



TECHNICAL MANUAL - CONSTRUCTION AND INSTALLATION

Swinging-sliding door with connecting rod on frame

JAMB THICKNESS 1 3/16"/1 9/16"

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1. INTRODUCTION

The Ergon Living T.E. SLIM system retains the tried and tested features of T.E. version:

- Rotation rod within the frame;
- Door weight limit 70 kg;
- Minimum door thickness 35 mm;
- Possibility of applying the “Soft Opening” damper;
- Available in silver and black finishes;
- Two different arm sizes:
 - “BASE” particularly suitable for LFM (Wall opening width) from 800 to 1000 mm;
 - “SMALL” particularly suitable for LFM (Wall opening width) from 610 to 800 mm;

Differences from the T.E. version:

- the connecting rod does not require the aluminium upright, but is simply held in the guide by a small plastic component;
- the T.E. SLIM version allows the use of a flat frame of the thickness 30 to 40 mm;
- the use of doors in standard sizes with a false frame of standard size (e.g.: door L = 815 mm with wall opening width L = 900 mm) using a 30 mm thickness frame;
- we recommend the use of a magnetic lock.

Depending on the specific needs, with the T.E. SLIM hardware the door can be constructed in such a way that, compared to the wall thickness, the door can assume any position. There follow two limit positions, making use of terminologies which are then used in this manual:

1. “centred door” where the door is positioned at the centre of the wall



2. “oriented door” where the door is positioned close to one of the two edges of the wall



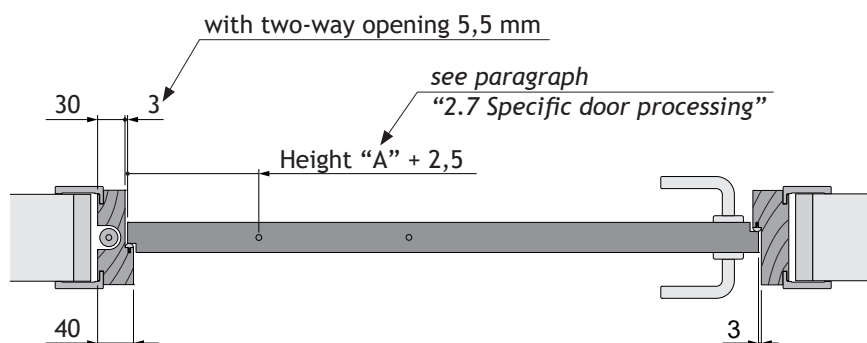
* See paragraph “2.6 Management of wall thicknesses”.

The Ergon Living T.E. SLIM system is offered in various sizes of standard widths and heights.

It is also possible obtain intermediate measures in width by shortening the track and the track cover (see “2.12 Track adjustment to the width of the door to be achieved”), in height by purchasing the appropriate shortenable rod kit (see “2.13 Shortenable connecting rod kit”), or requesting the rod in a special measurement.

SWING DOORS WITH ONE DIRECTION OF OPENING

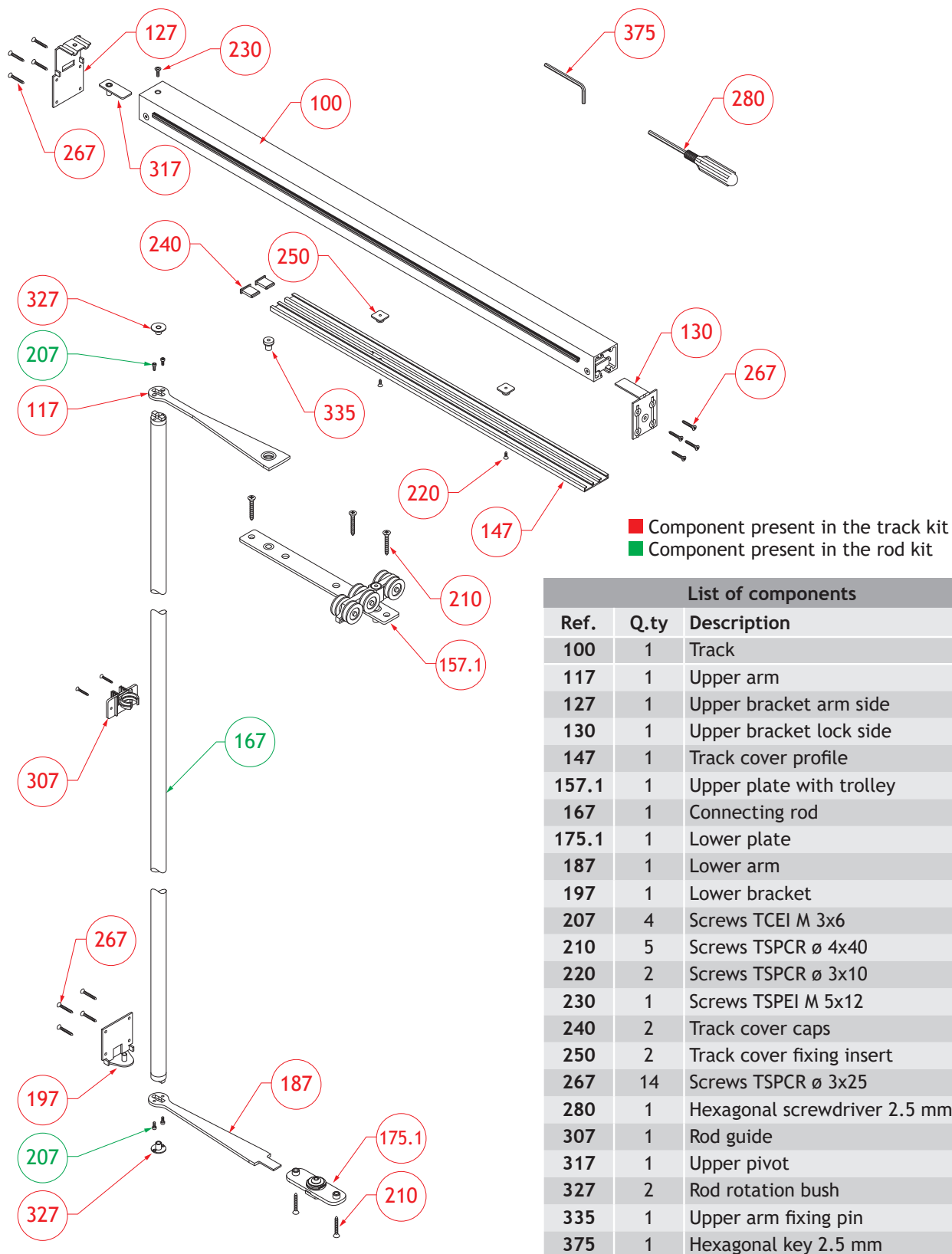
The Ergon kits for swing doors with one-way opening are the same as those used for doors with two-way opening; this is possible by simply creating the hinges in the vertical sides of the door. Here below is an example:



Caution: The door and frame hinges are mirrored. It is also possible to construct doors without the hinge.

2. DESCRIPTION

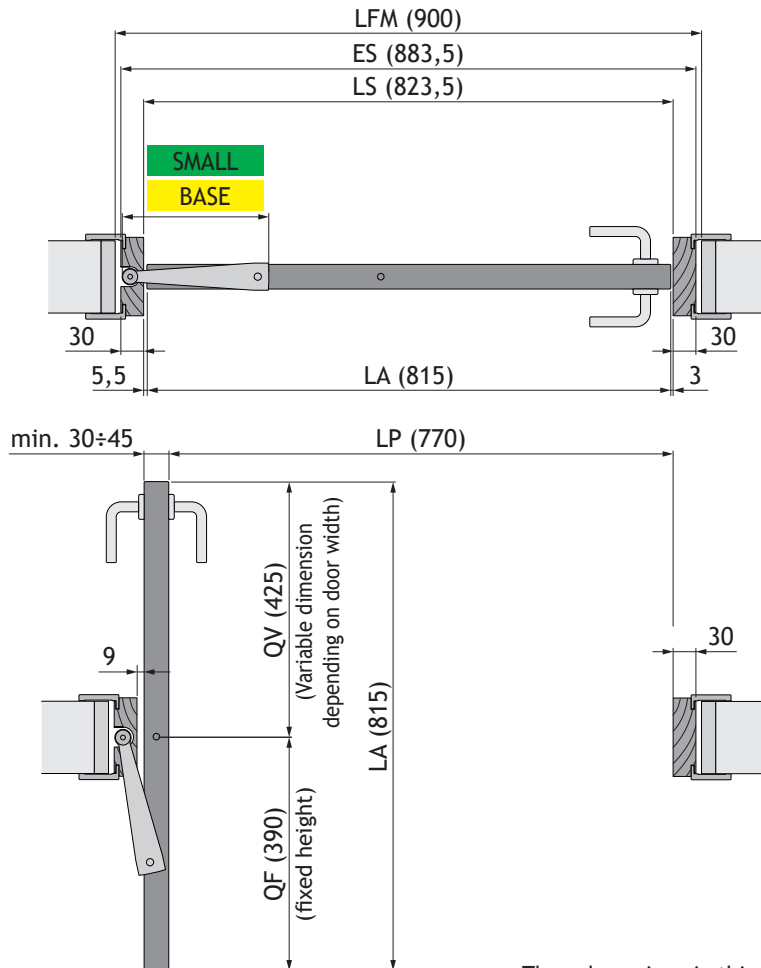
2.1 Exploded hardware diagram



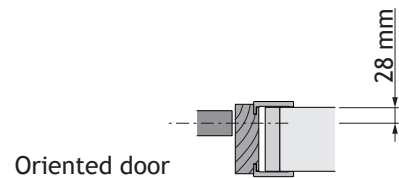
List of components		
Ref.	Q.ty	Description
100	1	Track
117	1	Upper arm
127	1	Upper bracket arm side
130	1	Upper bracket lock side
147	1	Track cover profile
157.1	1	Upper plate with trolley
167	1	Connecting rod
175.1	1	Lower plate
187	1	Lower arm
197	1	Lower bracket
207	4	Screws TCEI M 3x6
210	5	Screws TSPCR \varnothing 4x40
220	2	Screws TSPCR \varnothing 3x10
230	1	Screws TSPEI M 5x12
240	2	Track cover caps
250	2	Track cover fixing insert
267	14	Screws TSPCR \varnothing 3x25
280	1	Hexagonal screwdriver 2.5 mm
307	1	Rod guide
317	1	Upper pivot
327	2	Rod rotation bush
335	1	Upper arm fixing pin
375	1	Hexagonal key 2.5 mm

2.2 Single door horizontal dimensional drawing

Dimensional example

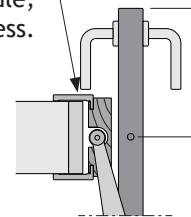


The door can be positioned oriented with respect to the thickness of the wall, respecting the limit shown in the diagram below.



Oriented door
For the management of wall thicknesses see "2.6 Management of wall thicknesses".

ATTENTION: On door with reduced widths the handle may collide with the jamb. Pay attention to the dimension of the handle, door leaf and wall thickness.



The values given in this table refer to a door with frame thickness 30 mm and door thickness 45 mm; in case of using a frame of thickness 40 mm the values of LP, LA, LS and QV decrease by 20 mm.

	BASE	SMALL	WIDTH DIMENSIONS						
			LFM	LP	LA	QF	QV		
		●	610	480	525	290	235		
		●	650	520	565	290	275		
Minimum size for "Soft Opening" arm SMALL	●	●	700	570	615	390	290	225	325
	●	●	750	620	665	390	290	275	375
Minimum size for "Soft Opening" arm BASE	⊙	⊙	800	670	715	390	290	325	425
	⊙		850	720	765	390			375
	⊙		900	770	815	390			425
	⊙		950	820	865	390			475
	⊙		1000	870	915	390			525

LFM = Wall opening width
LP = Passage dimension (LFM - 130)
LA = Door width (LFM - 85)
LS = Jamb opening (LFM - 76,5)
ES = Exterior jambs (LFM - 16,5)
QF = Fixed dimension arms side
QV = Variable dimension handle side

⊙ = Standard Available sizes

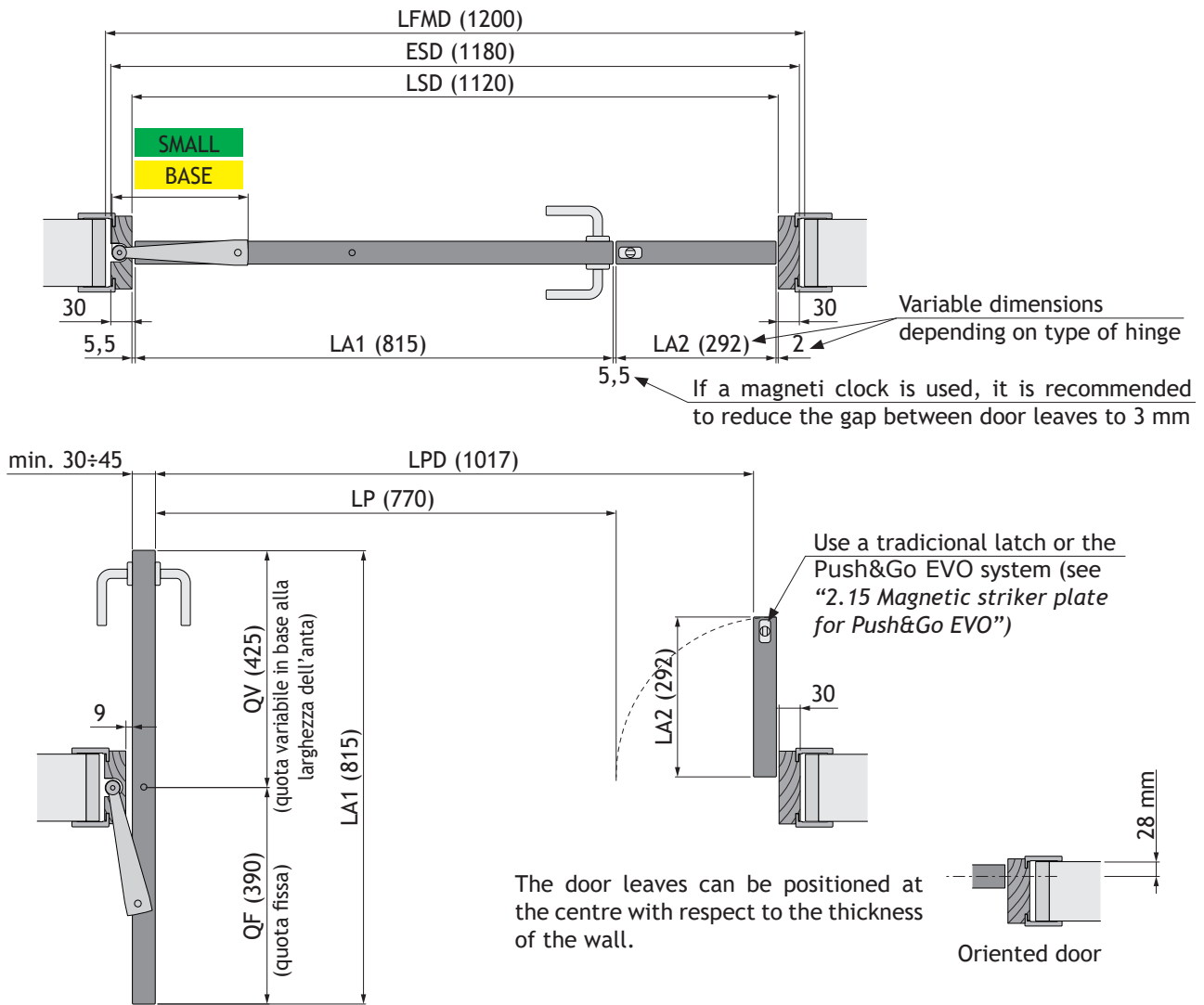
● = Some examples of measurements obtainable by shortening the track, it is also possible to obtain other intermediate measurements

For other special measurements ask Celegon s.r.l. for feasibility

2.3 Double door horizontal dimensional drawing

ERGON door leaf and rabbet door

Dimensional example



The door leaves can be positioned at the centre with respect to the thickness of the wall.

For the management of wall thicknesses see "2.6 Management of wall thicknesses".

The values given in this table refer to a door with frame thickness 30 mm and door thickness 45 mm.

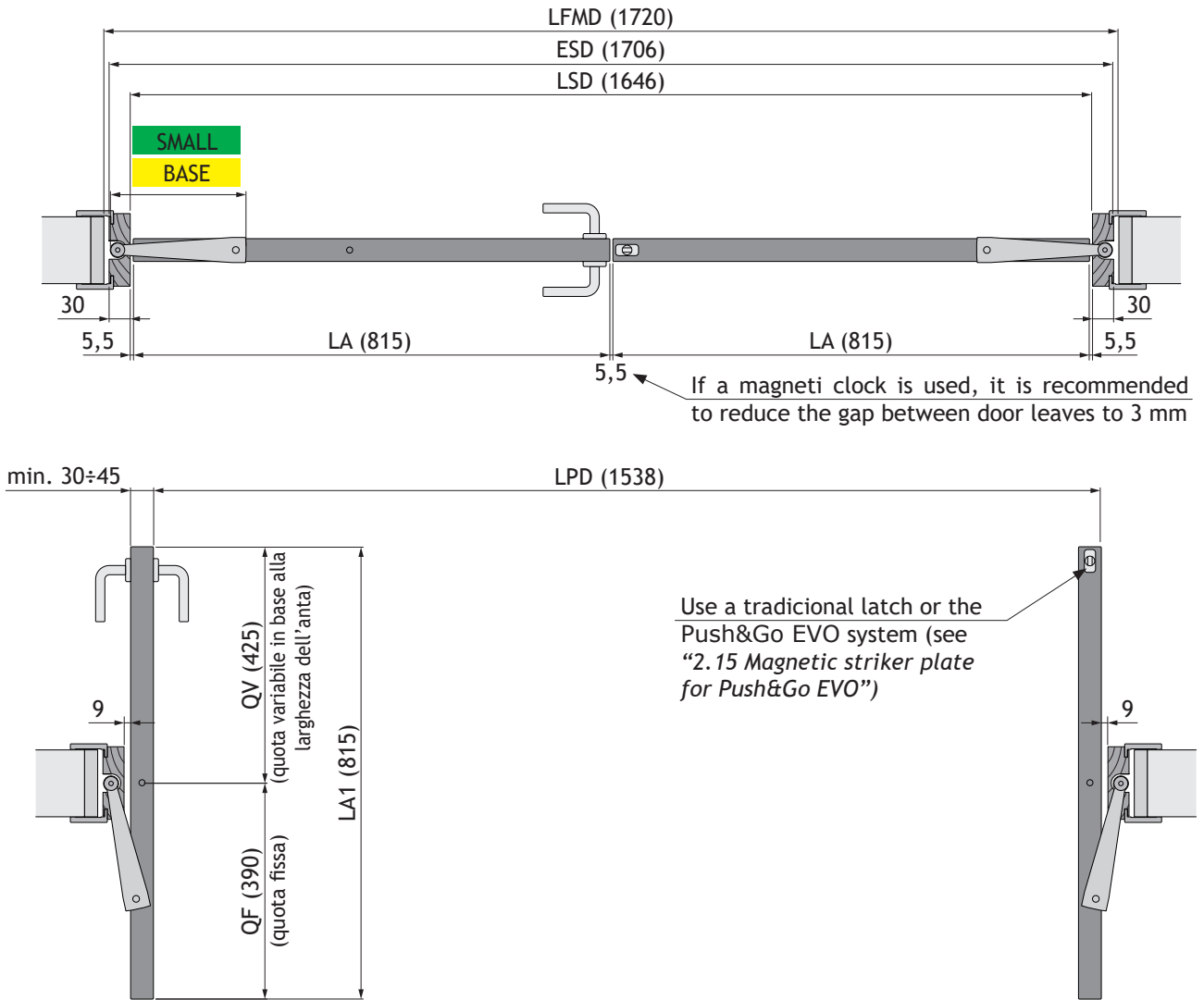
When ordering hardware, the dimensions of the wall opening and the type of arm that will be used must be provided. A custom track kit be supplied based on the dimensions provided.

- LFMD = Wall opening width
- LPD = Passage dimension (LFMD - 183)
- LA1 = Door width (see table in paragraph "2.2 Single door horizontal dimensional drawing")
- LA2 = Door leaf width (LFMD - LA1 - 93 variable depending on door LA1 dimensions and type of hinge used)
- LSD = Jamb opening (LFMD - 80)
- ESD = Exterior jambs (LFMD - 20)
- QF = Fixed dimension arms side
- QV = Variable dimension handle side

2.4 Double door horizontal dimensional drawing

Double ERGON door leaves

Dimensional example

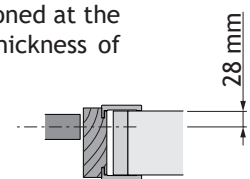


The values given in this table refer to a door with frame thickness 30 mm and door thickness 45 mm.

In this case, it is possible to use track kits for single doors in combination with the dedicated union kit.
For specifications see 2.14. and 2.15

- LFMD = Wall opening width
- LPD = Passage dimension (LFMD - 182)
- LA1 = Door width $(\frac{LFMD - 90}{2})$
- LSD = Jamb opening (LFMD - 74)
- ESD = Exterior jambs (LFMD - 14)
- QF = Fixed dimension arms side
- QV = Variable dimension handle side

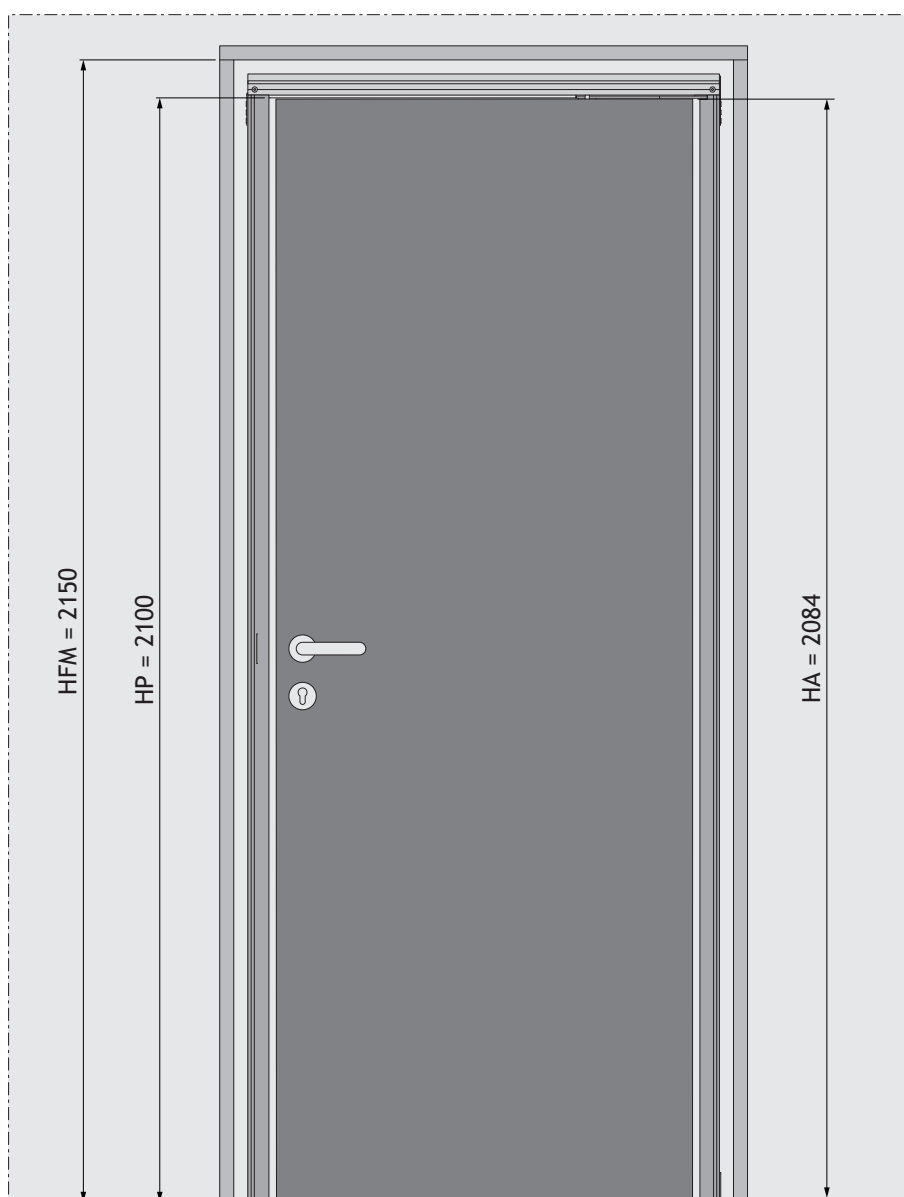
The door leaves can be positioned at the centre with respect to the thickness of the wall.



Oriented door

For the management of wall thicknesses see "2.6 Management of wall thicknesses".

2.5 Vertical dimension drawing

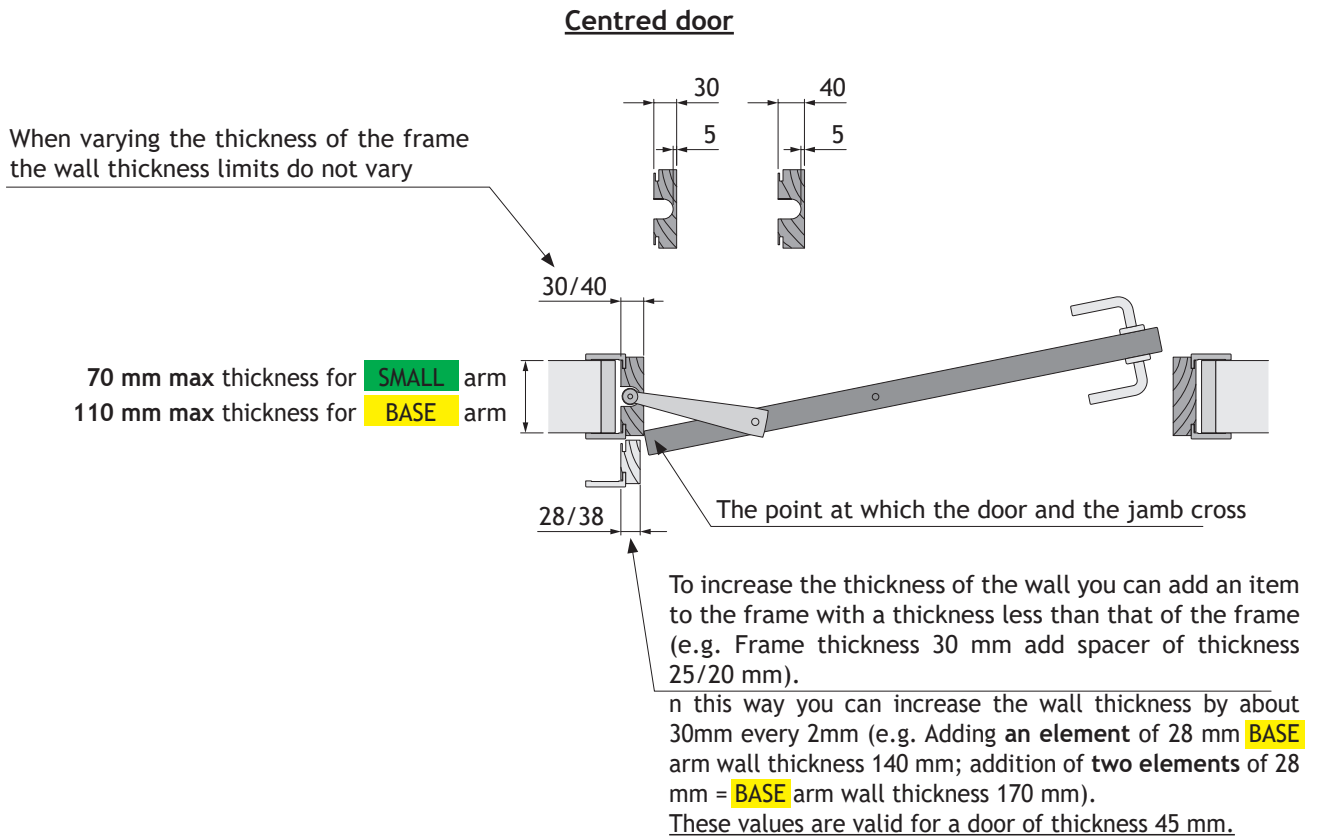


VERTICAL DIMENSIONS			
HFM	HP	HA	$HP = (HFM - 50)$ $HA = (HFM - 66)$
wall opening height	passage height	door leaf height	
* 1950	1900	1884	
* 2000	1950	1934	
* 2050	2000	1984	
* 2100	2050	2034	
* 2150	2100	2084	
* 2200	2150	2134	
* 2250	2200	2184	

* Standard Available sizes
 Other measurements may be obtained by adjusting the connecting rod (see paragraph "2.13 Shortenable connecting rod kit") of prepared oversized kits. For bespoke rods, ask Celegon s.r.l. for feasibility.

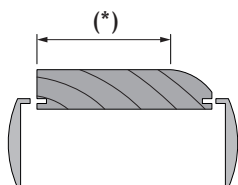
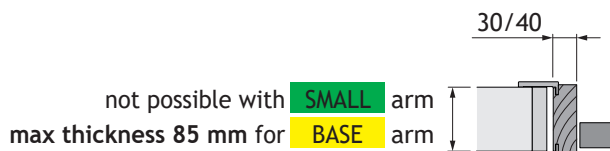
2.6 Management of wall thicknesses

During opening, the Ergon system forces the door to recede from the arms side. In this way, when there are wall thicknesses of certain dimensions, the door approaches the jamb to the point in which they cross (see design below), which prevents the door from opening completely. On this page are some solutions that can be adopted.



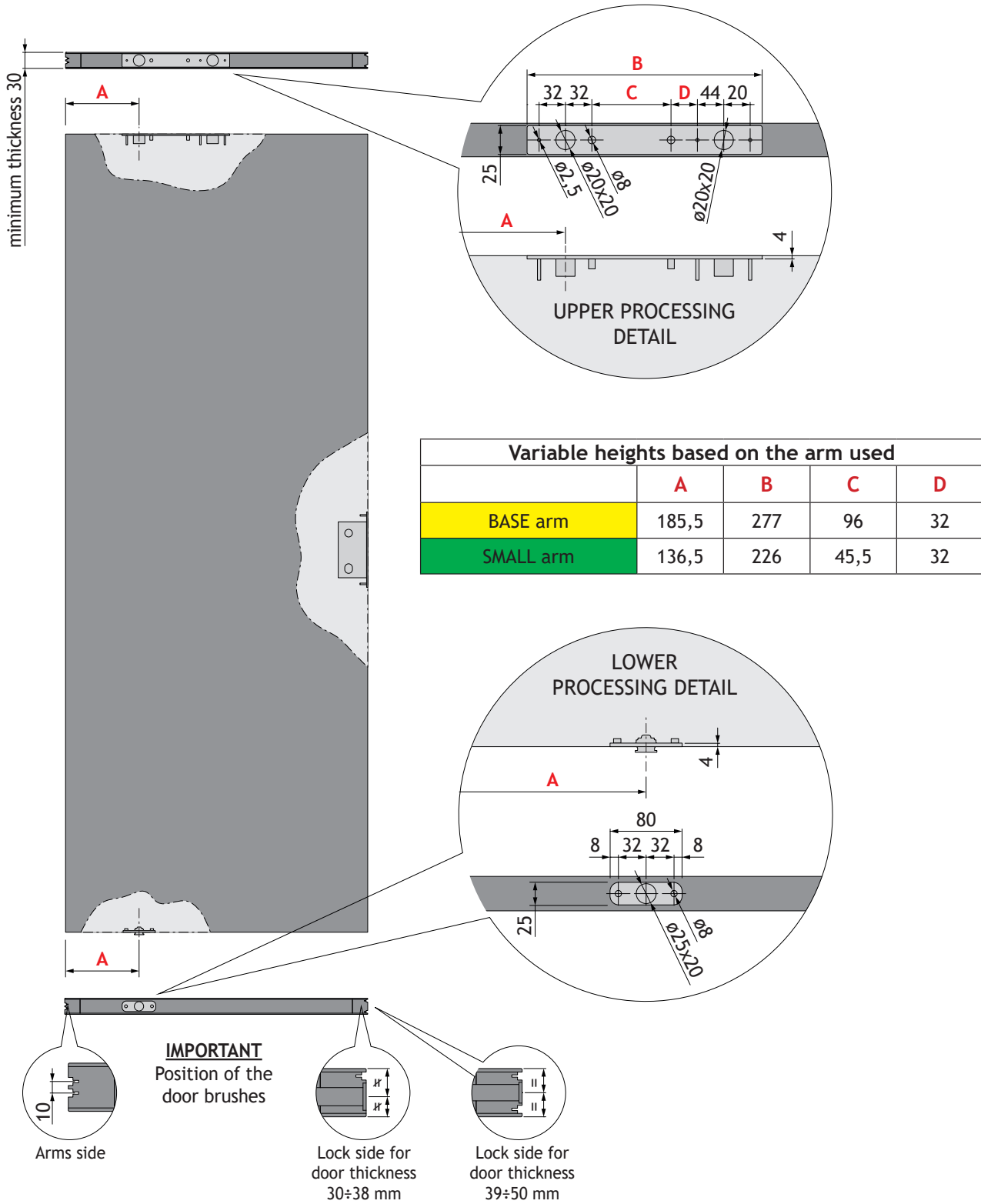
Oriented door

Caution: Placing the oriented door from one side with respect to the wall decreases the thickness limit of the wall.



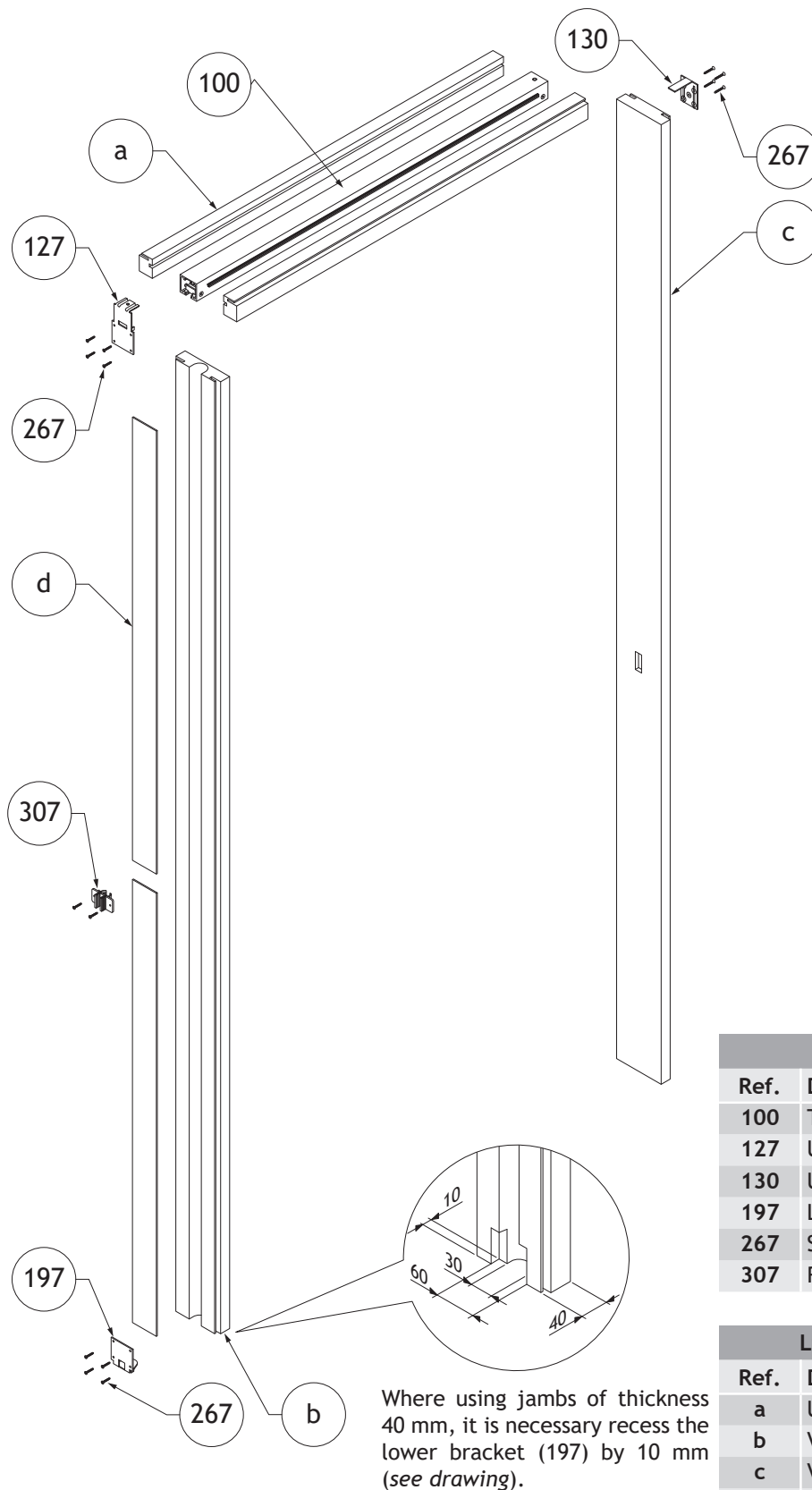
(*) When using rounded jambs, the limit value is to be considered only on the flat surface of the jamb and not on the rounded part.

2.7 Specific door processing



We recommend using a lock with the facing not exceeding 18 mm.

2.8 Exploded frame diagram (centred door)



List of components

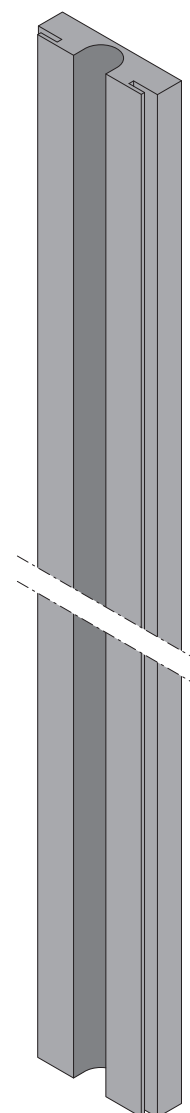
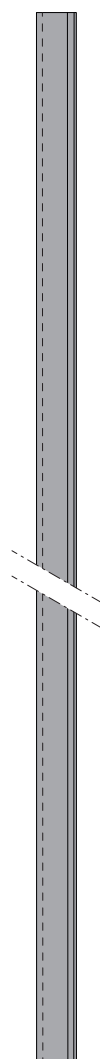
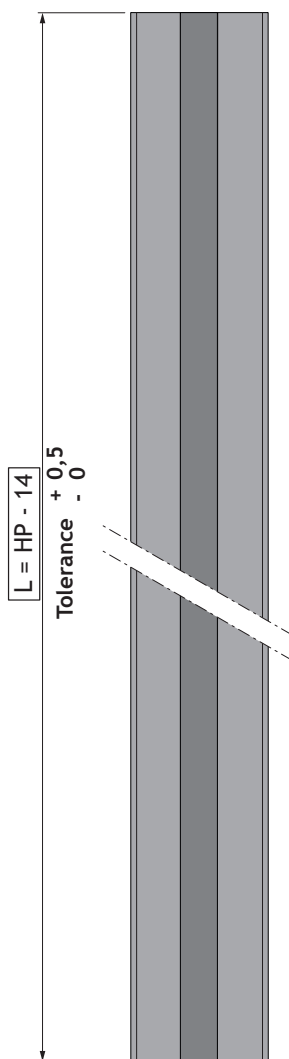
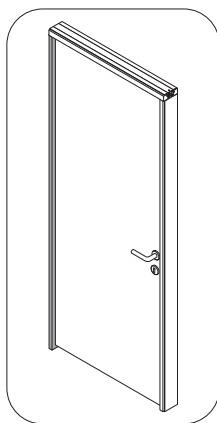
Ref.	Description
100	Track
127	Upper bracket arm side
130	Upper bracket lock side
197	Lower bracket
267	Screws TSPCR ø 3x25
307	Rod guide

List of wooden components

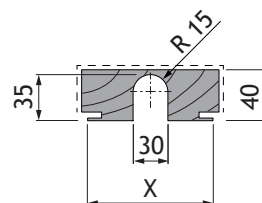
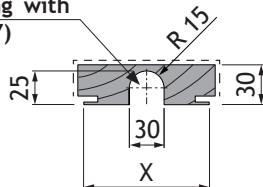
Ref.	Description
a	Upper crosspiece
b	Vertical jamb bracket side
c	Vertical jamb lock side
d	Infill strips

2.9 Construction details of the vertical frame arms side

Jamb arms side



Check coupling with guide rod (307)



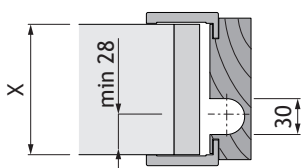
DIMENSION TO BE RESPECTED

X = WALL THICKNESS

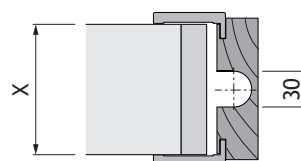
HP = PASSAGE HEIGHT

--- SIDE IN VIEW

oriented door

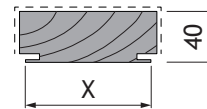
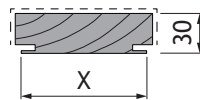
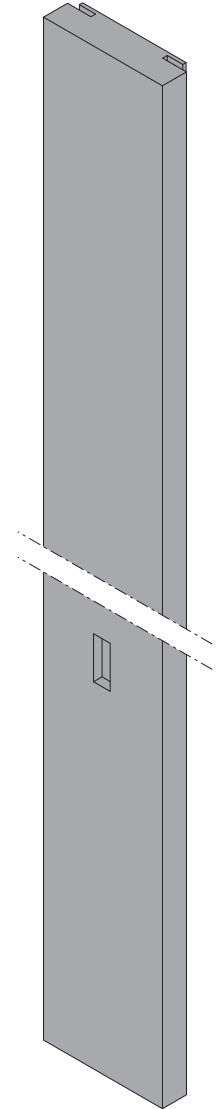
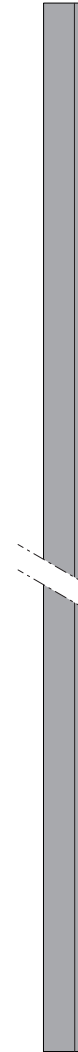
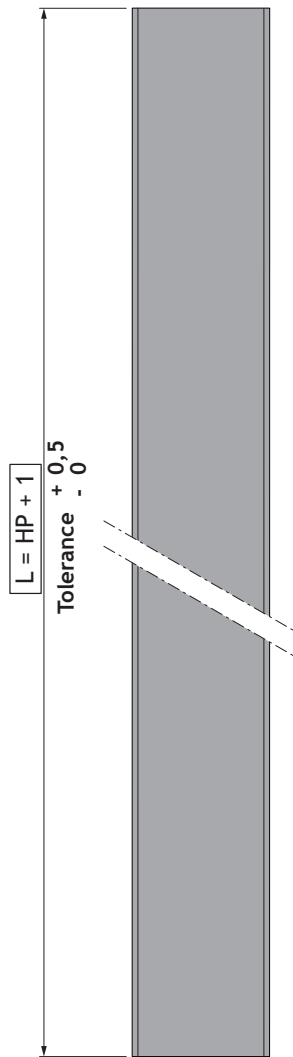
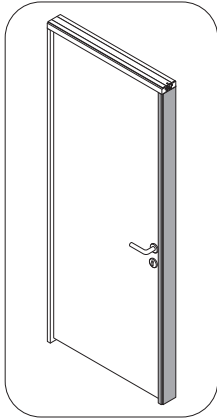


centred door



2.10 Construction details of the vertical frame lock side

Jamb lock side



□ DIMENSION TO BE RESPECTED

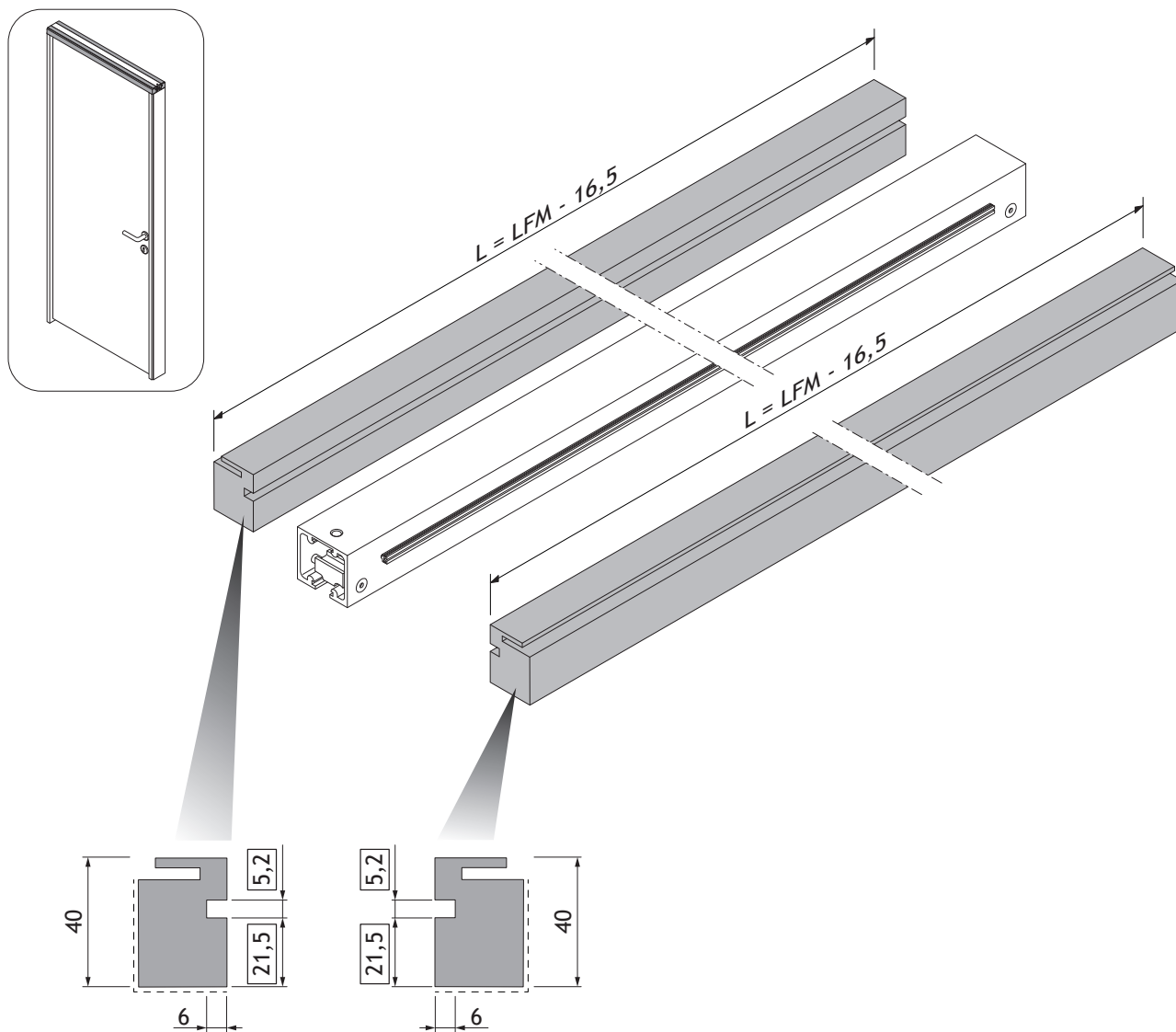
X = WALL THICKNESS

HP = PASSAGE HEIGHT

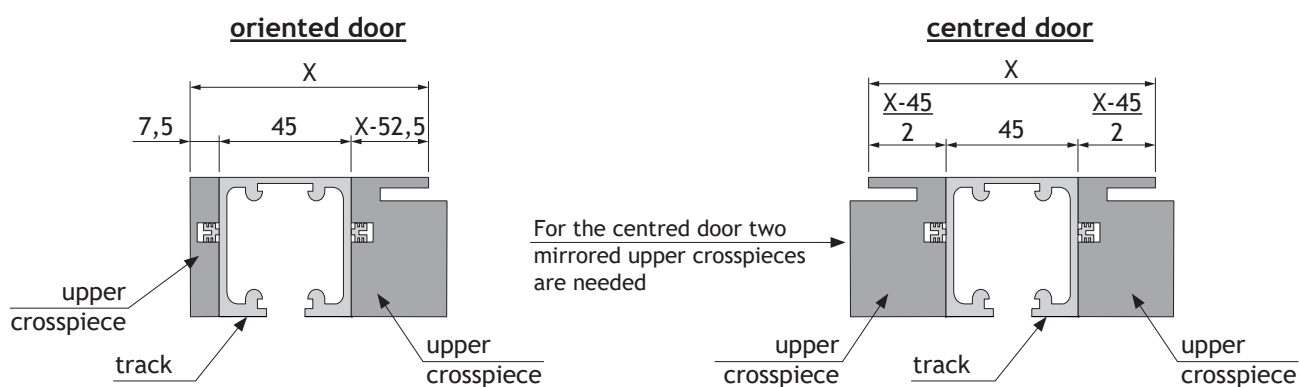
--- SIDE IN VIEW

2.11 Construction details of the upper crosspiece

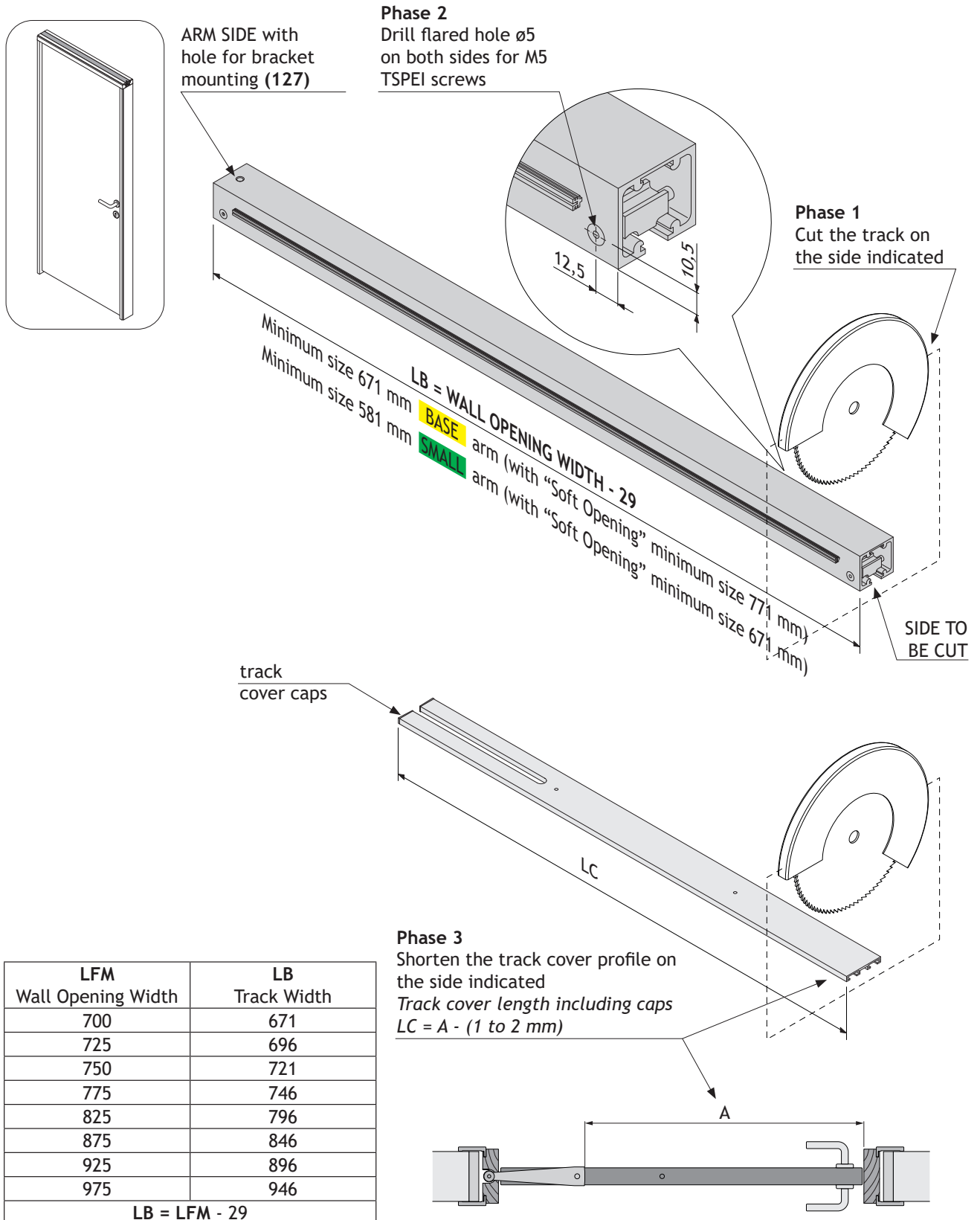
Valid for frame thickness 30 and 40 mm



DIMENSION TO BE RESPECTED
 X = WALL THICKNESS
 LFM = WALL OPENING WIDTH
 --- SIDE IN VIEW

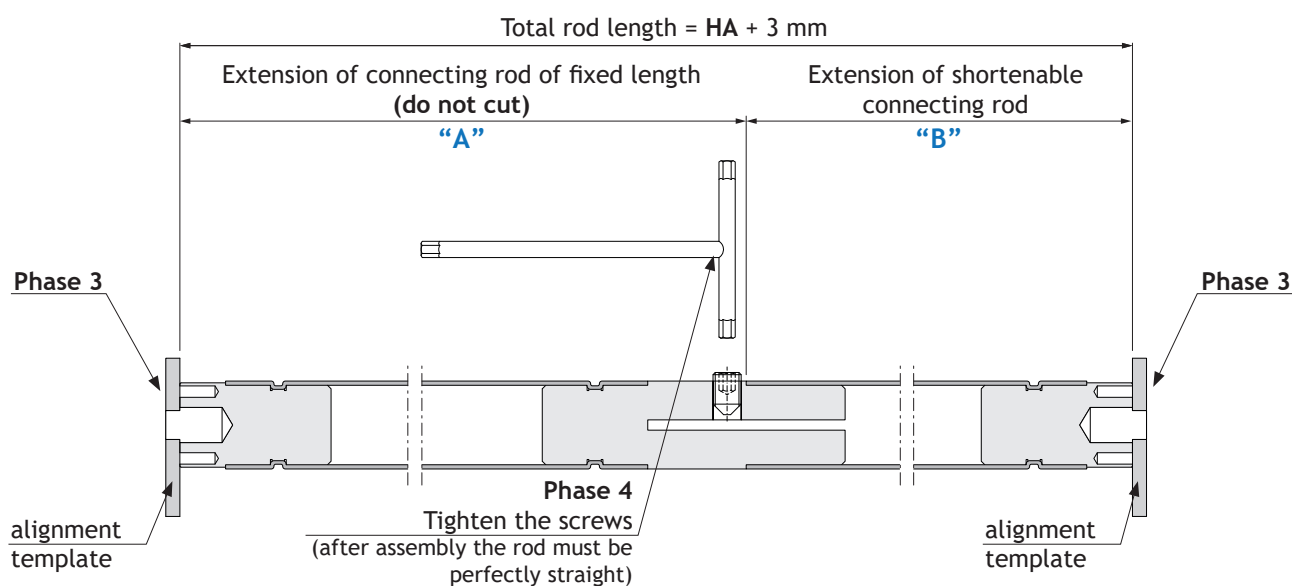
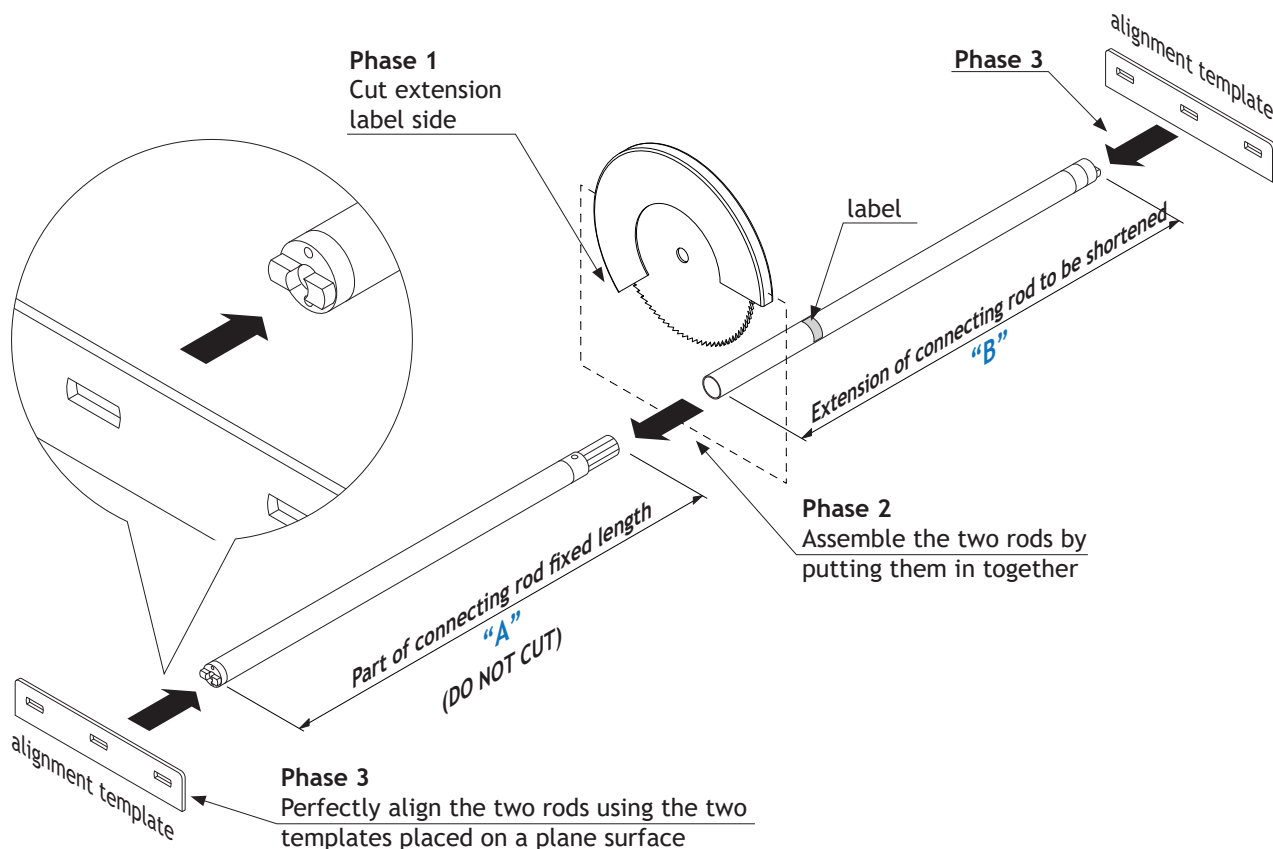


2.12 Track adjustment to the width of the door to be achieved



2.13 Shortenable connecting rod kit

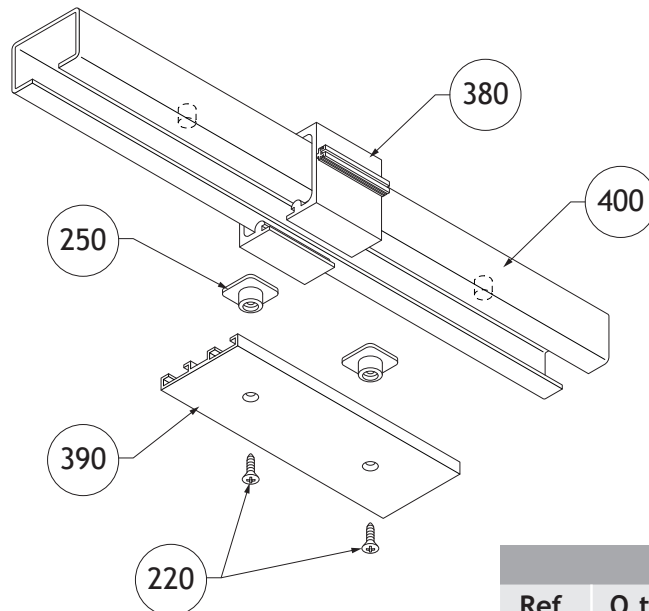
Connecting rod adjustment for non-standard heights



Item nr.	HP max	Dimension "A" fixed length	Dimension "B" to be shortened	
730250CP	2500	1258	HA - 1255	Available on stock
730300CP	3000	1508	HA - 1505	Available on request

2.14 Track union kit for double door with ERGON LIVING system

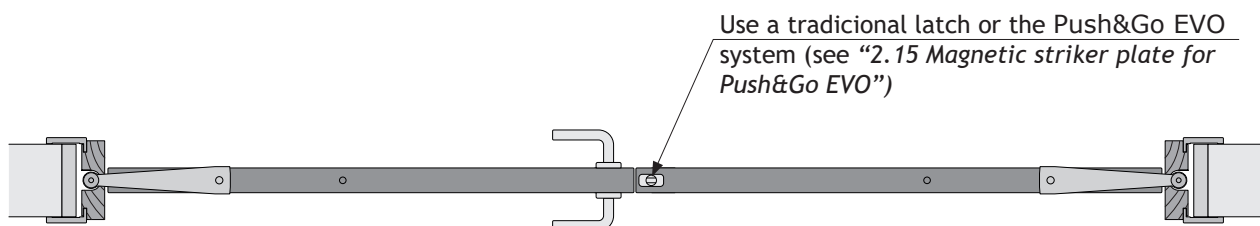
1



List of components		
Ref.	Q.ty	Description
220	2	Screws TSPCR \varnothing 3x10
250	2	Track cover fixing insert
380	1	Track extension
390	1	Track extension covers
400	1	Track junction connector

2

The measurements refer to a jamb of thickness 30 mm.



* N.B. For wall thickness limits see paragraph "2.6 Management of wall thicknesses" in this manual.

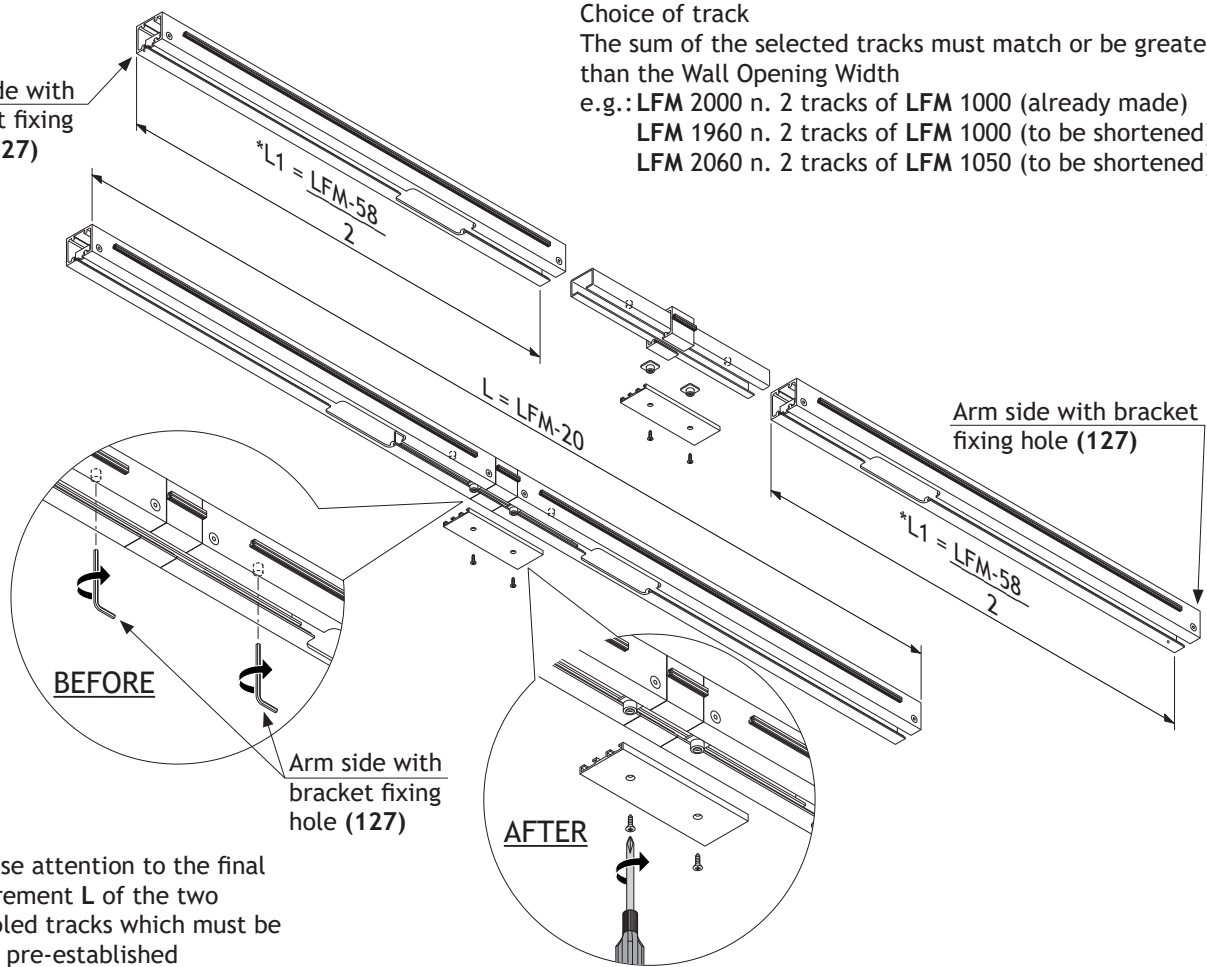
LFM minimum 1600 mm with **BASE** arm with "Soft Opening" LFM minimum 1700 mm

LFM minimum 1400 mm with **SMALL** arm with "Soft Opening" LFM minimum 1500 mm

For dimensions smaller than those indicated, contact Celegon s.r.l.

3

Arm side with bracket fixing hole (127)



Choice of track

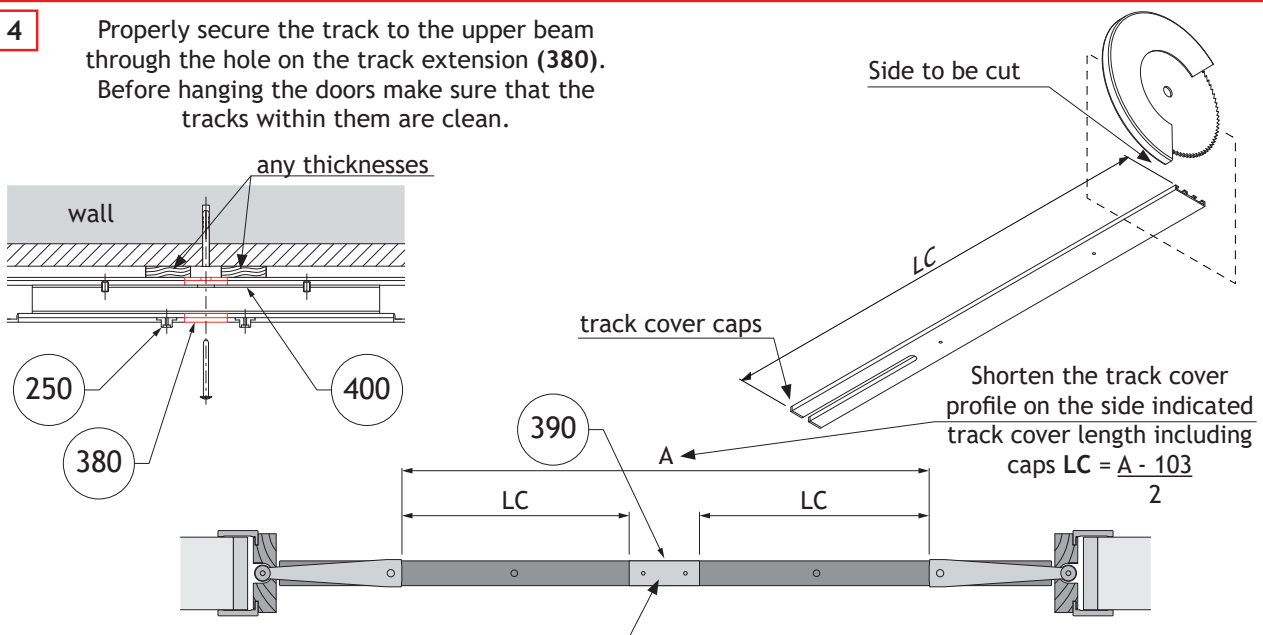
The sum of the selected tracks must match or be greater than the Wall Opening Width

- e.g.: LFM 2000 n. 2 tracks of LFM 1000 (already made)
- LFM 1960 n. 2 tracks of LFM 1000 (to be shortened)
- LFM 2060 n. 2 tracks of LFM 1050 (to be shortened)

Pay close attention to the final measurement **L** of the two assembled tracks which must be that as pre-established

4

Properly secure the track to the upper beam through the hole on the track extension (380). Before hanging the doors make sure that the tracks within them are clean.

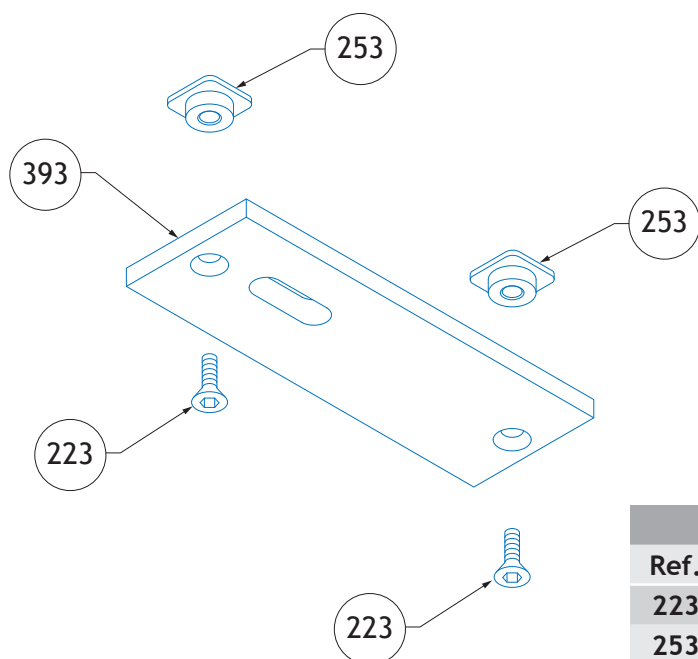


Create the opening to block the secondary door leaf for the traditional latch
OR

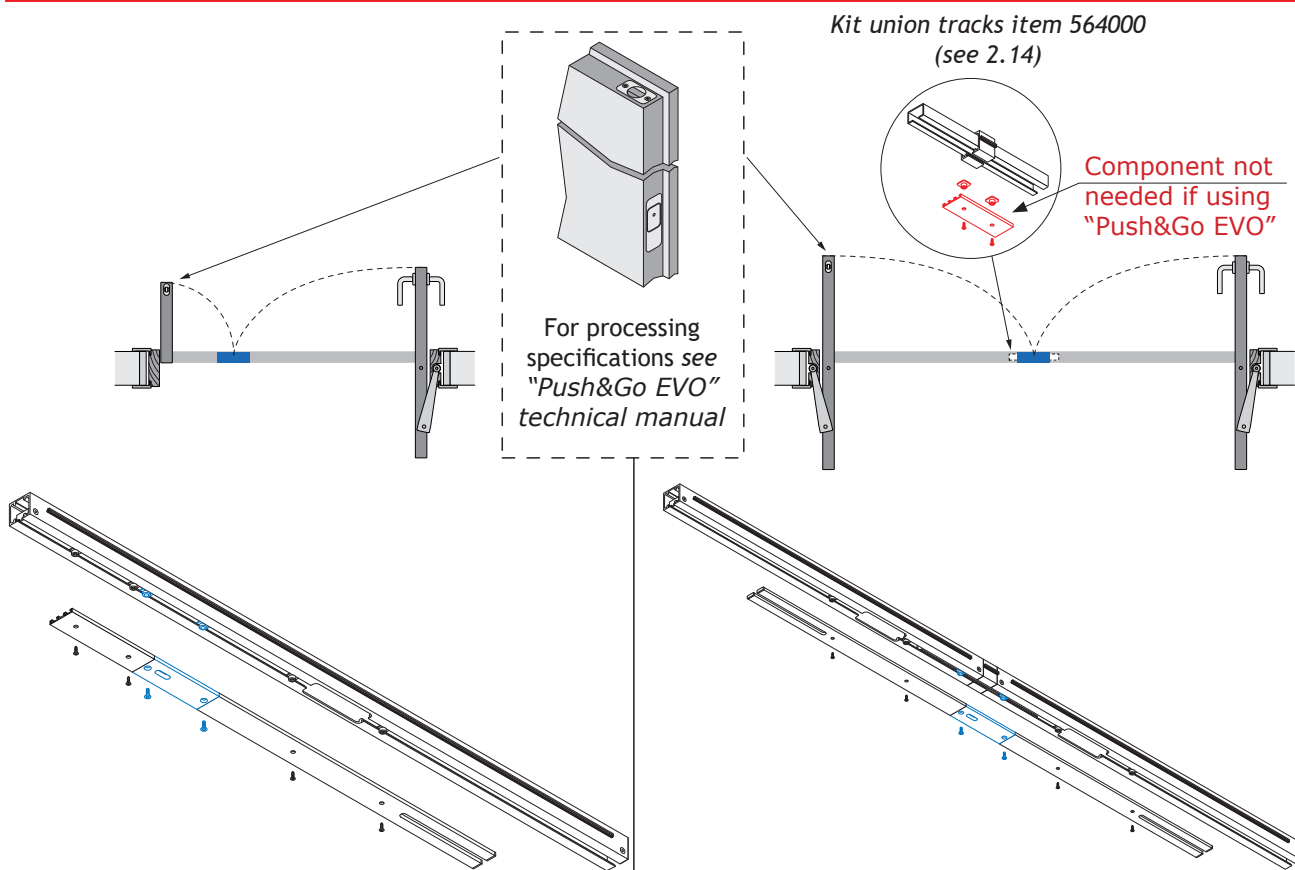
For the Push&Go EVO system use the dedicated kit
(see "2.15 Magnetic striker plate for Push&Go EVO")

2.15 Magnetic striker plate for Push&Go EVO

For use with double door leaves with ERGON LIVING system



List of components		
Ref.	Q.ty	Description
223	2	Screws TSPEI M 5x12
253	2	Plate fixing insert
393	1	Magnetic striker plate



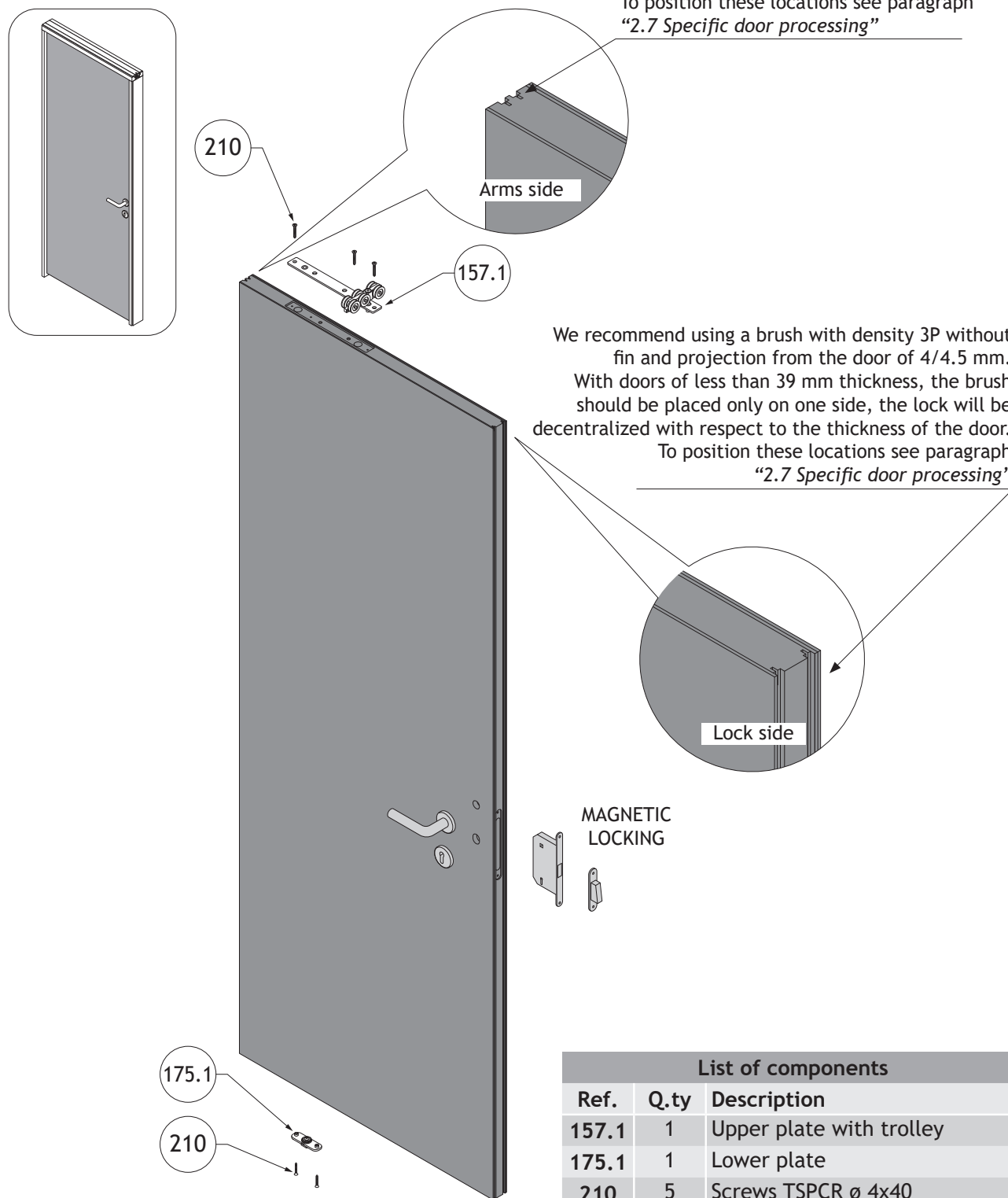
3. ASSEMBLY

3.1 Installation of hardware on the door leaf

LOCATIONS FOR BRUSH (or seal)

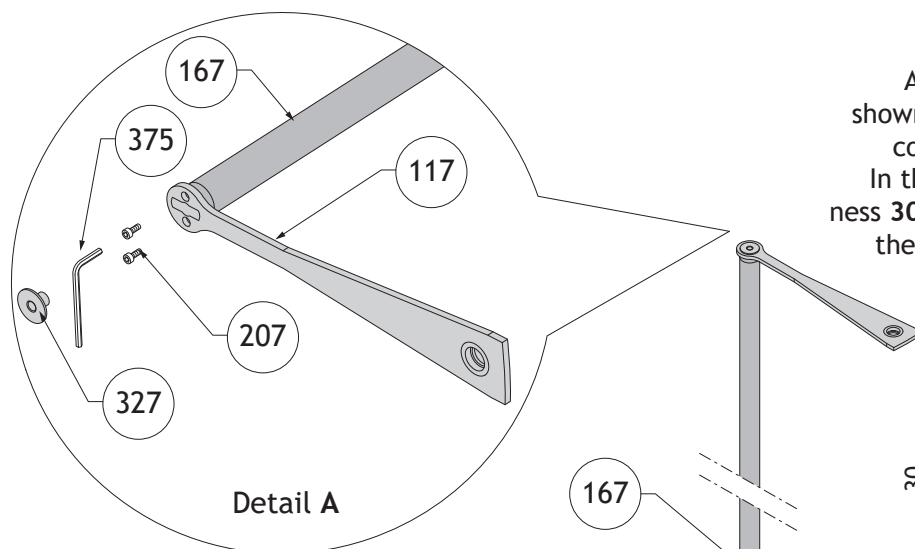
We recommend using a brush with density 3P without fin and projection from the door of 6/6.5 mm.

To position these locations see paragraph "2.7 Specific door processing"

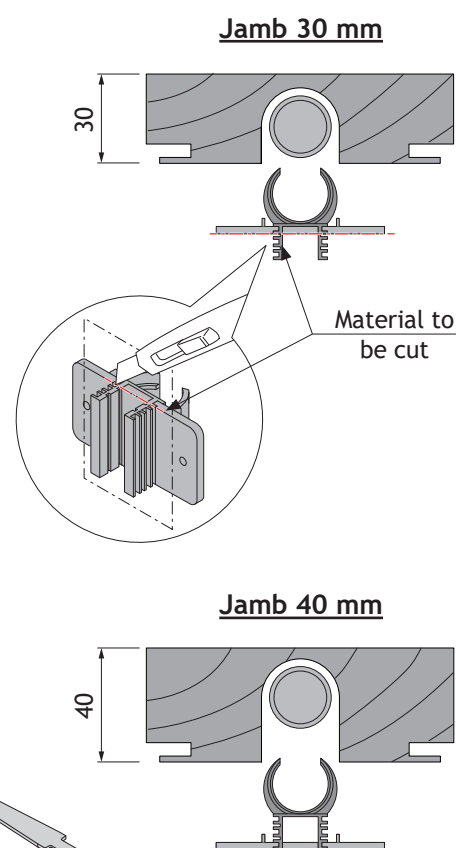


3.2 Connecting rod assembly with upper and lower arm

Mount the upper and lower arm on the rod. When inserting the bushing (327) pay attention to the pins on the same: they must fit into the hexagons present on the screw heads (207).

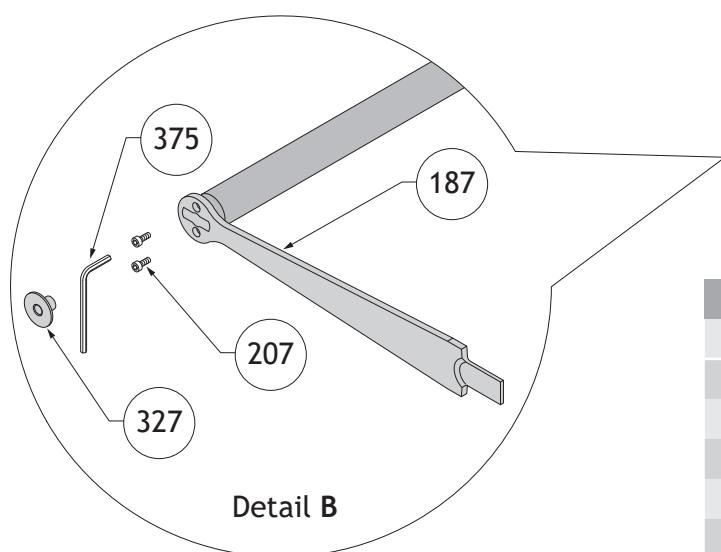


Assemble the guide rod (307) as shown in the following drawings, according to the thickness of jamb. In the case of using jambs of thickness 30 mm, it is necessary to remove the excess material (see drawing).



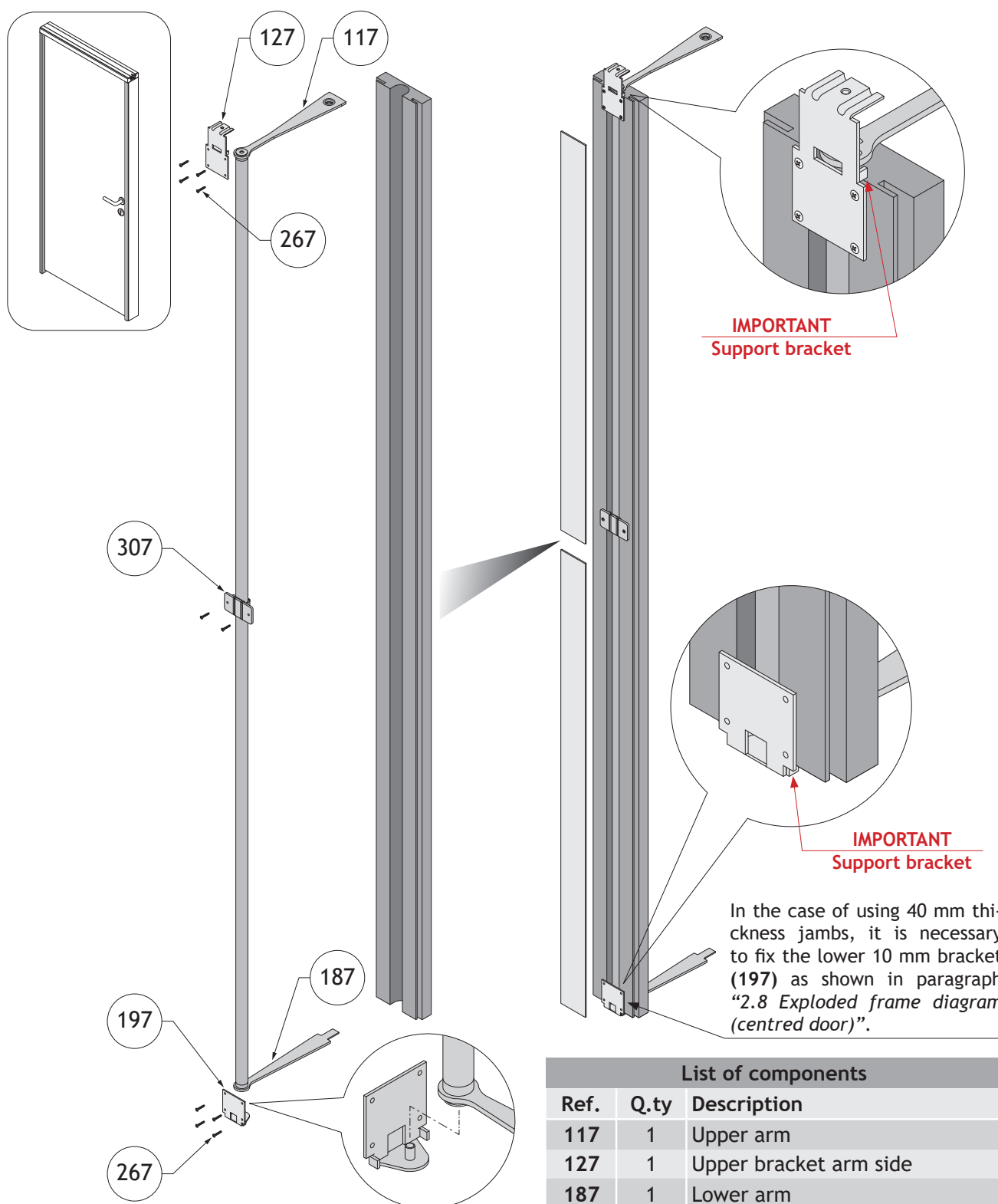
Caution!

Fasten the screws carefully (207) using the 2.5 mm hexagonal key (375) and make sure that the arm is attached to the pin plane of the connecting rod.



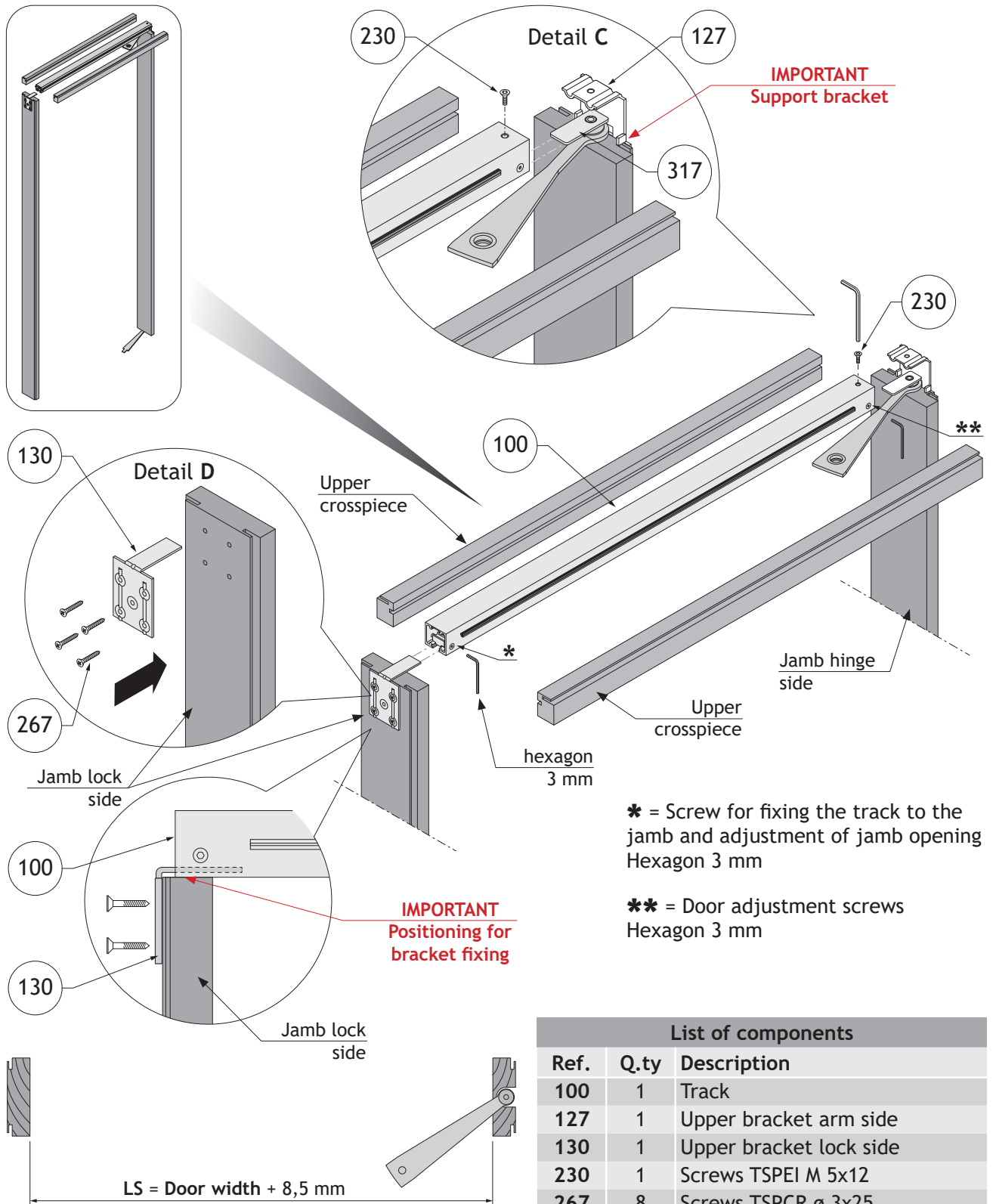
List of components		
Ref.	Q.ty	Description
117	1	Upper arm
167	1	Connecting rod
187	1	Lower arm
307	1	Rod guide
327	2	Rod rotation bush
207	4	Screws TCEI M 3x6
375	1	Hexagonal key 2.5 mm

3.3 Assembly of hinge side jamb to the connecting rod



List of components		
Ref.	Q.ty	Description
117	1	Upper arm
127	1	Upper bracket arm side
187	1	Lower arm
197	1	Lower bracket
267	10	Screws TSPCR ø 3x25
307	1	Rod guide

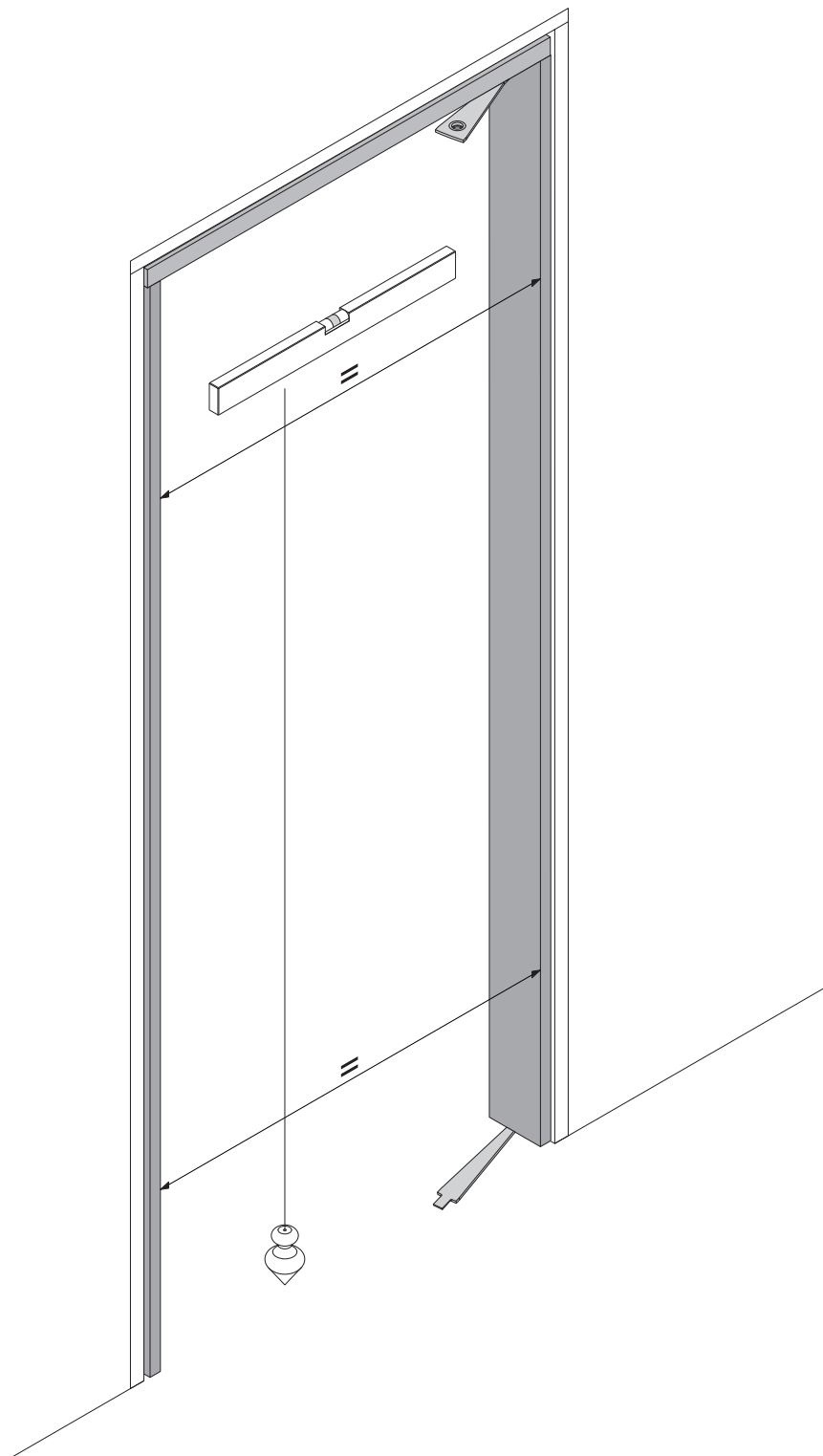
3.4 Assembly of frame and track



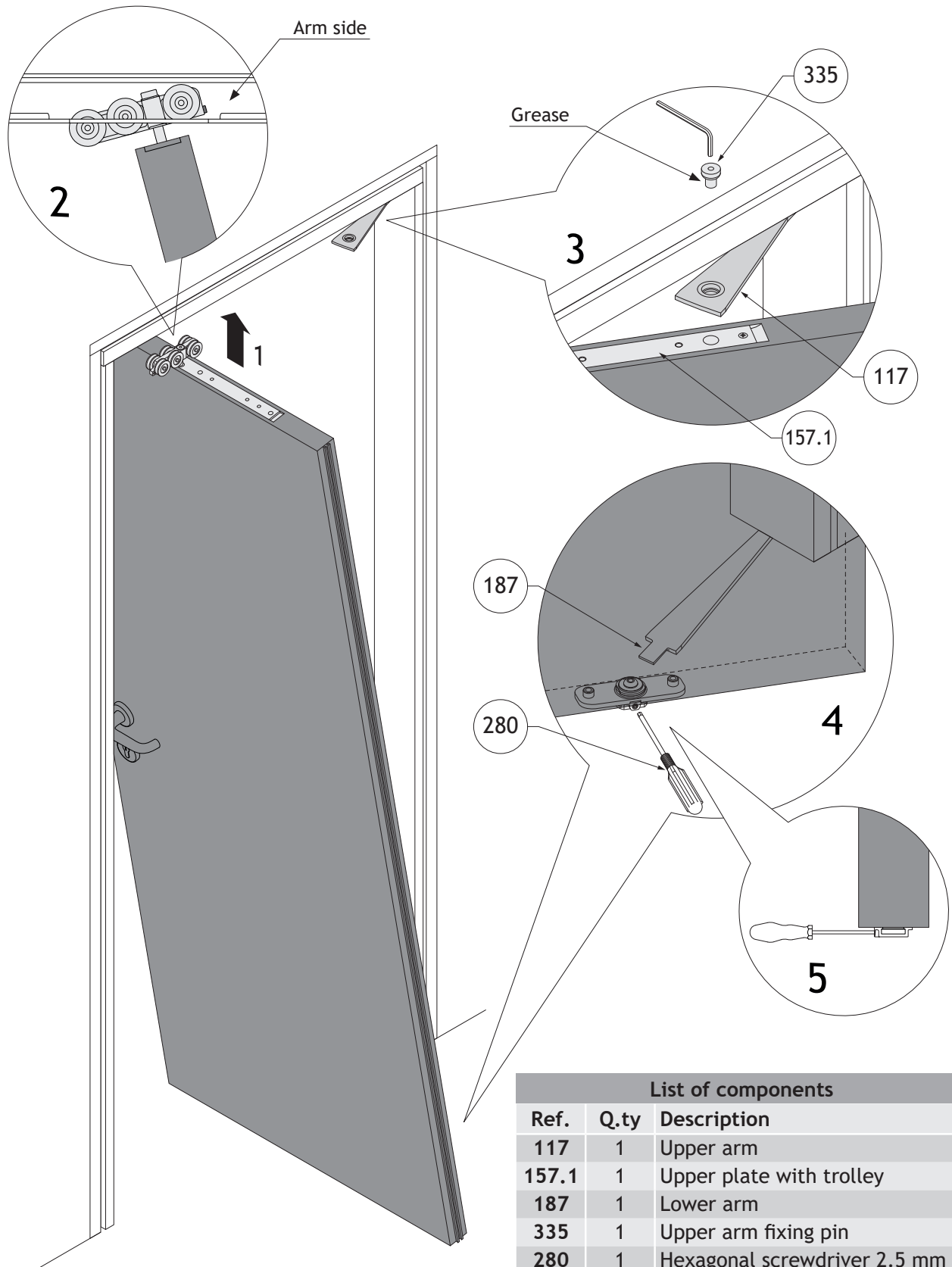
List of components		
Ref.	Q.ty	Description
100	1	Track
127	1	Upper bracket arm side
130	1	Upper bracket lock side
230	1	Screws TSPEI M 5x12
267	8	Screws TSPCR ø 3x25
317	1	Upper pivot

3.5 Installation of complete jamb

N.B.: Pay close attention to level of the track and the plumb line of the jambs

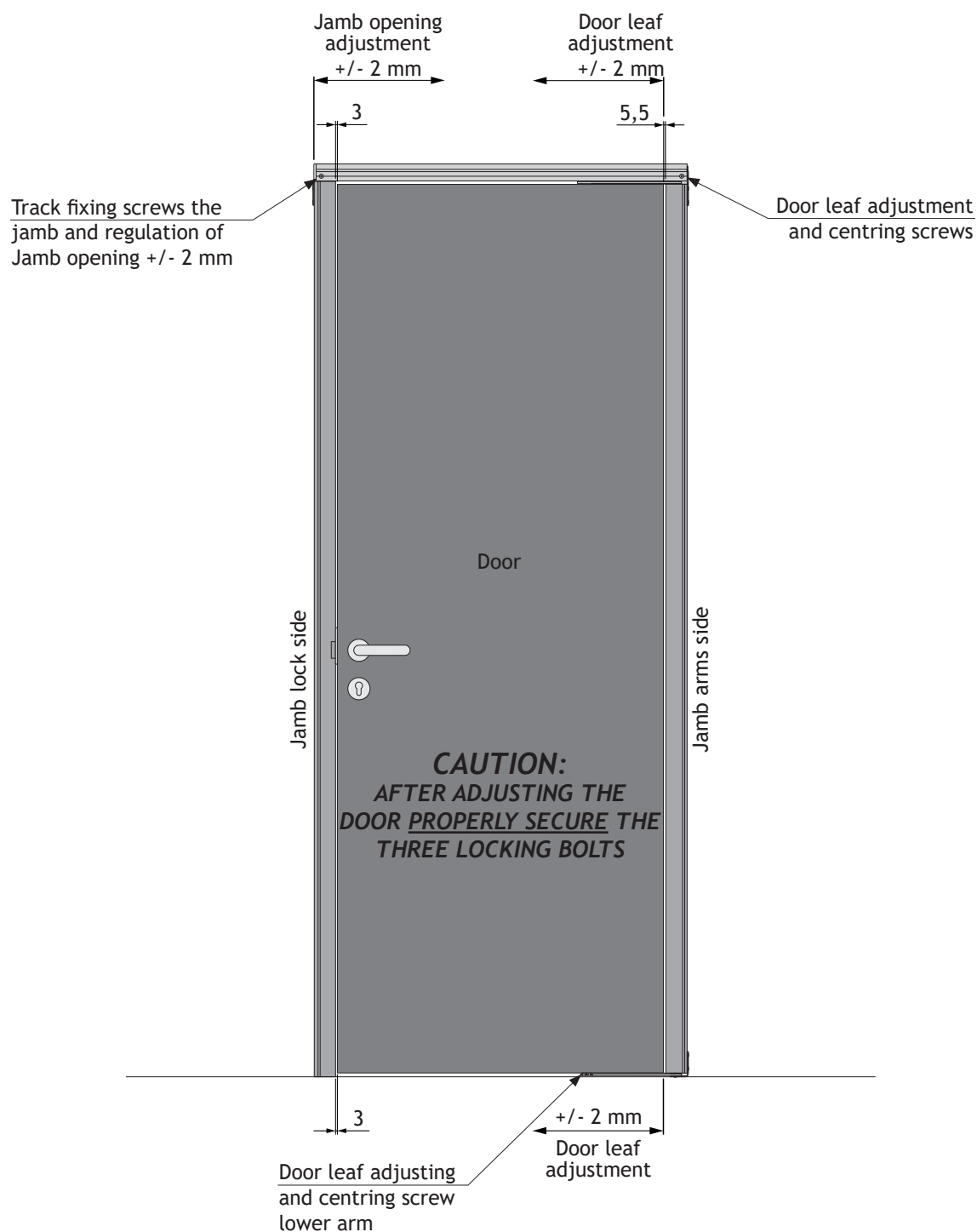


3.6 Door leaf installation

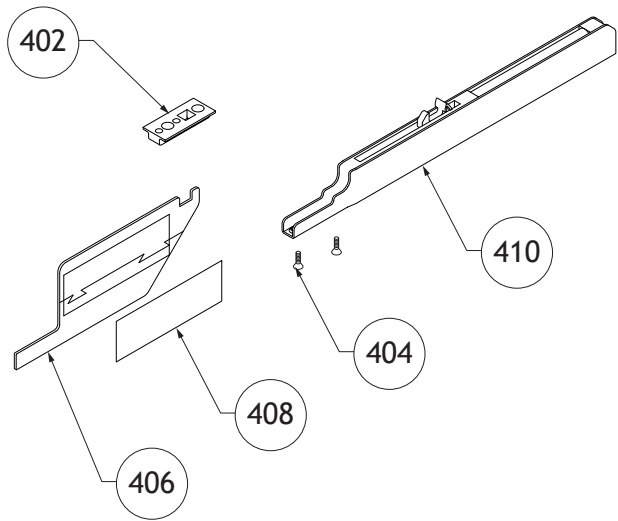


List of components		
Ref.	Q.ty	Description
117	1	Upper arm
157.1	1	Upper plate with trolley
187	1	Lower arm
335	1	Upper arm fixing pin
280	1	Hexagonal screwdriver 2.5 mm

3.7 Door leaf and frame adjustment



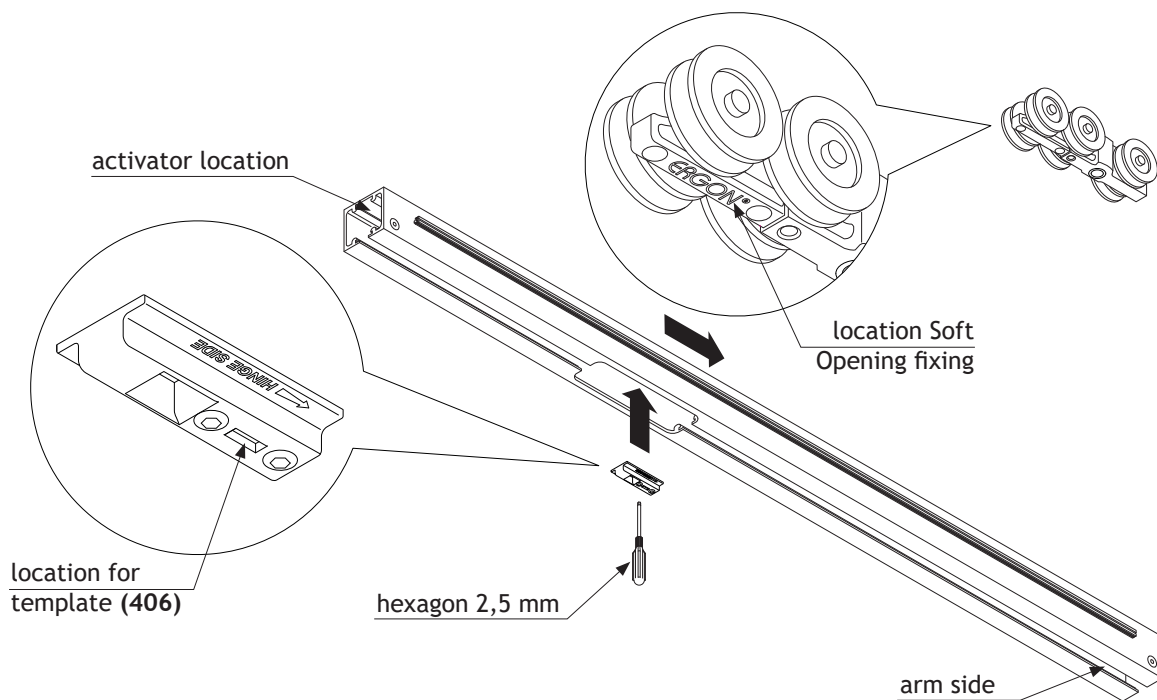
3.8 “Soft Opening” damper installation (Optional)



List of components		
Ref.	Q.ty	Description
402	1	Activator
404	2	Screws TSP+ M3x8
406	1	Activator positioning template
408	1	Sticker
410	1	Soft Opening

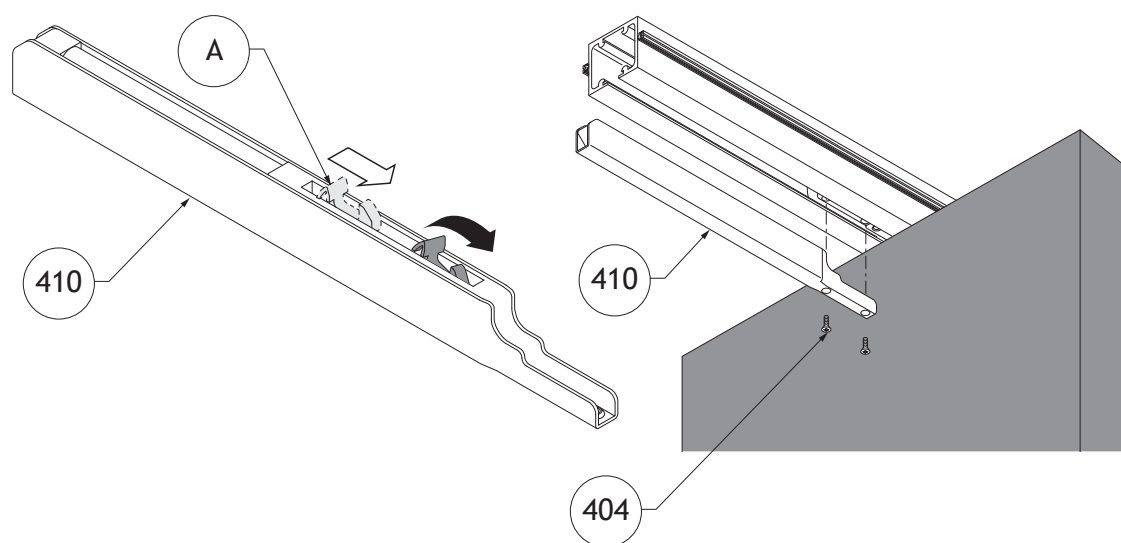
Phases of installation

1. Assemble and secure the jambs and track to the wall.
2. Check that the trolley provided has support for the attachment of the Soft Opening.

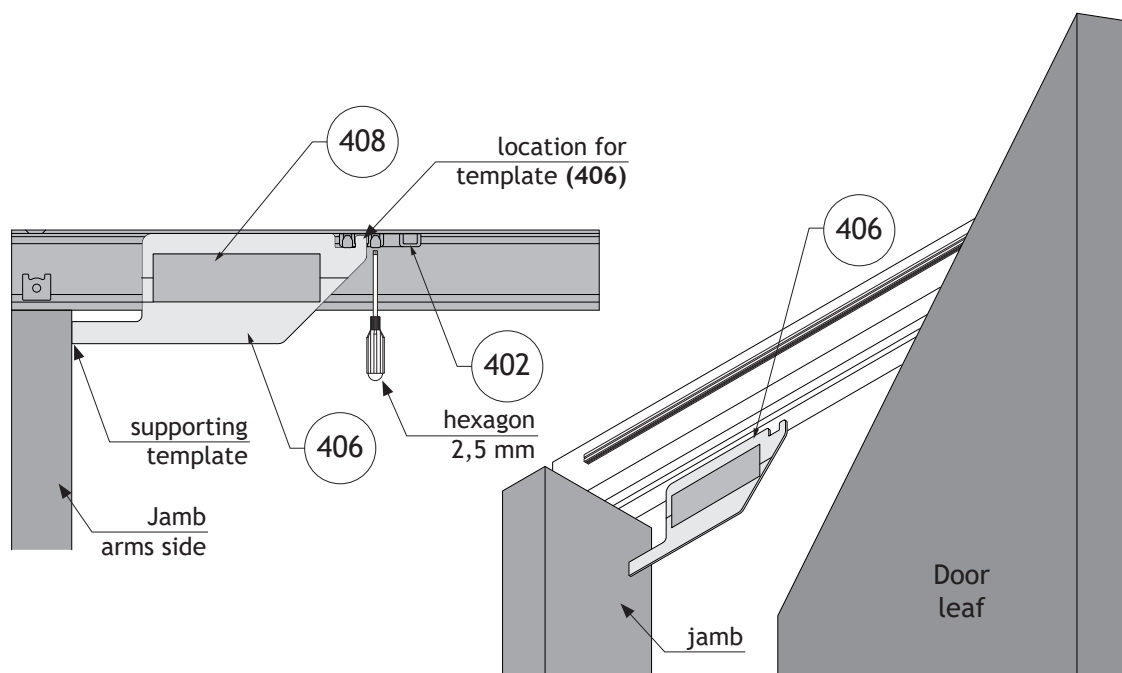


3. Slide the activator (402) into its location in the track paying attention to the instructions. The activator must be brought temporarily to the stop on the hinge part of the arm.
4. Attach the door leaf and secure the hinge arms. Follow the standard settings of the door and open the door leaf completely.

N.B. In the case of a door already installed insert the activator in the location of the track after having dismantled the track cover.

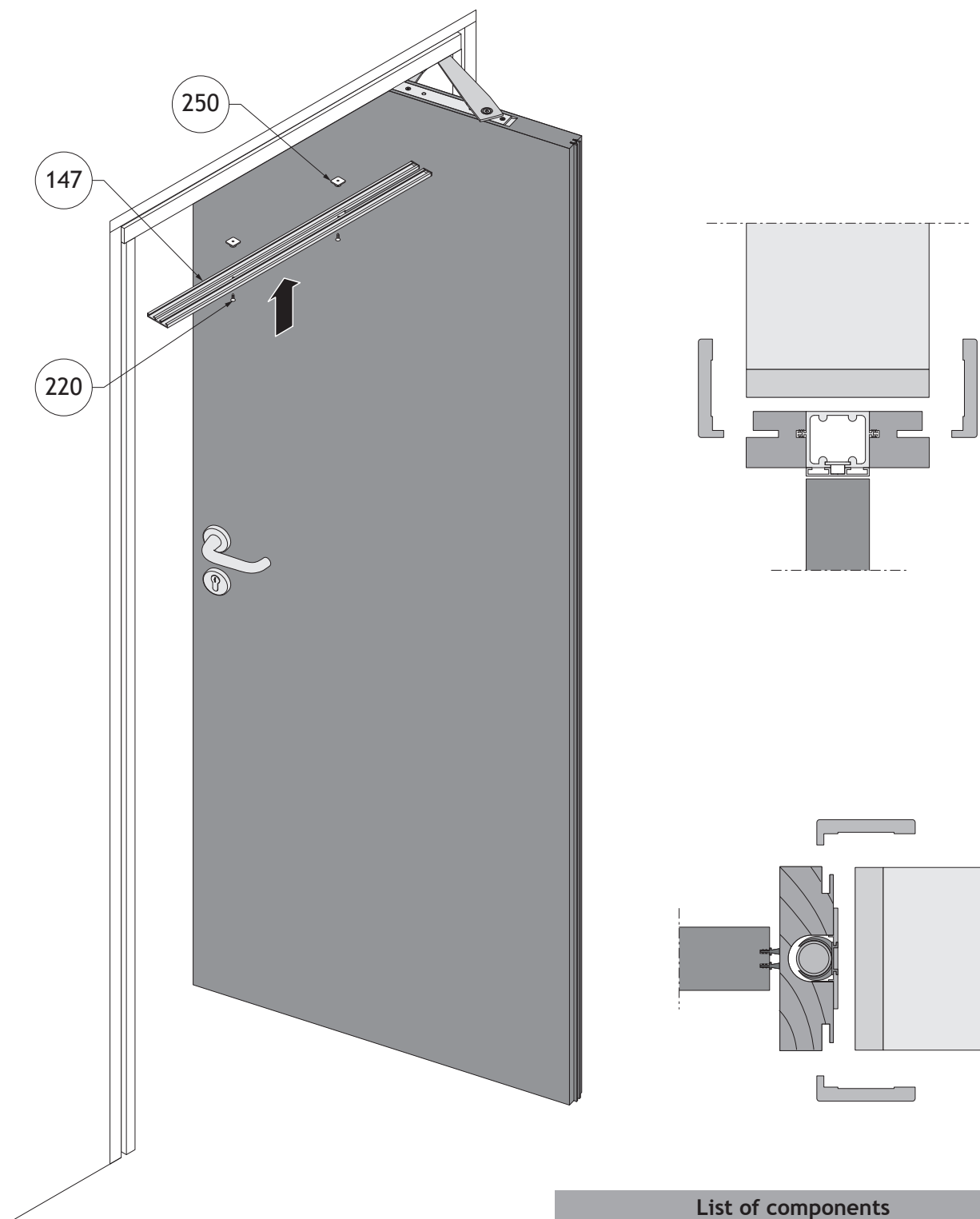


5. Push the hook (A) to load the Soft Opening (410) and secure it to the trolley with the screws (404) supplied.



6. Join the two parts of the template (406) using the sticker (408).
 Take the door leaf to 45° and place the template (406) to the jamb dragging the activator (402) into the correct position, firmly attach the locking screws.
7. Check the correct operation of the Soft Opening.
 Complete the installation of the door.

3.9 Mounting frames and track cover profiles



List of components		
Ref.	Q.ty	Description
147	1	Track cover profile
220	2	Screws TSPCR \varnothing 3x10
250	2	Track cover fixing insert

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