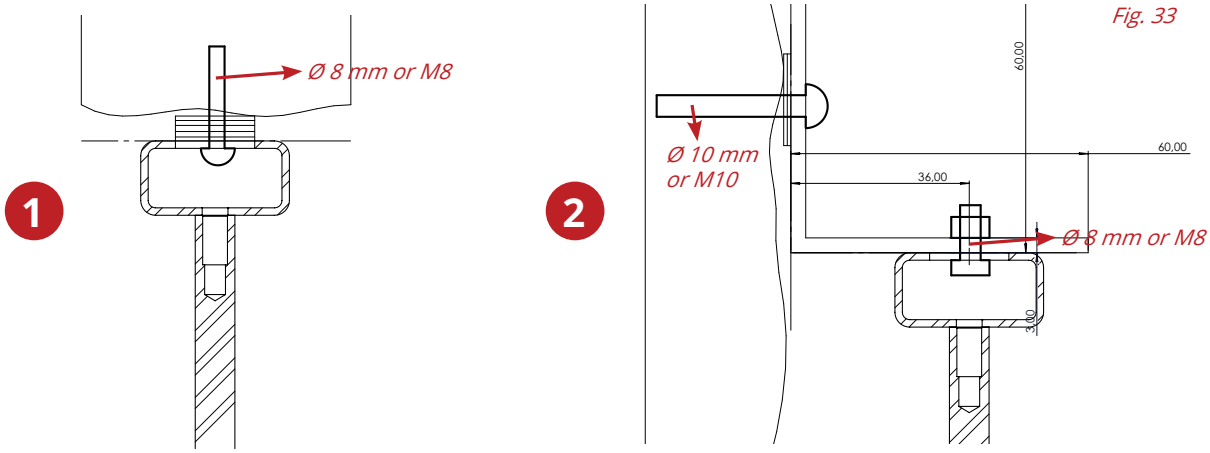


Fig. 33

6. ASSEMBLY OF THE STACKDOOR® CURTAIN

6.1. ASSEMBLY OF THE CURTAIN FROM TOP TO BOTTOM - METHOD 1

6.1.1. FIXING THE UPPER PACK TO THE BUILDING'S CEILING

1 / POSITION THE UPPER PACK IN ITS FINAL POSITION. ***(FIG. 34)***

- position it against the ceiling of the structure
- centered between the two side guides
- approximately 2 mm away from the plastic strip of profile A of the side guide.

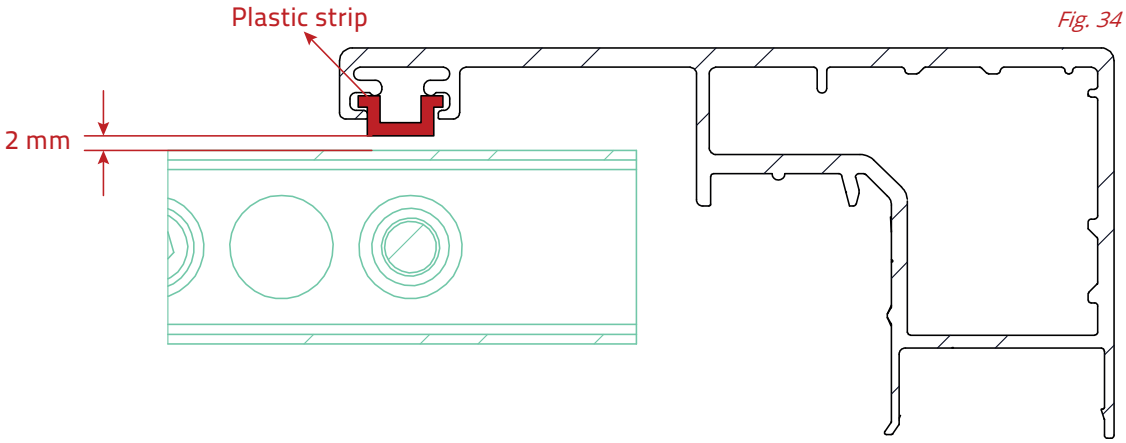


Fig. 34

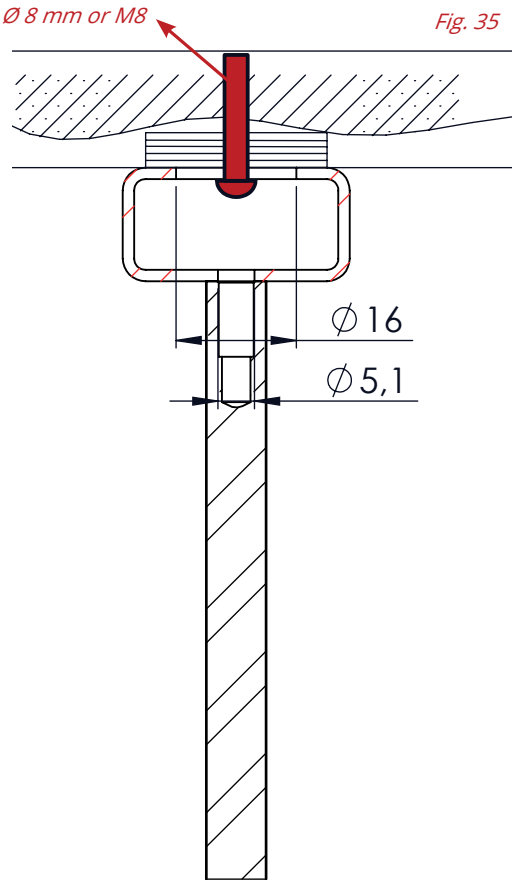


Fig. 35

2 / UNFOLD THE UPPER TUBE FROM THE REST OF THE PACK

3 / GET THE SCREWS SUITABLE FOR ANCHORING INTO THE STRUCTURE.

Use M8 class 8.8 screws for anchoring into steel structures, or equivalent for anchoring into concrete.

4 / ANCHOR THE UPPER TUBE INTO THE CEILING.

Every 300mm, pass the screws through the lower hole of the upper tube into the Ø 16mm holes, slide them into the upper Ø 10mm hole of the same tube, and fix them to the structure *(Fig. 35)*.

6.1.2. ASSEMBLY OF ALL CURTAIN PACKS WHILE DESCENDING

1 / SUSPEND THE SUSPENSION C (ASSEMBLY AID TOOL PROVIDED IN THE INSTALLATION KIT) EVERY METER TO THE LOWER TUBE OF THE ALREADY ANCHORED UPPER PACK «N» *(FIG. 36)*

2 / SUSPEND THE NEXT PACK «N-1» IN DESCENDING ORDER FROM TOP TO BOTTOM ON THE SUSPENSION C.

Fig. 36

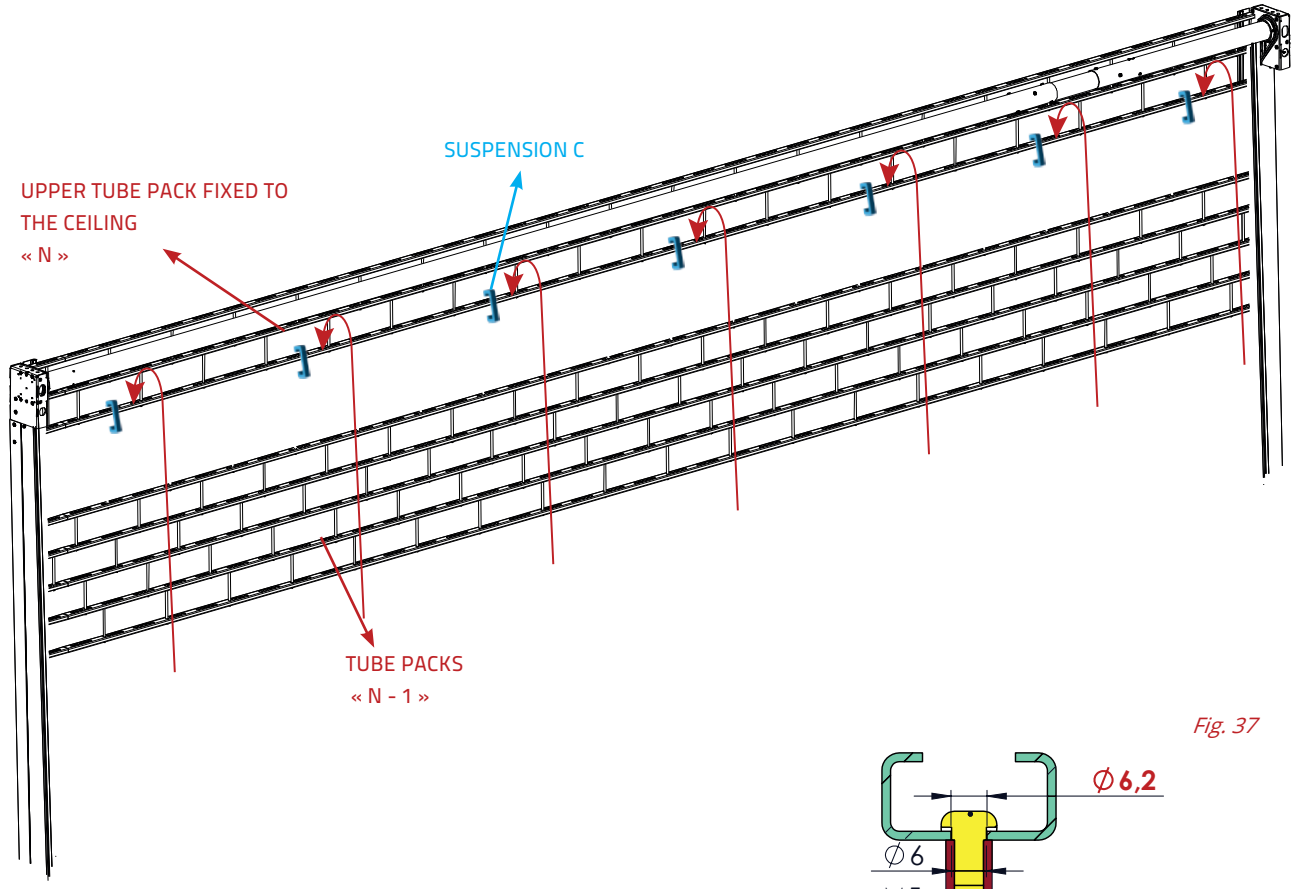
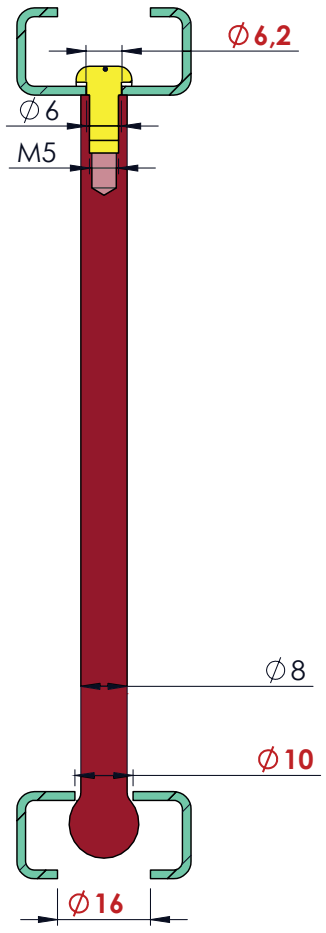


Fig. 37



3 / EQUIP YOURSELF WITH M5 COUNTERSUNK HEAD SCREWS PRE-COATED WITH LOCTITE AND 130 MM CONNECTORS.

4 / ASSEMBLE THE 2 PACKS BY SCREWING THE CONNECTORS EVERY 300 MM.

- Insert the connectors from underneath the tubes into the Ø 16 mm holes.
- Slide them upwards into the Ø 10 mm holes of the same tube, in the same vertical axis.
- Secure the connectors permanently from above the upper tube using the provided screws (M5 countersunk). *(Fig. 37)*

5 / CONTINUE THE OPERATION UNTIL YOU REACH THE BOTTOM OF THE CURTAIN, WHICH IS THE PACK 00 CONTAINING THE BOTTOM CROSSBAR.

If you need to unscrew Loctite-coated screws, be sure to reapply Loctite 243 (blue) before screwing them back in.

6.2. ASSEMBLY OF THE CURTAIN ON THE GROUND - METHOD 2

We recommend assembling the tubes and their connectors on protected trestles to avoid damaging the Stackdoor's finish.

6.2.1. ASSEMBLY OF THE PACKS TOGETHER INVOLVES SCREWING THE CONNECTORS EVERY 300 MM

On the protected trestles, assemble all the packs in the order of their numbering by screwing the connectors every 300 mm:

- Insert the connectors from underneath the tubes into the Ø 16 mm holes
- Slide them upwards into the Ø 10 mm holes of the same tube, in the same vertical axis
- Using the provided screws (M5 countersunk head), securely fasten the connectors from above the upper tube into the Ø 6.2 mm holes located in the same vertical axis *(Fig.37)*

If you need to unscrew Loctite-coated screws, be sure to reapply Loctite 243 (blue) before screwing them back in.

6.2.2. ADDING A VERTICAL SUPPORT STRUCTURE AND POSITIONING THE CURTAIN

1 / FOLD THE ENTIRE CURTAIN, EXCEPT FOR THE TOP TUBE

2 / CONSTRUCT THE VERTICAL SUPPORT STRUCTURE AROUND THE CURTAIN *(FIG. 38)*

- Position a rafter approximately 600 mm from each left and right end of the complete tube bundle. Add an intermediate rafter in the middle of the curtain.
- Secure two shims perpendicular to each rafter:
- one shim under the bottom crossbars of the curtain
- **one shim** to maintain the spacing between the top tube and the rest of the curtain

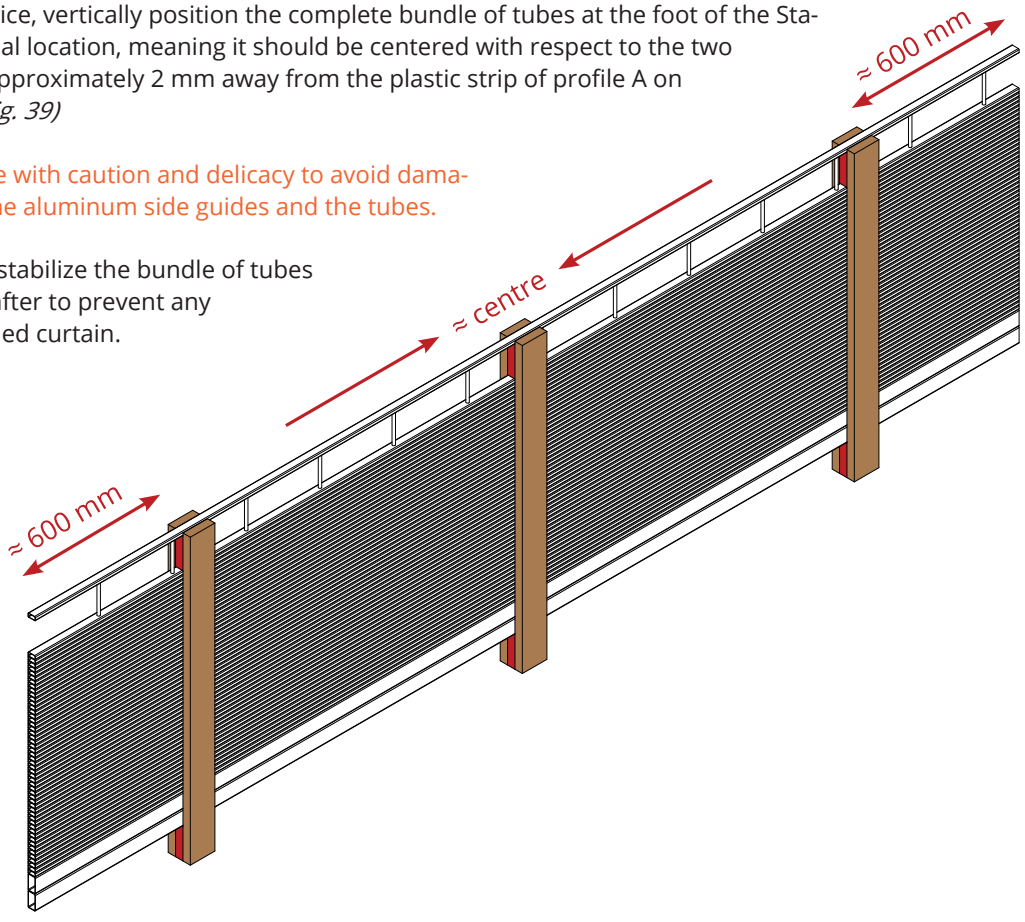
3 / POSITION THE FOLDED CURTAIN AT THE BOTTOM OF ITS FINAL LOCATION.

Using a lifting device, vertically position the complete bundle of tubes at the foot of the Stackdoor®, at its final location, meaning it should be centered with respect to the two side guides and approximately 2 mm away from the plastic strip of profile A on the side guide. *(Fig. 39)*

Handle with caution and delicacy to avoid damaging the aluminum side guides and the tubes.

Next, secure and stabilize the bundle of tubes in front of each rafter to prevent any tipping of the folded curtain.

Fig. 38



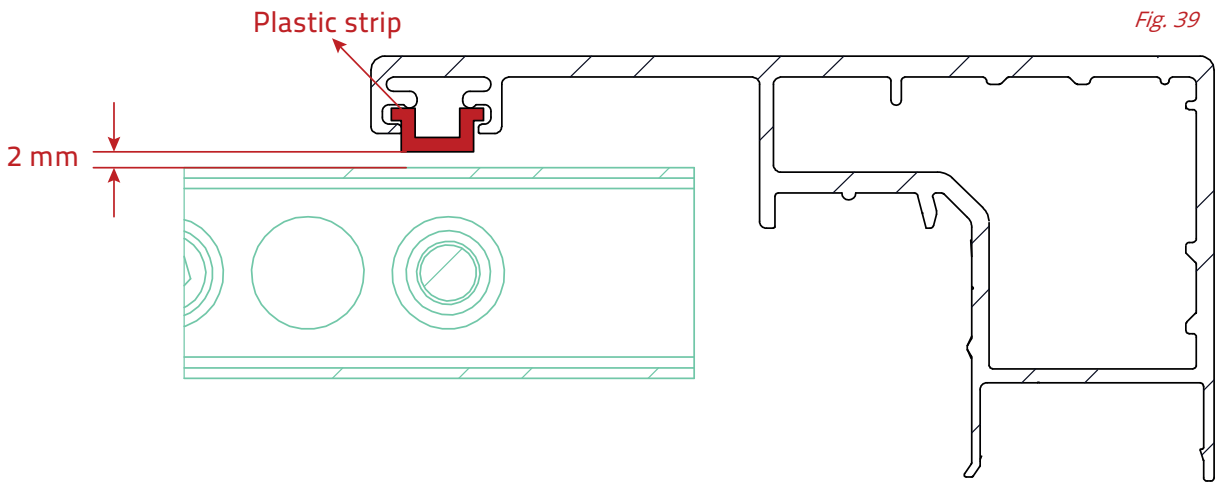


Fig. 39

6.2.3. MOUNTING THE CURTAIN TO THE BUILDING'S CEILING

THIS STEP SHOULD BE CARRIED OUT AFTER THE MOTOR IS PUT INTO SERVICE TO LIFT THE CURTAIN USING THE MOTOR. PLEASE CONTINUE WITH THE INSTALLATION BY COMPLETING CHAPTERS 7, 8, AND 9 OF THIS MANUAL FIRST, AND RETURN TO SECTION 6.2.3 AFTER PUTTING THE MOTOR INTO SERVICE.

1 / TO LIFT THE COMPLETE PACKAGE OF TUBES

Once the chains and cables are secured and the motor is connected, proceed with the lifting of the entire curtain, still folded within its vertical support structure.

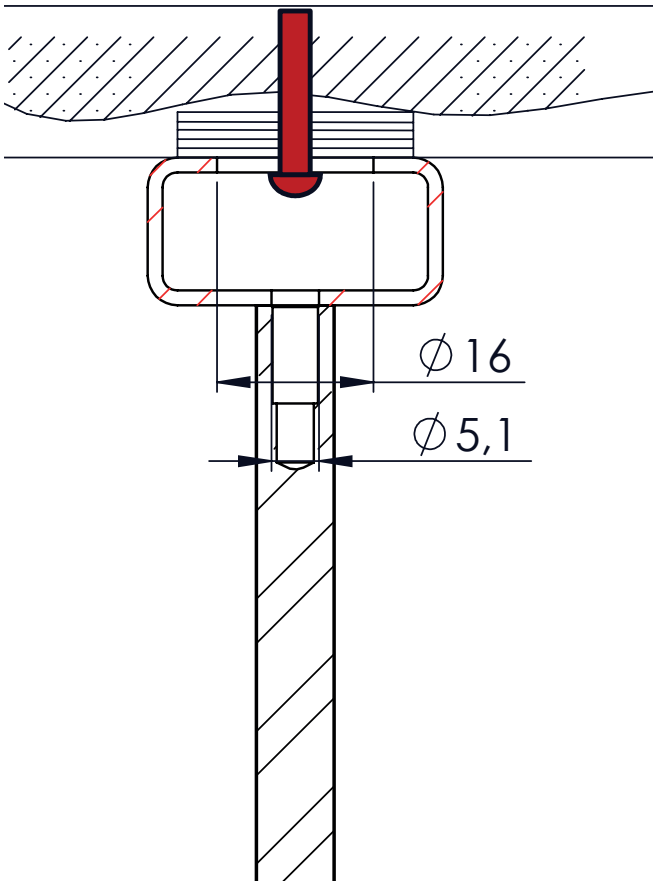
2 / GET THE SCREWS SUITABLE FOR ANCHORING INTO THE STRUCTURE

M8 class 8.8 (for anchoring in steel structure) or equivalent (for concrete anchoring)

3 / ANCHOR THE UPPER TUBE (UNFOLDED FROM THE REST OF THE PACK) TO THE CEILING.

Every 300mm, pass the screws through the lower hole of the upper tube into the Ø16 mm holes, slide them into the upper Ø10 mm hole of the same tube, and secure them to the structure. *(Fig. 40)*

Fig. 40



4 / REMOVE THE VERTICAL SUPPORT STRUCTURE AROUND THE FOLDED STACKDOOR®.

5 / ACTIVATE THE MOTOR TO UNFOLD THE STACKDOOR® CURTAIN.

At this stage of the installation, the motor's end limit switch has not been adjusted yet. Make sure not to force the descent and leave a margin of height to avoid constraining or damaging the Stackdoor®.

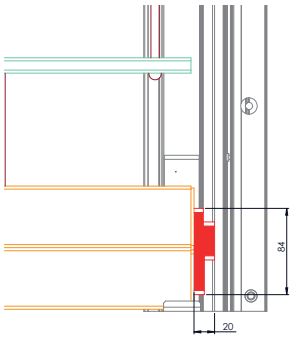
7. INSTALLATION OF THE CHAINS AND CABLES

THIS POINT IS A CRITICAL STEP TO ENSURE THE FUTURE PROPER FUNCTIONING OF THE STACKDOOR®.

7.1. INSTALLATION OF THE CHAINES

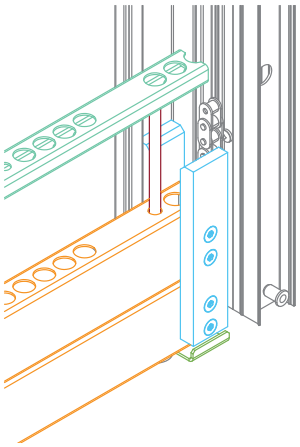
Check that the suspension plates with chain attachments are mounted in the bottom rails. *(Fig. 41)*

Fig. 41



Also, verify the presence of the PEHD (plastic) parts at the ends of the bottom rails. *(Fig. 42)*

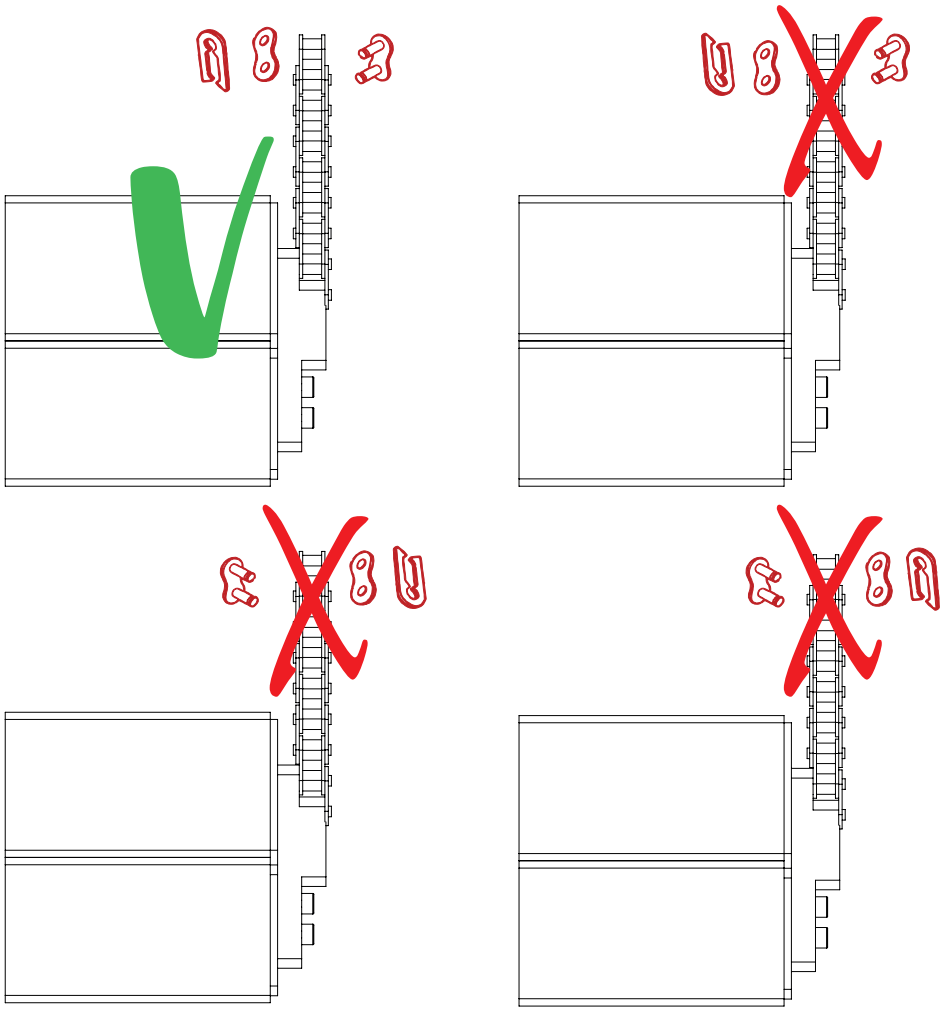
Fig. 42



Each side guide should contain a chain: one chain on the motor side and one chain on the speed limiter side (opposite the motor side).

It is imperative to always start adjusting the chains with the chain on the motor side..
The reason being that the sprocket on the internal motor side is not free, due to the presence of parts fixed between the motor and the tube.

Fig. 43



1 / CONNECT THE CHAIN TO THE CHAIN END (8 CM) ALREADY FIXED TO THE LOWER CROSS MEMBER USING THE CONNECTING LINK. ENSURE TO FOLLOW THE CORRECT ASSEMBLY DIRECTION OF THE FREE ELEMENTS *(FIG.43)*.

2 / REATTACH THE CHAIN GUIDE PLATE TO THE BRACKET USING THE 6 PREVIOUSLY REMOVED SCREWS *(FIG.44)*.

3 / WIND THE CHAIN, KEEPING ITS AXIS ALIGNED, ONTO THE SPROCKET OF THE SHAFT, WHILE INSERTING IT INTO EACH OF THE 2 SLOTS PROVIDED FOR THIS PURPOSE IN THE SIDE GUIDE *(FIG.45)*.

4 / ROTATE THE SPROCKET AROUND THE SHAFT IN THE CORRECT DIRECTION TO TENSION THE CHAIN

Internal motor side:

Rotate the sprocket by manually rotating the shaft using the motor. To do this, use the disengagement manoeuvre: insert an internal hexagonal screwdriver (size 7) and rotate it until the chain is tensioned. *(Fig.46)*

Checkpoint: The lower crossbar should remain stationary and horizontal on the ground. Use a laser level to verify that the crossbars remain horizontal.

Any other case (opposite motor side and external motor):

Rotate the free sprocket manually around the stationary shaft until the chain is tensioned.

Checkpoint: The lower crossbar should remain stationary and horizontal on the ground. Use a laser level to verify that the crossbars remain horizontal.

Fig. 44

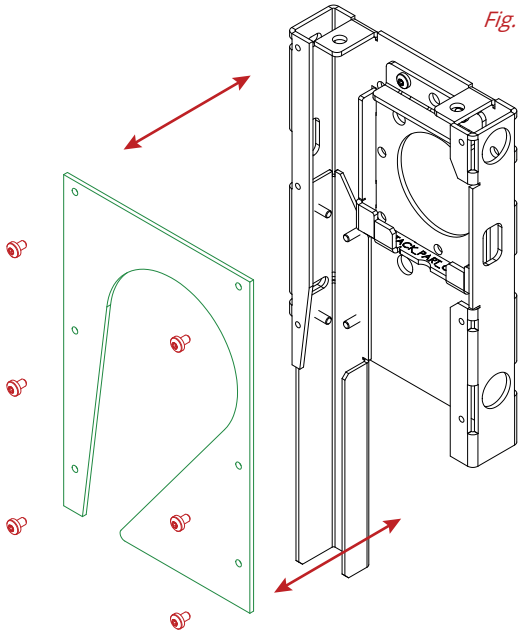


Fig. 45

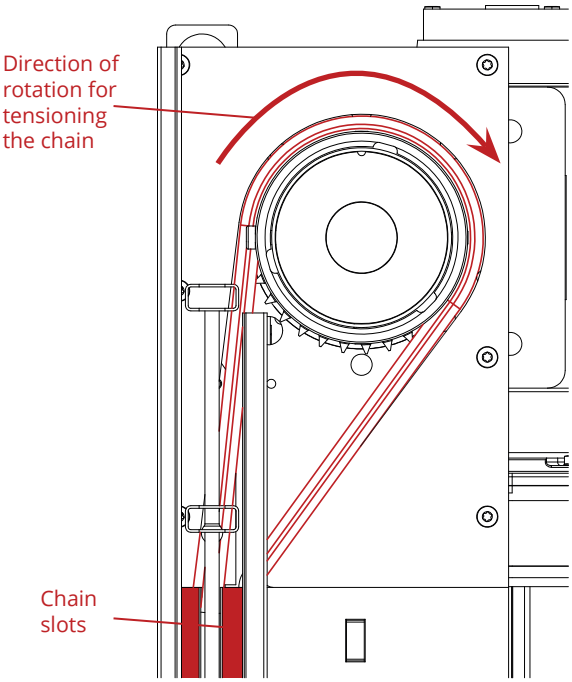
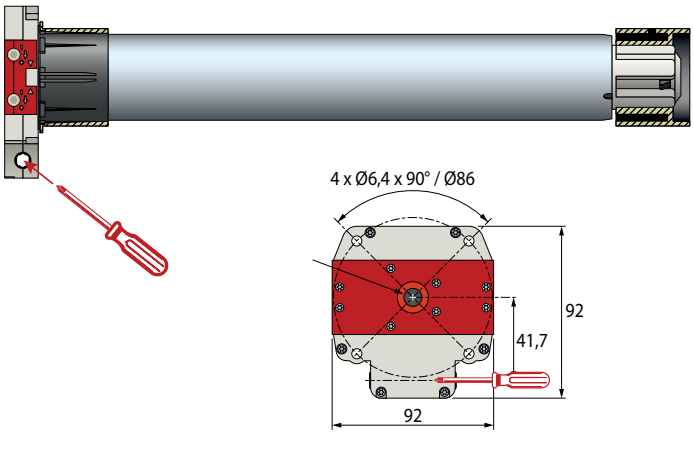
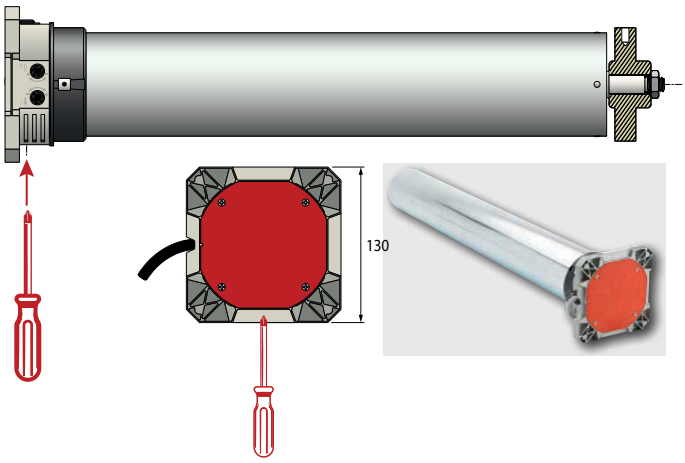


Fig. 46

MOTOR T6 :



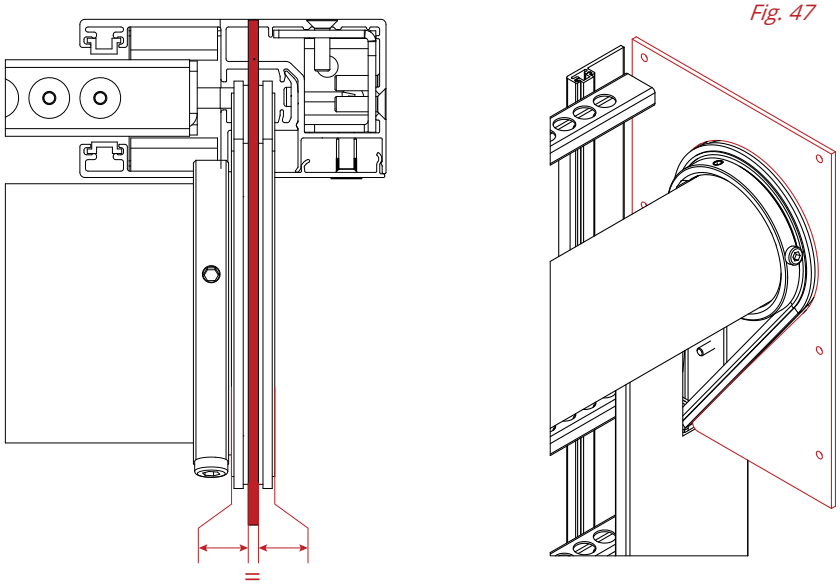
MOTOR T8 :



5 / ADJUST THE POSITIONING OF THE SPROCKET SO THAT THE CHAIN IS PERFECTLY CENTERED ON THE CHAIN GUIDE PLATE. *(FIG.47)*

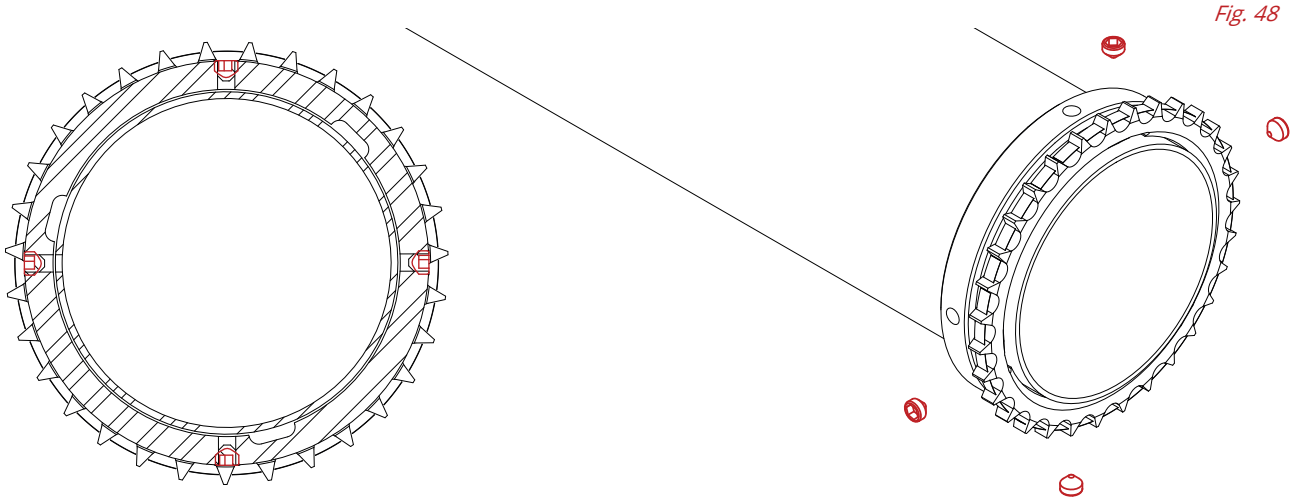
Checkpoint: The chain guide plate should not come into contact with the chain or the sprocket; there should be some clearance..

Fig. 47



6 / WHEN THE POSITIONING OF THE CHAIN AND ITS SPROCKET IS CORRECT, TIGHTEN 3 SET SCREWS (FOR Ø 70 MM SHAFTS) OR 4 SET SCREWS (FOR Ø 102 MM SHAFTS) BETWEEN THE SPROCKET AND THE SHAFT *(FIG.48)*

Fig. 48



7 / REPEAT THE PREVIOUS STEPS TO MOUNT THE SECOND CHAIN

THE FOLLOWING STEPS MUST BE CARRIED OUT AFTER THE MOTOR HAS BEEN PUT INTO SERVICE (SEE CHAPTER 9).

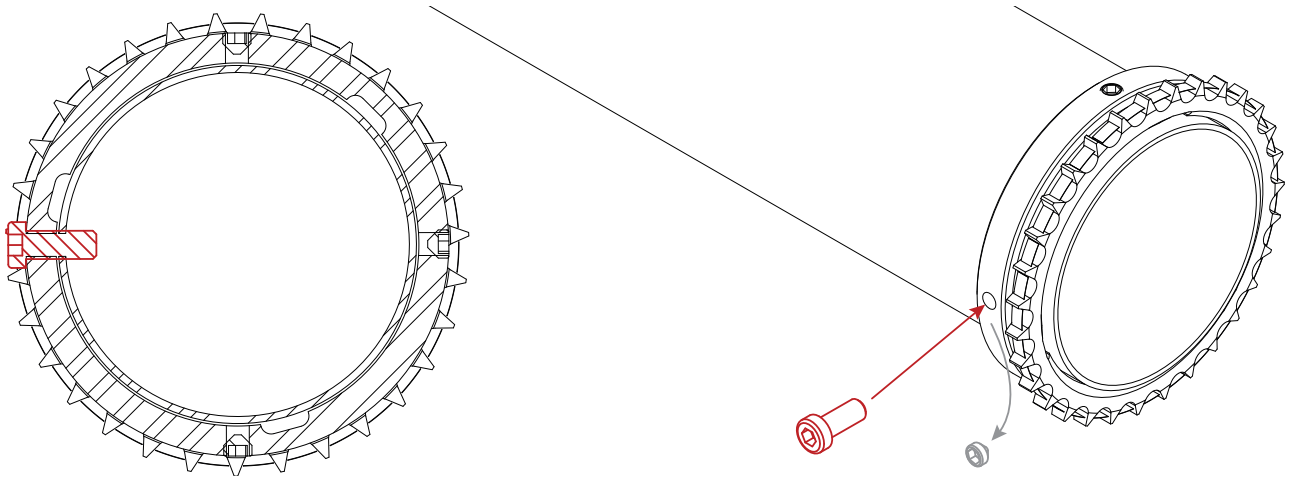
8 / MAKE A FEW UP AND DOWN CYCLES OF THE DOOR TO CHECK THAT THE GEARS ARE ALIGNED WITH THE SHAFT AND THAT THE CHAIN IS PROPERLY POSITIONED. READJUST THE AXIAL POSITION OF THE SPROCKETS IF NECESSARY..

9 / ONCE THE SPROCKET POSITIONING IS CORRECT, LOCK EACH SPROCKET ONTO THE SHAFT *(FIG.49).*

For this, remove one of the set screws from each gear and drill the shaft with a Ø 6.5 mm drill bit at the location of the removed screw to screw in a self-tapping screw M8x20.

For this step, disassembly and then reassembly of the chain guide plate on the console will be necessary.

Fig. 49



7.2. CABLE INSTALLATION (FOR STACKDOOR® SDT6C, SDT8C, AND SDMEC)

7.2.1. CABLE FIXATION ON THE BOTTOM RAILS *(FIG.50)*

Before mounting the cable on its anchor, verify the presence of the screw and the safety washer at the end of its termination..

1/ REMOVE THE COVER OF THE CABLE SUPPORT BOX BY UNSCREWING THE 4 COUNTERSUNK SCREWS LOCATED ON THE SIDES OF EACH BOX. KEEP THE COVER TO REATTACH IT AT THE END OF ASSEMBLY.

2/ THREAD THE CABLE THROUGH THE CABLE GUIDES ALREADY MOUNTED ON THE TUBES.

3/ SCREW THE THREADED TERMINATION CRIMPED ON THE CABLE INTO THE ROD OF THE CABLE SUPPORT BOX.

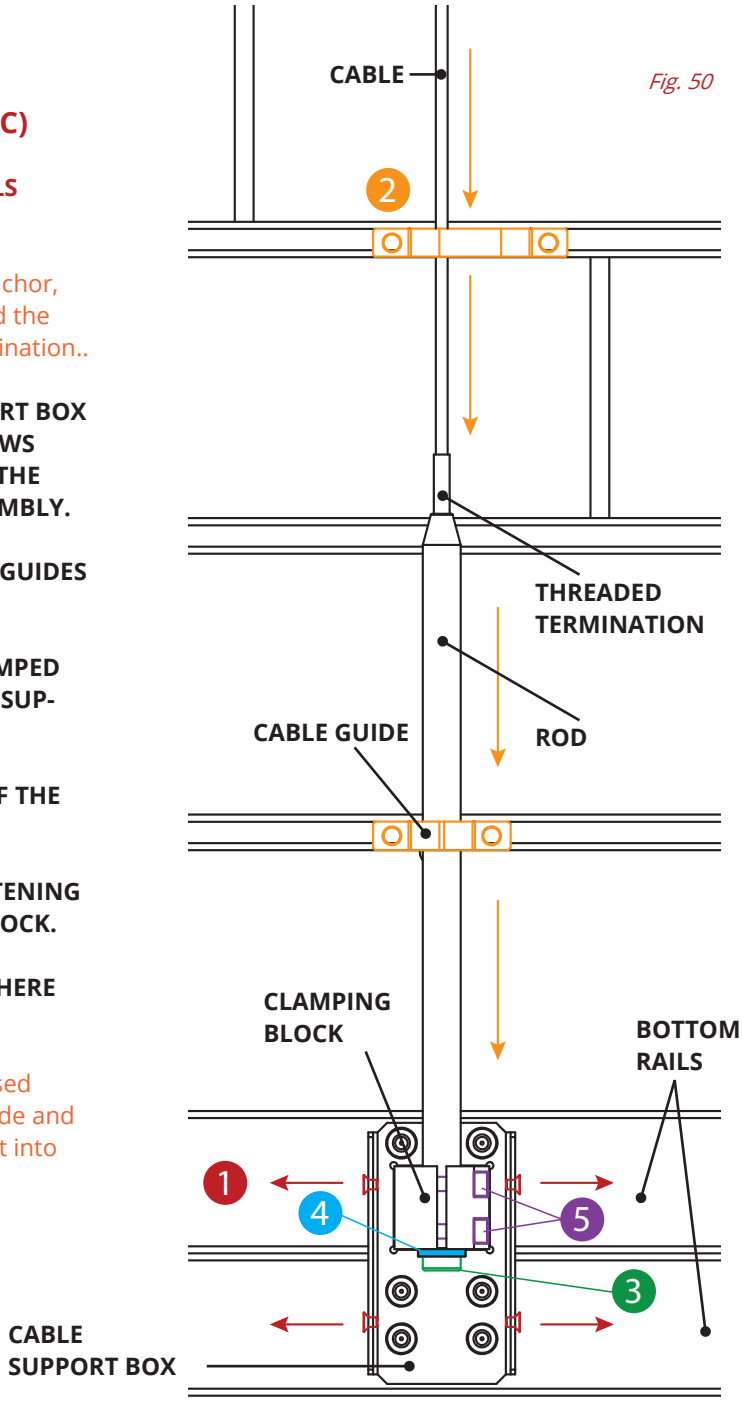
4/ ENSURE THAT THE WASHER AT THE END OF THE CABLE IS AGAINST THE CLAMPING BLOCK.

5/ LOCK THE ROD BY PRESSING IT AND TIGHTENING THE 2 M10X30 SCREWS OF THE CLAMPING BLOCK.

6/ REPEAT THESE STEPS AS MANY TIMES AS THERE ARE CABLES ON THE STACKDOOR®.

The cable support boxes will be closed once all adjustments have been made and the STACKDOOR® is ready to be put into service..

Fig. 50



7.2.2. FIXING THE CABLES ON THE DRUMS

THIS POINT IS A CRITICAL STEP TO ENSURE THE FUTURE PROPER FUNCTIONING OF THE STACKDOOR®.

1 / VERIFY THE CORRECT POSITIONING OF THE DRUM (SEE CHAPTER 5.3).

2 / PLACE THE DRUM LOCKING AXLE BY INSERTING IT FROM THE CURTAIN SIDE TOWARDS YOU. *(FIG. 51)*

3 / ENSURE THAT THE CURTAIN IS IN THE LOW POSITION: THE BOTTOM RAIL SHOULD TOUCH THE GROUND AND THE CHAINS SHOULD BE TAUT.

4 / PULL THE CABLE UPWARD AS CLOSE TO THE CURTAIN AS POSSIBLE, PASS THE CABLE OVER THE DRUM TO TENSION IT, AND WRAP IT AROUND THE DRUM FOR 2.5 TURNS. THE 2 TURNS OF THE CABLE SHOULD END AT THE LEVEL OF THE HALF-MOON.

5 / PASS THE VERTICALLY TENSIONED CABLE UNDER THE DRUM LOCKING AXLE AND PULL IT TO THE RIGHT, IN LINE WITH THE SHAFT. *(FIG. 52)*

Fig. 51

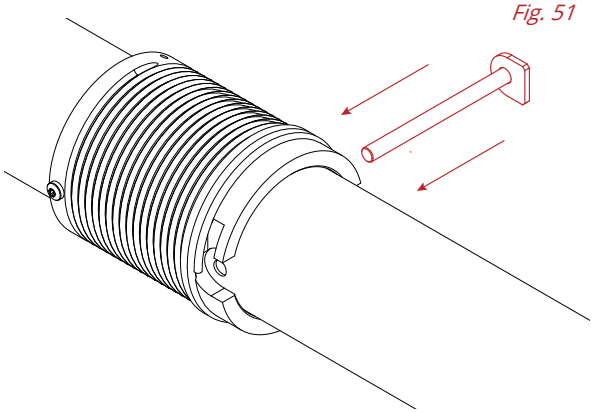
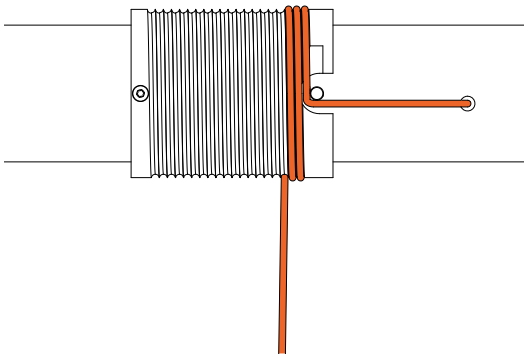


Fig. 52



6 / PLACE THE HALF-MOON LOCKING PLATE ON THE DRUM LOCKING AXLE AND TIGHTEN THE NUT TO SECURE THE CABLE. *(FIG. 53)*

7 / PASS THE CABLE THROUGH THE 2 CABLE LOCKING PLATES AND FASTEN THEM TO THE SHAFT USING THE 4 SELF-TAPPING SCREWS PROVIDED. PASS THE REMAINING CABLE THROUGH THE HOLE IN THE SHAFT. IF THE CABLE HAS A LOT OF EXTRA LENGTH, CUT IT. *(FIG. 54)*

8 / REPEAT THESE STEPS FOR EACH CABLE ON THE STACKDOOR®.

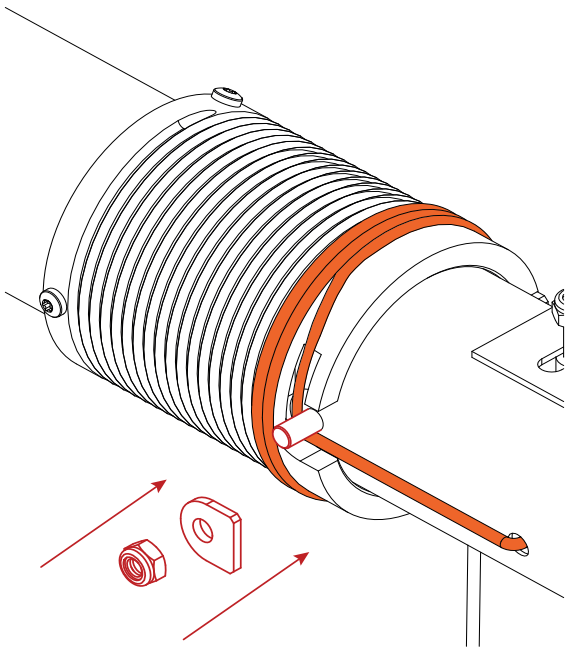


Fig. 53

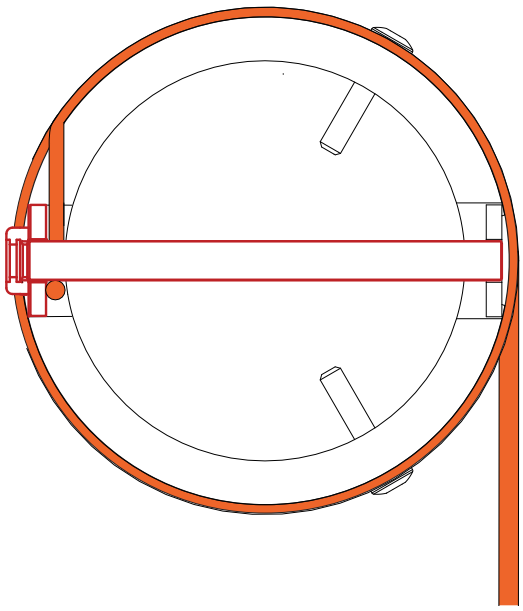
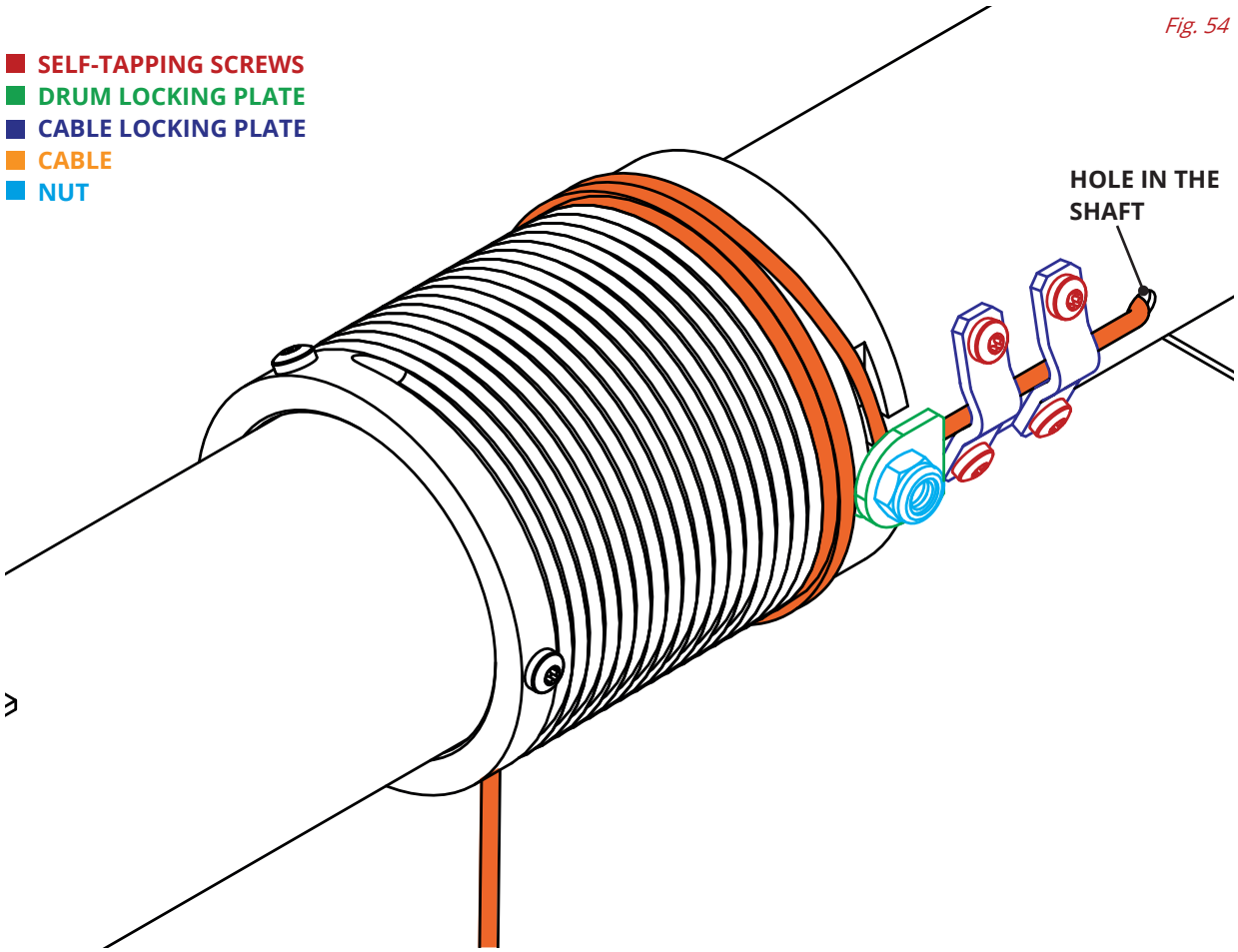


Fig. 54

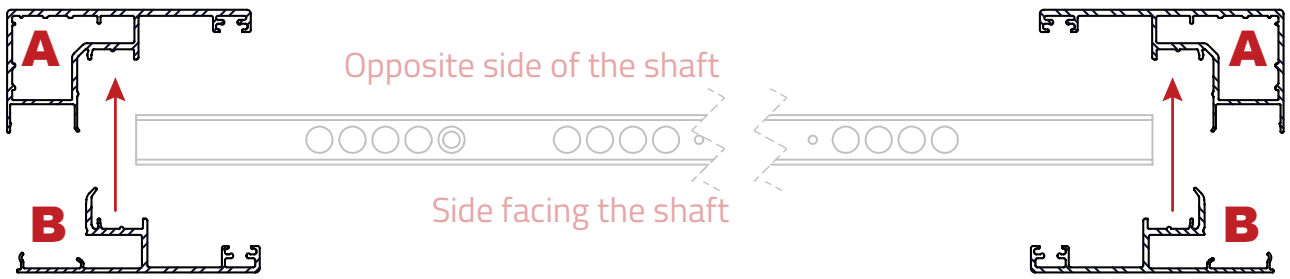


8. CLOSING AND LOCKING OF THE GUIDES (PART B)

1 / FOLD THE CURTAIN COMPLETELY TO RAISE THE TUBES AND CHAINS IN ORDER TO CLEAR THE SPACE REQUIRED FOR SCREWING.

2 / TAKE ONE OF THE GUIDING PROFILES B AND CLIP IT INTO THE ALREADY MOUNTED PROFILE A. USE A WHITE MALLET TO CLIP THE PROFILES. *(FIG. 55)*

Fig. 55



3 / ASSEMBLE THE TWO PARTS TOGETHER USING THE SELF-DRILLING SCREWS 4.2X16 SQUARE DRIVE *(FIG. 56 & 57)*

The positioning of the screws is indicated by holes on part B of the profile, every 400mm in height.

4 / SECURE THE LAST SELF-TAPPING SCREW M6X20 AT THE FRONT OF LATERAL GUIDE B, UPPER PART *(FIG. 56 & 57)*

Note: The hole in the lower part is reserved for disassembling the guide in case of maintenance.

5 / LAY THE U PROFILE ON THE GROUND BY INSERTING IT BETWEEN THE GUIDING PROFILES A AND B AND PRESSING IT AGAINST THE GROUND TO MAINTAIN THE SPACING BETWEEN THE LOWER PARTS OF THE GUIDING PROFILES. *(FIG. 57)*

6 / REPEAT THESE ACTIONS FOR THE SECOND SIDE GUIDE.

Fig. 56

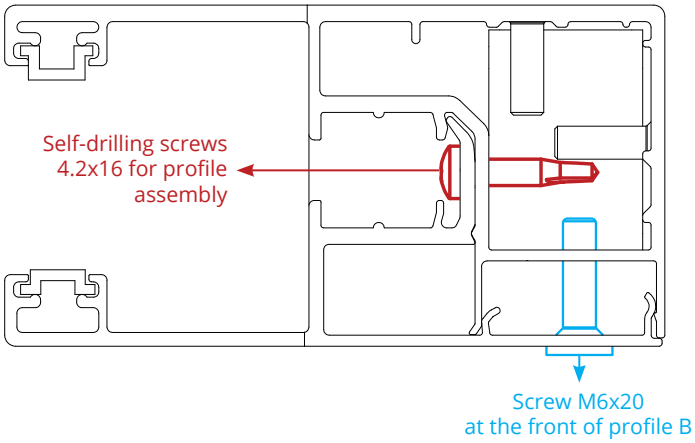
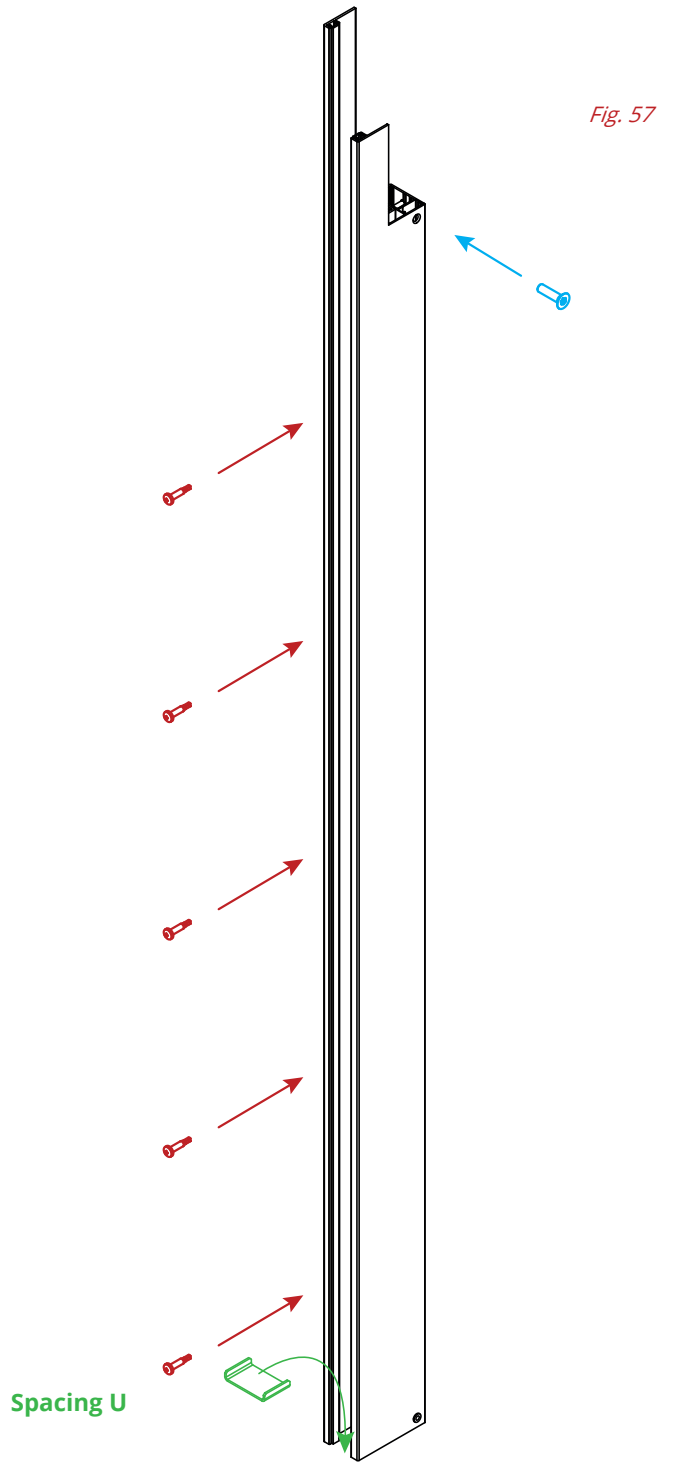


Fig. 57



9. PUTTING INTO SERVICE AND LIFTING OF THE CURTAIN USING THE MOTOR

9.1. MOTOR CONNECTIONS AND ADJUSTMENTS

1 / PERFORM THE ELECTRICAL ASSEMBLY OF THE MOTOR FOLLOWING THE STEPS DESCRIBED IN THE MOTOR MANUAL (PROVIDED WITH THE STACKDOOR®).

If the motor manual is missing, contact Charter Global Ltd and provide the serial number of the Stackdoor® which is located on the CE nameplate.

For Stackdoor® with an external motor (SDME and SDMEC), it's crucial that the three-phase connection is done correctly in the phase sequence to ensure that the door operates in the desired direction when the command is activated. If the connection is done incorrectly, swap L1 and L2.

2 / CONNECT THE MOTOR TO ITS CONTROL. THE TYPES OF CONTROLS ARE PRESENTED IN THE FOLLOWING TABLE:

STACKDOOR® TYPE	SDT6 / SDT8 / SDT8 / SDT8C		SDME / SDME	
OPERATING MODE	Maintained contact	Automatic or sequential	Maintained contact	Automatic or sequential
CONTROL PANEL	No control panel	MO713NE	TS971	TS971
CONTROL POINT	Key switch inversion box only	Key switch, push button, remote control, etc.	Key switch inversion box only	Key switch, push button, remote control, etc.

For the connections of the control panels and the motor controls, refer to the control panel manual provided with the Stackdoor®. If the manual is missing, contact Charter Global Ltd and provide the serial number of the Stackdoor® found on its CE plate.

Only use control modes that are compliant and authorized by the manufacturer. The manufacturer declines all responsibility in case of issues related to the use of a Stackdoor® equipped with a non-authorized control.

Only for Stackdoor® with an external motor (SDME and SDMEC): it is strongly recommended to install a thermal protection (circuit breaker) upstream of the motor control panel and calibrated to the operating current. The possible protections according to the type of external motor are given in the following table:

MOTOR TYPE	OPERATING CURRENT (A) IN ASCENT / DESCENT	MOTOR CIRCUIT BREAKER ADJUSTMENT RANGE (A)	EXAMPLE MODEL
GFA SI14.15	4.4 / 2.6	4..6.3 A	Schneider GV2ME10
GFA SI17.15	3.7 / 2.2	2.5..4 A	Schneider GV2ME08
GFA SI63 25.15	4.0 / 2.3	4..6.3 A	Schneider GV2ME10
GFA SI40.15	4.4 / 2.6	4..6.3 A	Schneider GV2ME10
GFA SI55.15	7.2 / 4.2	6..10 A	Schneider GV2ME14
GFA SI75.15	8.1 / 4.7	6..10 A	Schneider GV2ME14
GFA SI17.24	3.3 / 1.9	2.5..4 A	Schneider GV2ME08
GFA SI40.24	5.2 /3.0	4..6.3 A	Schneider GV2ME10

Always ensure that the connections are secure before operating them.

3 / ACTIVATE THE MOTOR POWER AND OPERATE IT IN THE DOWNWARD DIRECTION UNTIL IT REACHES ITS END POSITION.

9.2. ADJUSTMENT OF THE END-OF-TRAVEL LIMITS

THIS POINT IS A CRITICAL STEP TO ENSURE THE FUTURE PROPER FUNCTIONING OF THE MOTOR.

1/ UPPER END LIMIT: THE SECOND HIGHEST TUBE SHOULD BE INCLUDED IN THE STACK. DO NOT ADJUST THE UPPER END LIMIT TO THE FULL STACK TO AVOID BENDING THE STACK.

2/ LOWER END LIMIT: THE BOTTOM CROSSBARS SHOULD BE LAID FLAT ON THE GROUND, AND THE CABLES AND CHAINS SHOULD BE TAUT.

To adjust the end-of-travel limits, refer to the motor manual provided and follow the adjustment steps. If the manual is not available, contact Charter Global Ltd and provide the Stackdoor® serial number indicated on its CE plate.

Only for Stackdoor® with external motor (SDME and SDMEC): The key switch is functional only once the end limits are set. Operate the door up and down using the motor control box.

9.3. ADDITIONAL ACCESSORIES

The various electro-sensitive protection devices (mandatory for automatic or sequential control and optional for maintained-action control) are listed in the following table:

DEVICE	DIMENSIONS HEIGTH (M)	DIMENSIONS LENGTH (M)	CONTROL PANEL	USAGE	SECURITY : EN12978 / EN12453
GRIDSCAN/ PRO 2000-44	2	0 to 10	AOS 3230-W	Inside	x
GRIDSCAN/ PRO 2500-52	2.5	0 to 10	AOS 3230-W	Inside	x
LRZ-I110	0 to 5	0 to 5	PSR-M-B1-SDI8-SDO2-DO2-PI	Inside / Outside	x
LRZ-I110	0 to 9.9	0 to 9.9	PSR-M-B1-SDI8-SDO2-DO2-PI	Inside / Outside	x
FLATSCAN-W	0 to 4	0 to 4	PSR-M-B1-SDI8-SDO2-DO2-PI	Inside	x

Integration of the LZR-I100, LZR-I110, and Flatscan-W is done on the upper corner of the Stackdoor®.

Gridscan installation is done on the guide profiles using the appropriate supports provided with the Gridscan.

For the connection of safety devices to the control box, refer to the device manual provided with the Stackdoor®. If the manual is missing, contact Charter Global Ltd and provide the serial number indicated on the CE plate of the Stackdoor®.

9.4. FINAL ADJUSTMENTS AND FINE-TUNING

1 / ADJUST THE TENSION OF THE CABLES IF NECESSARY
To increase the tension, loosen the 2 M10 screws of the clamping block, pull the cable end downwards, and then tighten the 2 screws to lock the clamping block and its cable. *(Fig. 47)*

2 / CLOSE ANY COVERS IF APPLICABLE
- shaft and console (optional cover)
- cable support box on the bottom crosspiece (for Stackdoor® SDT6C, SDT8C, and SDMEC)

10. CHECKLIST OF VERIFICATIONS

10.1. SIDE GUIDES

P 17 / Fig. 5
Check the following points for the overall level of the guides:

- Consoles at the same level (horizontal plane)
- Distance between the 2 highest points and between the 2 lowest points of the side guides, specified in the technical sheet provided for the project (daylight dimensions or external dimensions)
- Side guides in the same plane

P 17 / Fig. 6
Check that the reference plate has been correctly positioned and fixed to the ground.

P 17 / Fig. 8
Check that all the anchor points of the guides have been fixed (on the profiles every 400 mm and on the consoles).

P 41 / Fig. 54, 55
Check the attachment of profile B to profile A: screws every 400 mm along the axis and screws on the front of profile B.

10.2. SHAFT AND MOTOR

P 29 / Fig. 32
Check the level and flatness of the shaft; adjust if necessary by tightening the anchorages of the consoles or supports in case of cables.

P 20, 21, 22, 23 / Fig. 14, 17, 22
In cases where this adjustment is possible, verify that the distance between the end of the shaft and the bearing is indeed 42 mm.

P 20, 21, 23 / Fig. 14, 17, 22
Verify that the parts of the shaft have been properly locked onto the intermediate sleeve(s).

IN CASE OF AN EXTERNAL MOTOR:

P 24 / Fig. 24
Check that the motor is securely locked with the washer and axial screw fixed at the end of the shaft.

P 22 / Fig. 19
Check that the shaft ends are securely tightened in the bearings using the 2 pressure screws.

10.3. CURTAIN

P 31 / Fig. 35 or P 34 / Fig. 40
Check that all anchorages to the structure are securely fastened.

P 32 / Fig. 37 or P 33 / Fig. 37
Check that there are no missing connectors: one connector every 300 mm on each tube.

IN CASE OF A STACKDOOR® >6M:

P 26 / Fig. 26, 27
Check that no screws have been forgotten during the horizontal assembly of the sections and ensure that no screws protrude from the tubes to avoid hindering the proper folding/unfolding of the curtain.

10.4. CABLES AND DRUMS (FOR STACKDOOR® SDT6C, SDT8C AND SDMEC)

P 27 / Fig. 29
Check the positioning of the drum and his cable.

P 40 / Fig. 52
Check that the drum has been properly locked onto the shaft, and that the cable is securely fastened to both the drum and the shaft.

P 39
Check the cable tension: the bottom crossbar remains stationary and horizontal on the ground once the curtain is unfolded.

10.5. CHAINS

P 35 / Fig. 41, 42
Verify that the suspension plates with chain attachments are mounted on the bottom crossbars. Also, check the presence of the PEHD (plastic material) parts at the ends of the bottom crossbars.

P 35 / Fig. 43
Verify that the piece necessary for coupling the chain to the end of the chain is assembled correctly.

P 36 / Fig. 44
Verify that the two chain guide plates are securely screwed onto their bracket.

P 37 / Fig. 47
Verify that the chain guide plate does not come into contact with the chain or the sprocket; there should be some clearance.

P 37 / Fig. 49
Verify that the sprockets have been securely locked onto the shaft.

P 36
Check the tension of the chains: the bottom crossbar remains stationary and horizontal on the ground once the curtain is unfolded.

10.6. FINAL VERIFICATIONS BEFORE PUTTING INTO SERVICE

P 41
Verify that the electrical connections are correct and secure, especially ensuring that exposed wires are insulated and secured.

P 42
Operate the door up and down to check its overall functionality. Be mindful of the maximum cycle usage frequencies allowed for each motor.

P 43
Ensure that the end-of-travel limits are properly adjusted.

WARRANTY CONDITIONS

1. General terms

A one year warranty from the date of invoice applies to all Stackdoor products unless otherwise stated in writing by Charter Global Ltd. The warranty covers the mechanical stability of the welding, seals and other equipment (for example, locks, motors, electrical equipment, steel cables, drums, sprockets, screws etc).

2. Conditions

The warranty is conditioned by:

- compliance with the installation instructions as described in the project-specific instructions and / or in the installation manual;
- normal use of the product;
- storage before installation protected from bad weather and in a dry place;
- regular maintenance as specified by the User Manual.

3. Exclusions

Degradation linked to:

- accident, abnormal use or caused by break-in and / or vandalism;
- the use of aggressive products (harsh cleaning products, road salt, etc.);
- corrosion or exposure to extreme weather conditions (floods, storms, etc.);
- the use of large quantities of water or the use of a high-pressure cleaner.

The warranty will be cancelled:

- if the joinery has been fitted with locks, accessories or other equipment that has not been supplied by Charter Global Ltd or imposed by the customer and not validated by Charter Global Ltd;
- in the event of modification of the joinery and/or equipment by a third party;
- in the event of malfunctions linked to improper installation of the joinery and/or equipment.

4. Waranty limits

Charter Global's warranty covers the replacement of defective parts, excluding labor and excluding compensation for ancillary costs or operating loss costs related to the replacement of parts or joinery. The delivery costs linked to this replacement being ancillary costs, they are not covered by the warranty. Under the warranty conditions, we may require the return of the completed checklist.
Charter Global Ltd reserves the right to replace defective parts with parts of a different design.

CHARTER GLOBAL
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STACKDOOR®

STACKDOOR® IS A REGISTERED TRADEMARK
OF CHARTER GLOBAL LTD

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Installation Manual Stackdoor®
Stackdoor EU Installation Guide v1_04-25
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