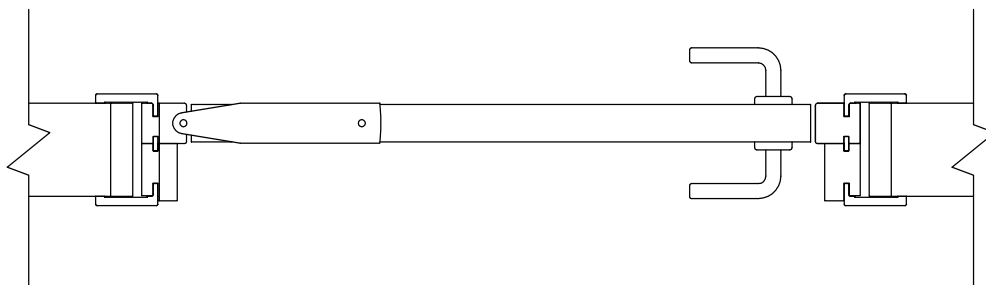




SERIE 40

HOME

technical construction and installation manual
swinging sliding door with connecting rod in the panel
FRAME WITH DOORPOST



INTRODUCTION

ERGON LIVING S/40 hardware is designed to be applied only on hollow-cored panels, for internal doors for interior residential use, that are at least 40 mm thick and weight no more than 70 kg.

To guarantee reliability and convenience of use, by now tested over time on many thousands of manufactured models, the components used come from the already tested ERGON Community model. The ERGON system have passed rigorous durability tests on repeated opening and closing (100,000 cycles) in accordance with the European standard EN 1191/00 at the CATAS research and development laboratory.

Since the connection rod is inside the door leaf and not in the door jamb, standard jambs can be used with the ERGON S/40 version, by doing some simple work as indicated in this manual.

The standard finishes offered for the ERGON S/40 version are silver and black, and, in order to reduce to a minimum the impediments of the door leaf during movement, three different types of arm are offered:

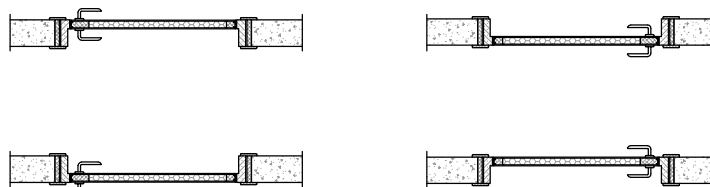
- "Base" particularly suitable for *LFM (wall hole opening)* from 800 to 1100 mm;
- "Small" particularly suitable for *LFM (wall hole opening)* from 610 to 800 mm;
- "Large" particularly suitable for *LFM (wall hole opening)* from 1100 to 1450mm.

According to specific requirements, with the ERGON S/40 hardware, the door can be made in such a way that, as regards the thickness of the wall, the door leaf can be installed in any position. However, to simplify the explanation, the two extreme positions are described by using the terminology found in this manual:

1) "**centered door**" *when the panel is positioned in the centre of the wall*; this solution offers the advantage that the construction of the door is independent of its installation because, since the door is centered and can be opened in both ways, the installation orientation could even be decided at the time of installation without making any modifications to the door;



2) "**oriented door**" *when the panel is placed near one of the two sides of the wall*; in this case the construction of the door must consider how it will be installed and therefore its orientation.



With reference to the passage widths the ERGON S40 version is offered in various standard sizes for each type (*Base, Small, Large*). However, if a suitable type is used, intermediate sizes can also be obtained by shortening the track and the track cover (page 17).

As regards the actual passage height, fixed-size or 5 cm-adjustable rods are offered (page 18), If different sizes from the standard ones offered are necessary, a special kit can be ordered with which, by shortening the connection rod (page 19), the required size can be obtained.

FRAME WITH JAMB AND DOORPOST

With this type of casing, we advise using the mechanical "AGB" Mediana Evolution lock.

ADVANTAGES

- **Practicality:** The adjacent doorpost allows the application of the "Mediana Evolution" lock, easily substituting the spring lock in plastic with the **ERGON** spring lock (present on each packet of hardware). Furthermore it allows a production standard, as it makes it possible to manage both small and large wall thickness (up to 74 cm with door positioned in the centre of the wall thickness).

- **Dimensions:** when frame with jamb and doorpost is used, there are some thickness wall limits which can change with the application of the different arms (BASE - SMALL - LARGE):

- for BASE arm version see at pag. 5-6
- for SMALL arm version see at pag. 7-8
- for LARGE arm version see at pag. 9-10

- **Functional:** A suitably modified Mediana Evolution lock, using simple pressure to substitute the standard spring lock with the **ERGON** lock, allows the door to close similarly to a door with a rabbet. In contrast to the magnetic lock, even if the door is pushed closed with considerable force, it latches closed. Furthermore, the door jamb can be mounted on either the right or left of the doorpost. In this way, the same door jamb can be used for doors installed internally, externally, or centrally.

LIMITS

- **Cost:** The adjacent doorpost, even if simple, is an extra element that must be constructed.
- **Aesthetic:** The dual-face release for the spring lock of the Mediana Evolution lock on the door jamb is visible near the lock. However, thanks to its limited dimensions, the visual impact is minimal.

RABBET DOOR WITH ONE-WAY OPENING

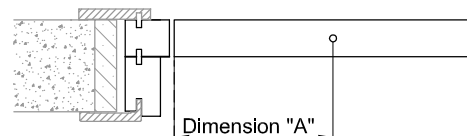
In some home's rooms can be more suitable using rabbet doors with **ERGON**, this is possible by putting some rabbets on the vertical door sides. In this way there's not more the double-way opening, but there is a better acoustic isolation inside the room by using a gasket for the tightness.

In the drawings on the right side there are two examples (fig. 2-3) of **ERGON** rabbet door. In order to prepare the rabbets on the panel and the jamb (fig.3), it's necessary that both of them are specular (fig. 4), furthermore in order to maintain the insertion point of the connecting rod on the panel in the right position, it's important to pay attention to the dimension "X" which has to be added to the "Dimension A", mentioned at pag.13 of the present manual instruction.

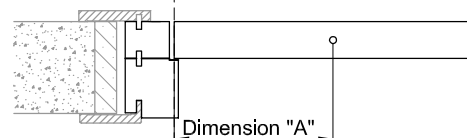


(Fig. 4)

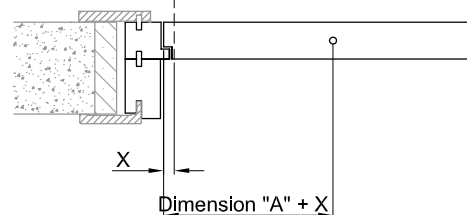
DOUBLE WAY
OF OPENING (Fig.1)



EXAMPLE OF
RABBET DOOR (Fig.2)

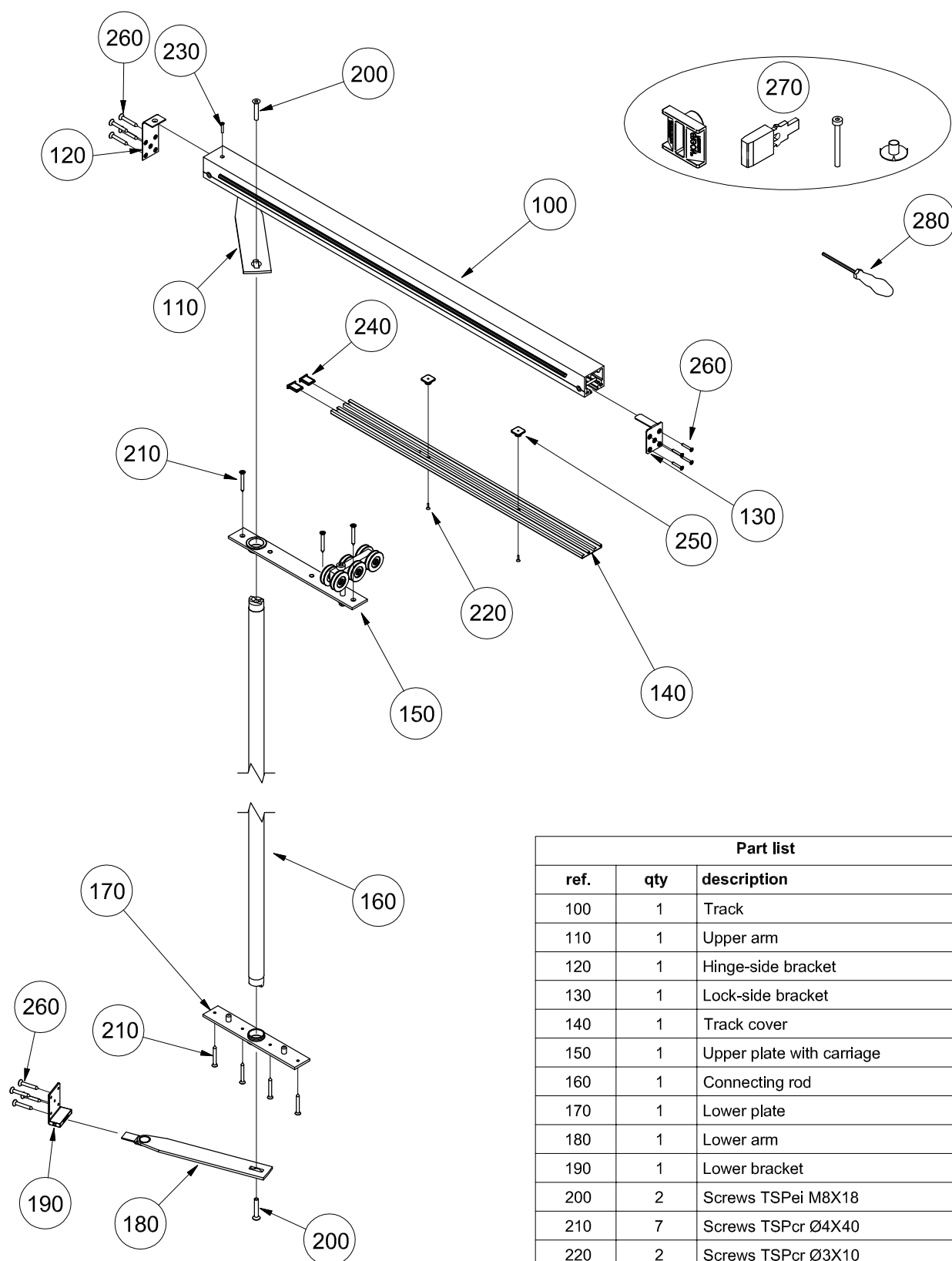


EXAMPLE OF
RABBET DOOR (Fig.3)



INDEX

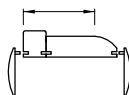
Exploded view of the hardware	page 4
Dimensional diagram of the <u>oriented door</u> with arm "BASE"	page 5
Dimensional diagram of the <u>centered door</u> with arm "BASE"	page 6
Dimensional diagram of the <u>oriented door</u> with arm "SMALL"	page 7
Dimensional diagram of the <u>centered door</u> with arm "SMALL"	page 8
Dimensional diagram of the <u>oriented door</u> with arm "LARGE"	page 9
Dimensional diagram of the <u>centered door</u> with arm "LARGE"	page 10
Dimensional diagram vertical	page 11
Summary sizes finished door leaf	page 12
Working door leaf specification	page 13
Exploded view of the frame	page 14
Details for vertical frame	page 15a-15b
Details for the upper crossbeam	page 16
Track adjustment to the width of the door	page 17
Adjustable connecting rod kit (<i>with provided kit</i>)	page 18
Connecting rod kit with extension (<i>with provided kit</i>)	page 19
Kit union tracks for door with two door leafs with ERGON system	page 20-21
Assembling the hardware in the door leaf	page 22
Assembly frame to track	page 23
Complete door jamb installation	page 24
Door leaf installation	page 25
Adjusting door leaf and door jamb	page 26
"Soft Opening" installation (optional)	page 27-28
Frames and track cover installation	page 29



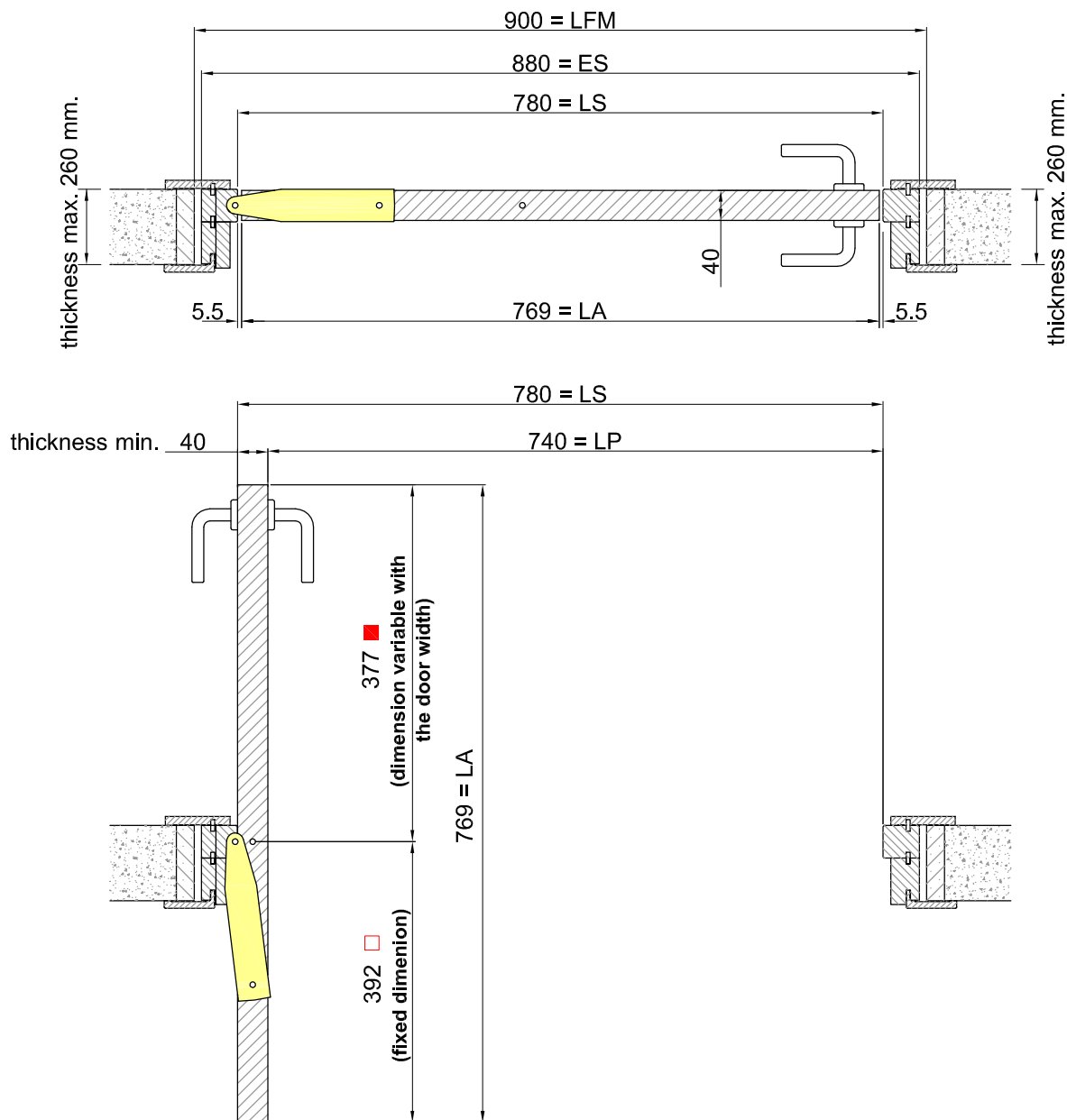
Part list		
ref.	qty	description
100	1	Track
110	1	Upper arm
120	1	Hinge-side bracket
130	1	Lock-side bracket
140	1	Track cover
150	1	Upper plate with carriage
160	1	Connecting rod
170	1	Lower plate
180	1	Lower arm
190	1	Lower bracket
200	2	Screws TSPei M8X18
210	7	Screws TSPcr Ø4X40
220	2	Screws TSPcr Ø3X10
230	1	Screws TSPei M5x 12
240	2	Track cover cap
250	2	Track cover installation insert
260	12	Screws TSPcr Ø3,5x30
270	1	Mediana evolution lock set
280	1	Hexagonal screwdriver mm 2,5

DIMENSIONAL DIAGRAM OF THE ORIENTED DOOR WITH ARM **BASE**

Wall thickness up to 260 mm



If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.



BASE ARM

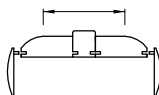
LEGEND	
LP	= Passage dimension (LFM - 160)
LA	= Door Leaf width (LFM - 131)
LS	= Door jamb opening (LFM - 120)
ES	= Outer jamb (LFM - 20) = length of the upper crossbeam
LFM	= Wall hole width
The dimensions on the technical drawing refer to the 900 wall hole width and it is the dimension in which the encumbrance of the open door is symmetric.	

ENCUMBRANCE DOOR			
LFM wall hole width	LP passage dimension	LA door leaf width	max. encumbrance of the open door
700	540	569	392 ☐
750	590	619	392 ☐
* 800	640	669	392 ☐
* 850	690	719	392 ☐
* 900	740	769	377 ☐
* 950	790	819	427 ☐
* 1000	840	869	477 ☐
* 1050	890	919	527 ☐
* 1100	940	969	577 ☐
* Available standard dimension, it is possible to have other dimension, even intermediate dimensions (see page 1 7) by adjusting the track.			

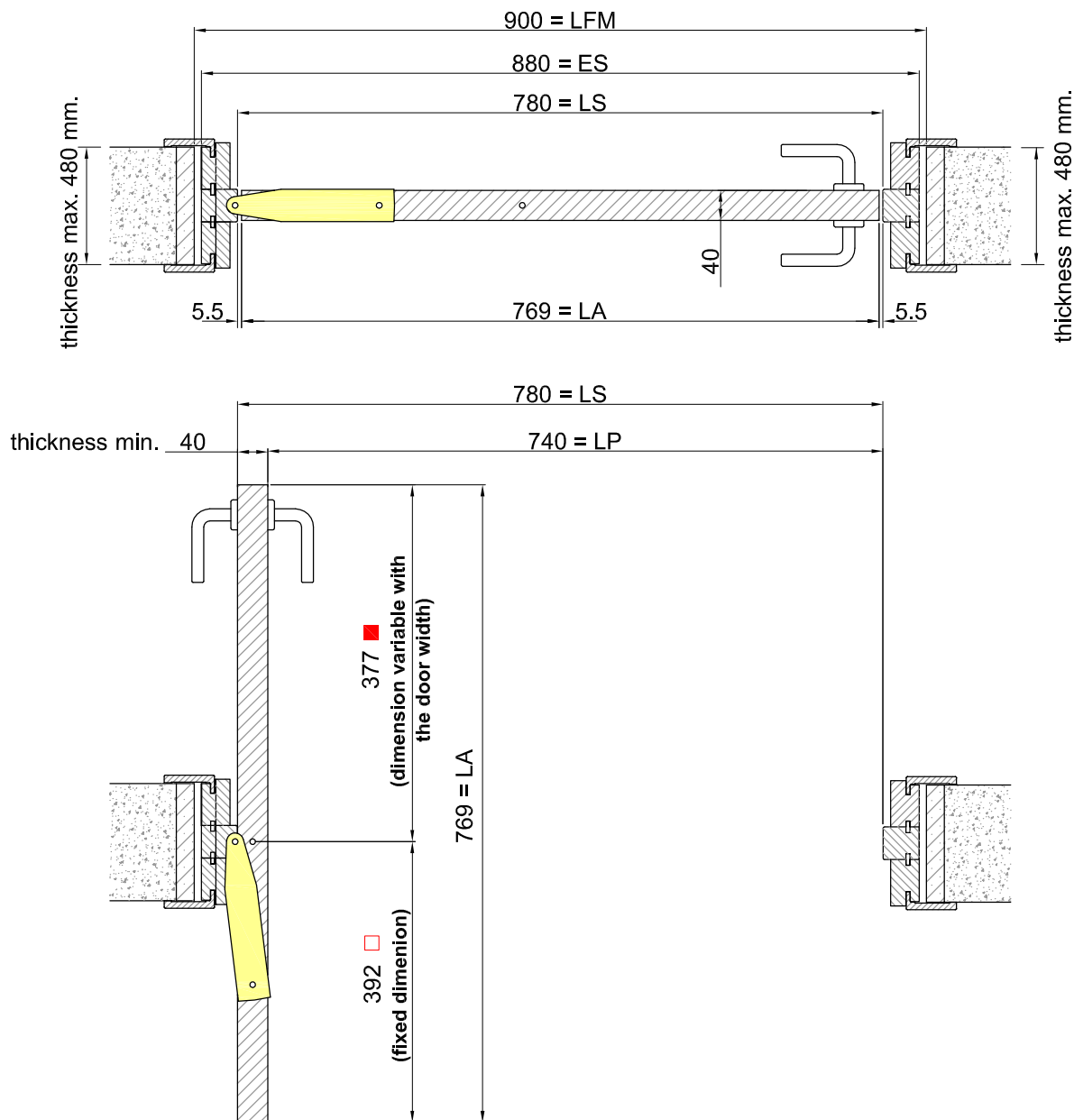
See in evidence the minimum measure possible by using "Soft Opening" kit pages 27-28

DIMENSIONAL DIAGRAM OF THE CENTERED DOOR WITH ARM **BASE**

Wall thickness up to 480 mm



If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.



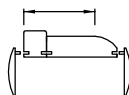
LEGEND	
LP	= Passage dimension (LFM - 160)
LA	= Door Leaf width (LFM - 131)
LS	= Door jamb opening (LFM - 120)
ES	= Outer jamb (LFM - 20) = length of the upper crossbeam
LFM	= Wall hole width
The dimensions on the technical drawing refer to the 900 wall hole width and it is the dimension in which the encumbrance of the open door is symmetric.	

ENCUMBRANCE DOOR			
LFM wall hole width	LP passage dimension	LA door leaf width	max. encumbrance of the open door
700	540	569	392 □
750	590	619	392 □
* 800	640	669	392 □
* 850	690	719	392 □
* 900	740	769	377 ■ □
* 950	790	819	427 ■
* 1000	840	869	477 ■
* 1050	890	919	527 ■
* 1100	940	969	577 ■
* Available standard dimension, it is possible to have other dimension, even intermediate dimensions (see page 1 7) by adjusting the track.			

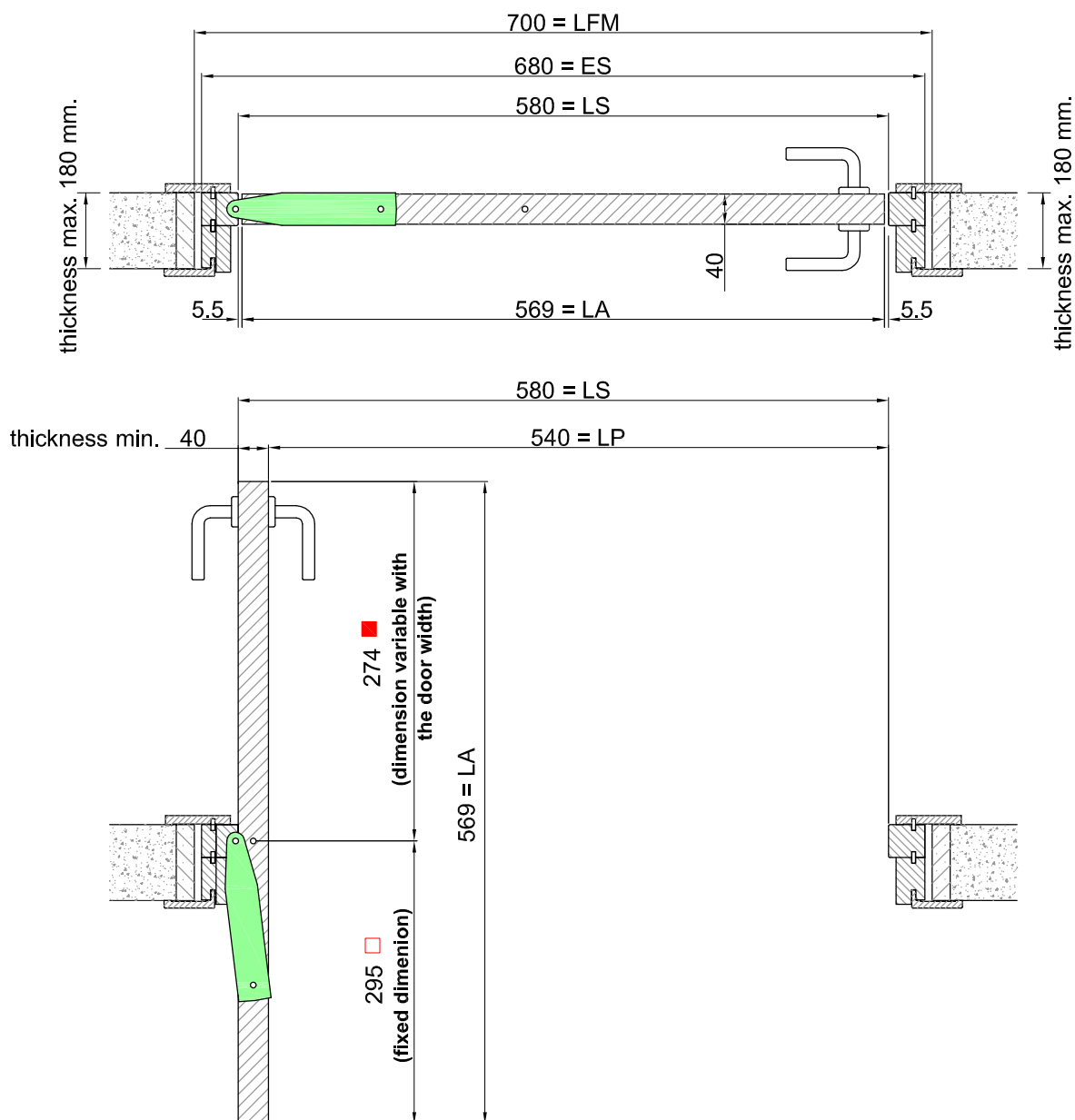
See in evidence the minimum measure possible by using "Soft Opening" kit pages 27-28

DIMENSIONAL DIAGRAM OF THE ORIENTED DOOR WITH ARM **SMALL**

Wall thickness up to 180 mm



If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.



LEGEND

- LP** = Passage dimension (LFM - 160)
LA = Door Leaf width (LFM - 131)
LS = Door jamb opening (LFM - 120)
ES = Outer jamb (LFM - 20) = length of the upper crossbeam
LFM = Wall hole width

The dimensions on the technical drawing refer to the 700 wall hole width and it is the dimension in which the encumbrance of the open door is symmetric.

ENCUMBRANCE DOOR

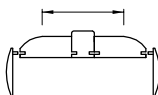
LFM wall hole width	LP passage dimension	LA door leaf width	max. encumbrance of the open door
610	450	479	295 ☐
650	490	519	295 ☐
700	540	569	295 ☒
750	590	619	324 ☒
* 800	640	669	374 ☒

* Available standard dimension, it is possible to have other dimension, even intermediate dimensions (see page 17) by adjusting the track.

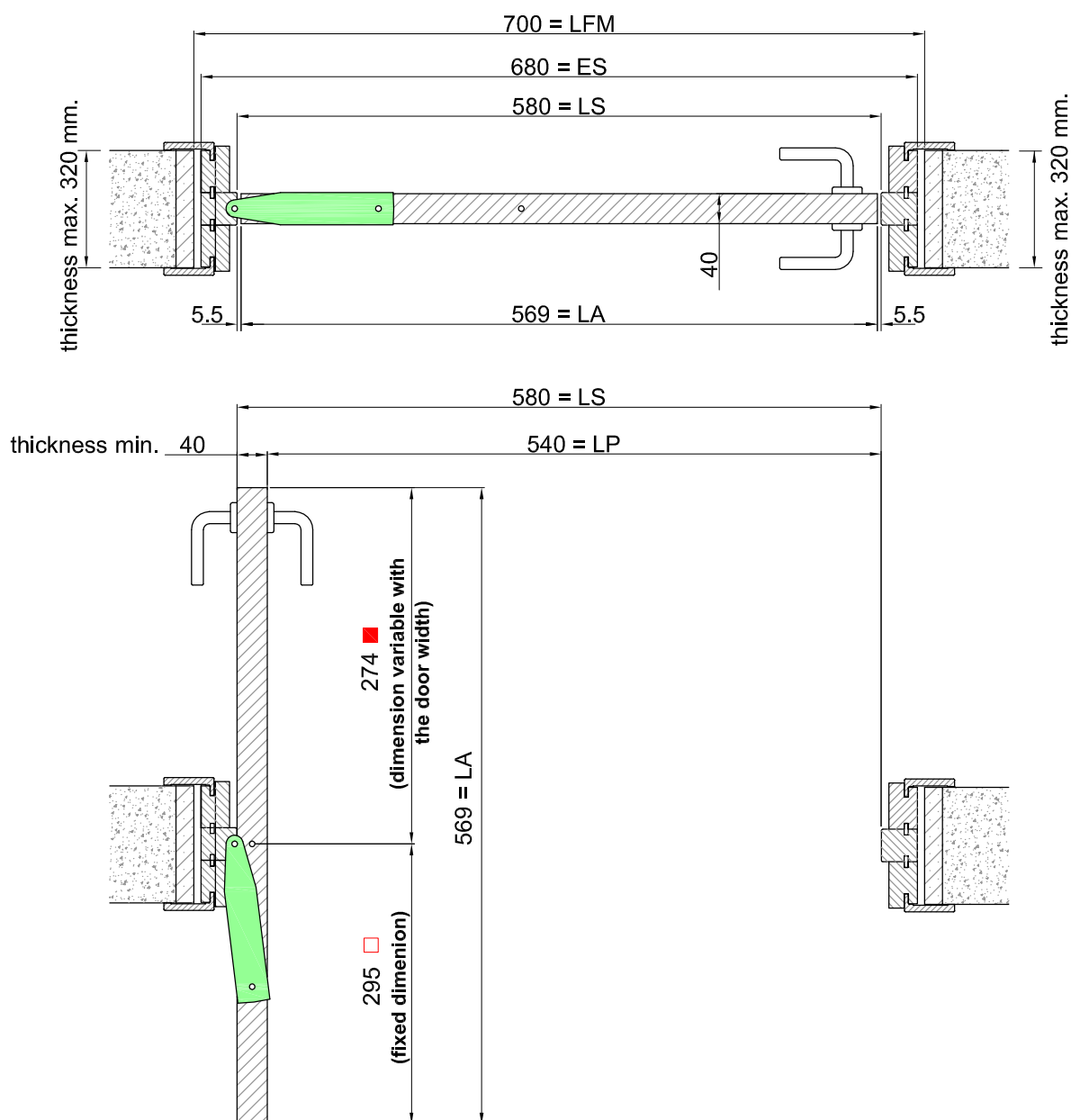
See in evidence the minimum measure possible by using "Soft Opening" kit pages 27-28

DIMENSIONAL DIAGRAM OF THE CENTERED DOOR WITH ARM **SMALL**

Wall thickness up to 320 mm



If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.



SMALL ARM

LEGEND

- LP** = Passage dimension (LFM - 160)
LA = Door Leaf width (LFM - 131)
LS = Door jamb opening (LFM - 120)
ES = Outer jamb (LFM - 20) = length of the upper crossbeam
LFM = Wall hole width

The dimensions on the technical drawing refer to the 700 wall hole width and it is the dimension in which the encumbrance of the open door is symmetric.

ENCUMBRANCE DOOR

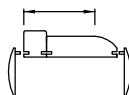
LFM wall hole width	LP passage dimension	LA door leaf width	max. encumbrance of the open door
610	450	479	295 ☐
650	490	519	295 ☐
700	540	569	295 ☒
750	590	619	324 ☒
*800	640	669	374 ☒

*Available standard dimension, it is possible to have other dimension, even intermediate dimensions (see page 17) by adjusting the track.

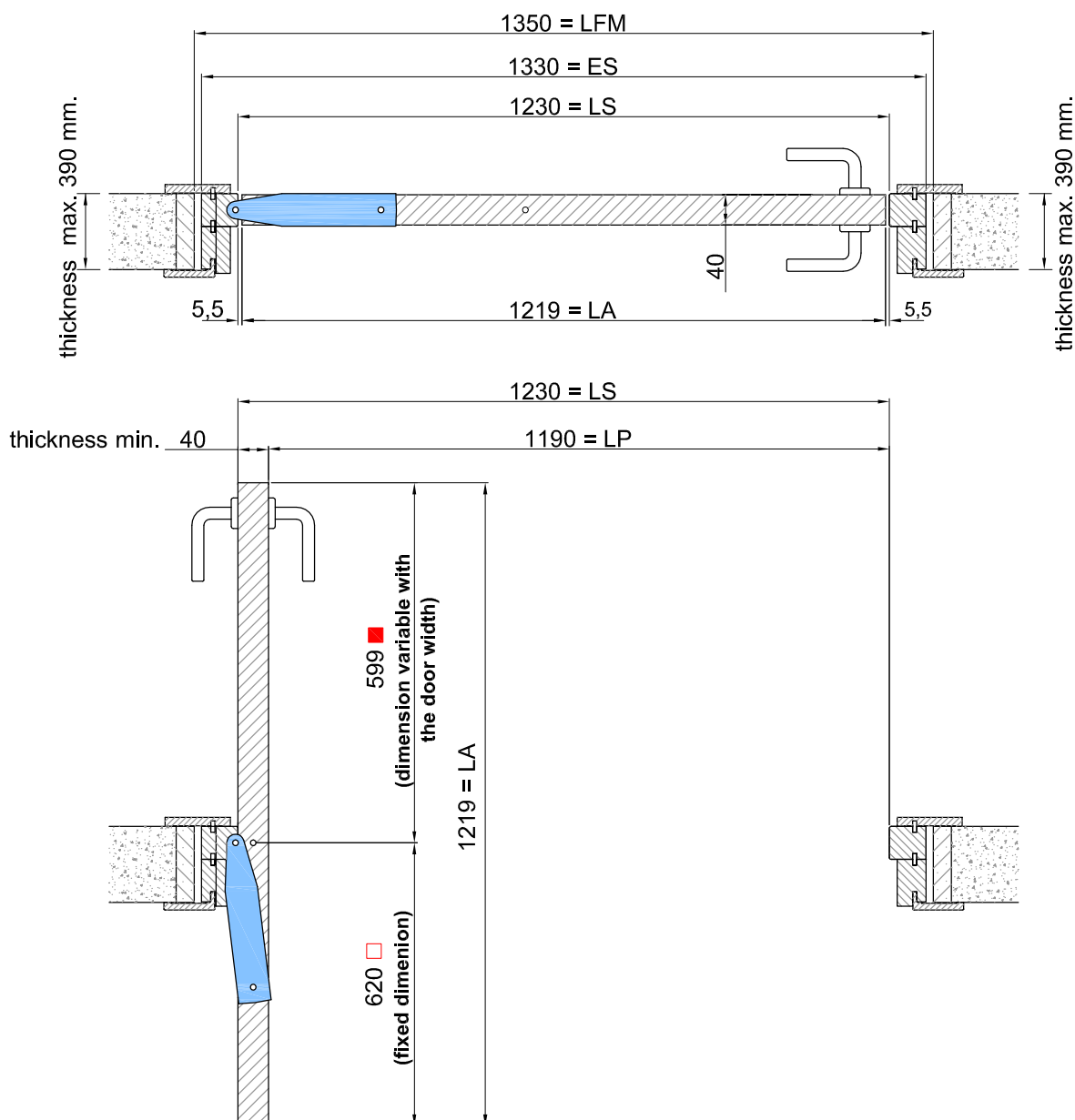
See in evidence the minimum measure possible by using "Soft Opening" kit pages 27-28

DIMENSIONAL DIAGRAM OF THE ORIENTED DOOR WITH ARM **LARGE**

Wall thickness up to 390 mm



If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.



LEGEND

- LP** = Passage dimension (LFM - 160)
LA = Door Leaf width (LFM - 131)
LS = Door jamb opening (LFM - 120)
ES = Outer jamb (LFM - 20) = length of the upper crossbeam
LFM = Wall hole width

The dimension on the technical drawing refer to the 1350 wall hole width and it is the dimensions in which the encumbrance of the open door is symmetric.

ENCUMBRANCE DOOR			
LFM wall hole width	LP passage dimension	LA door leaf width	max. encumbrance of the open door
1100	940	969	620 
1150	990	1019	620 
1200	1040	1069	620 
1250	1090	1119	620 
* 1300	1140	1169	620 
1350	1190	1219	620  
1400	1240	1269	650 
* 1450	1290	1319	700 

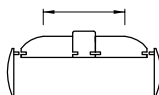
* Available standard dimension, it is possible to have other dimension, even intermediate dimensions (see page 17) by adjusting the track.

* Available standard dimension, it is possible to have other dimension, even intermediate dimensions (see page 17) by adjusting the track.

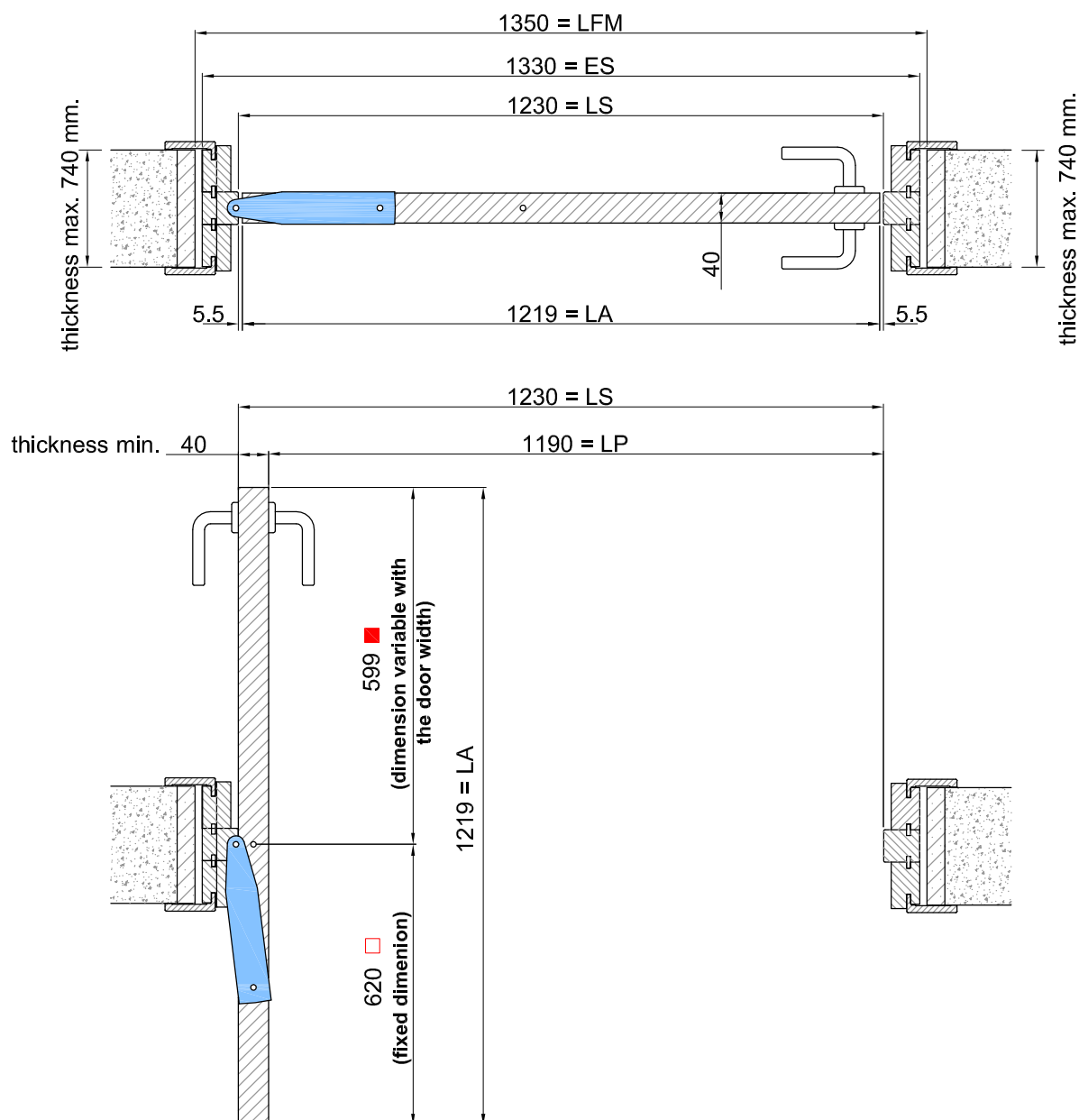
See in evidence the minimum measure possible by using "Soft Opening" kit pages 27-28

DIMENSIONAL DIAGRAM OF THE CENTERED DOOR WITH ARM **LARGE**

Wall thickness up to 740 mm



If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.



LEGEND

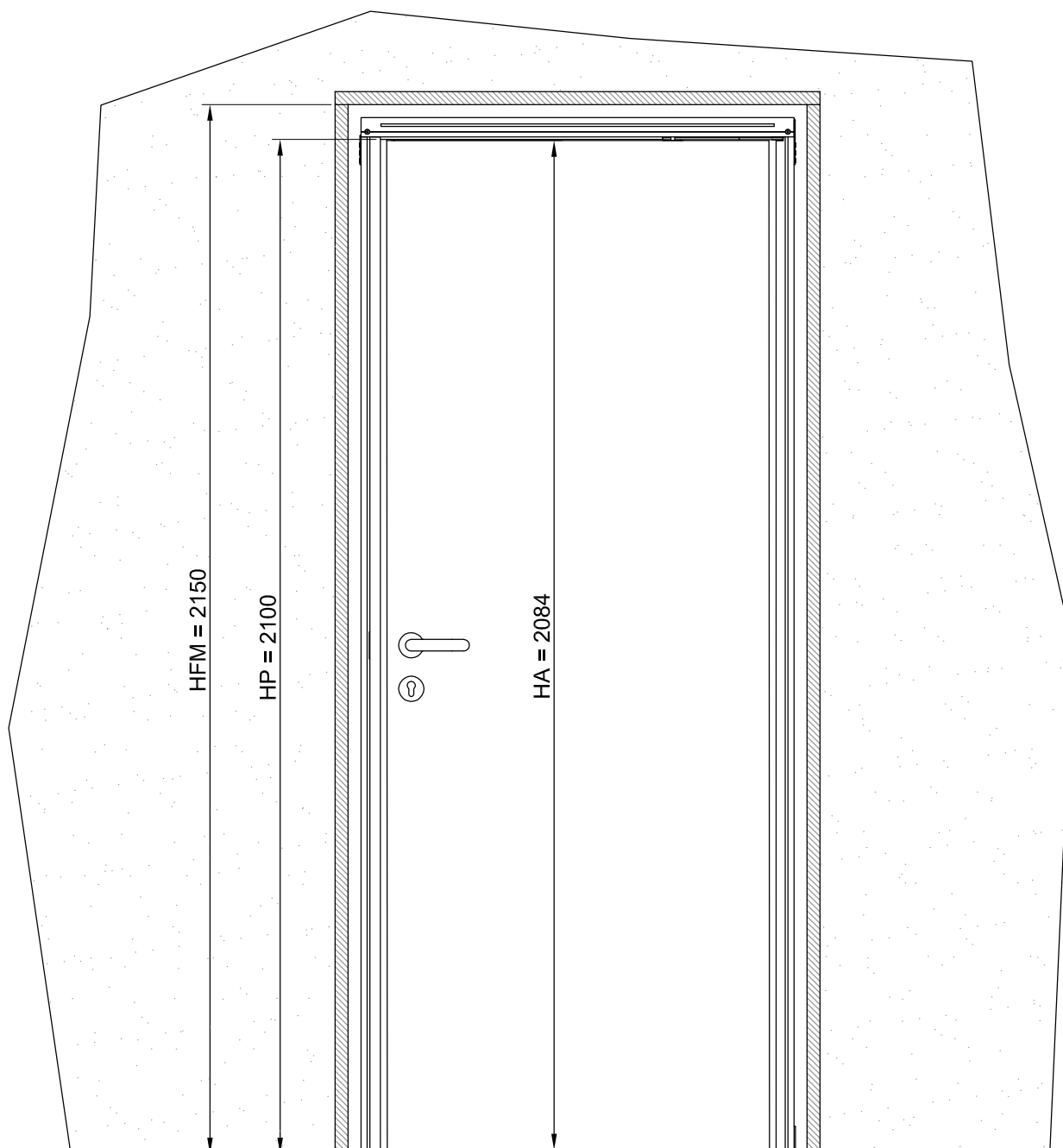
- LP** = Passage dimension (LFM - 160)
LA = Door Leaf width (LFM - 131)
LS = Door jamb opening (LFM - 120)
ES = Outer jamb (LFM - 20) = length of the upper crossbeam
LFM = Wall hole width

The dimension on the technical drawing refer to the 1350 wall hole width and it is the dimensions in which the encumbrance of the open door is symmetric.

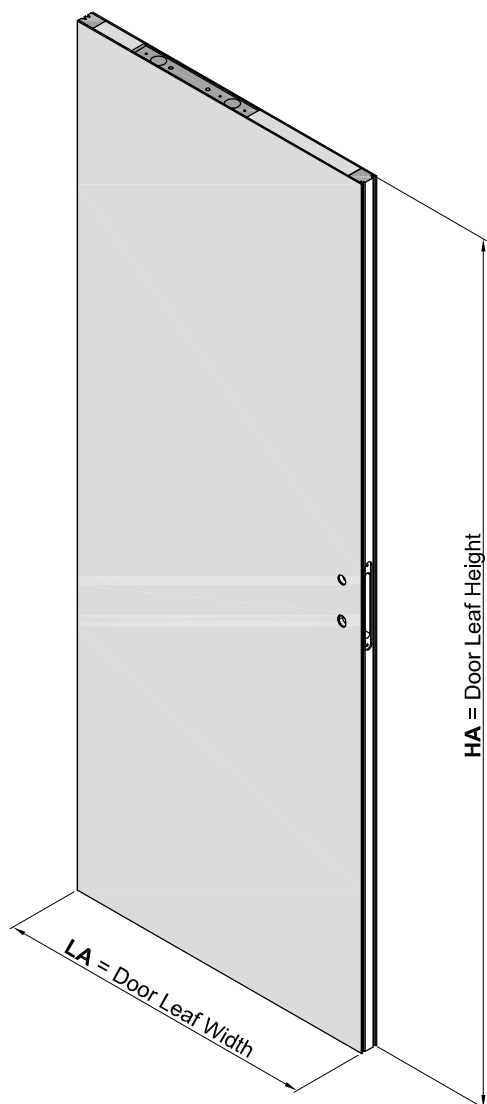
ENCUMBRANCE DOOR			
LFM wall hole width	LP passage dimension	LA door leaf width	max. encumbrance of the open door
1100	940	969	620 ☐
1150	990	1019	620 ☐
1200	1040	1069	620 ☐
1250	1090	1119	620 ☐
* 1300	1140	1169	620 ☐
1350	1190	1219	620 ☒ ☐
1400	1240	1269	650 ☒
* 1450	1290	1319	700 ☒

* Available standard dimension, it is possible to have other dimension, even intermediate dimensions (see page 17) by adjusting the track.

See in evidence the minimum measure possible by using "Soft Opening" kit pages 27-28



VERTICAL DIMENSIONS			
HFM	HP	HA	HP = (HFM - 50) HA = (HFM - 66)
wall hole height	height passage dimension	height door leaf	
* 1950	1900	1884	
* 2000	1950	1934	
* 2050	2000	1984	
* 2100	2050	2034	
* 2150	2100	2084	
* 2200	2150	2134	
* 2250	2200	2184	
* Available standard dimension. It is possible to have other dimensions, even intermediate dimensions, by purchasing the adjusting rod kit (see page 18) or rod kit with extension (see page 19). For getting rods in special sizes, kindly contact Celegon S.r.l..			



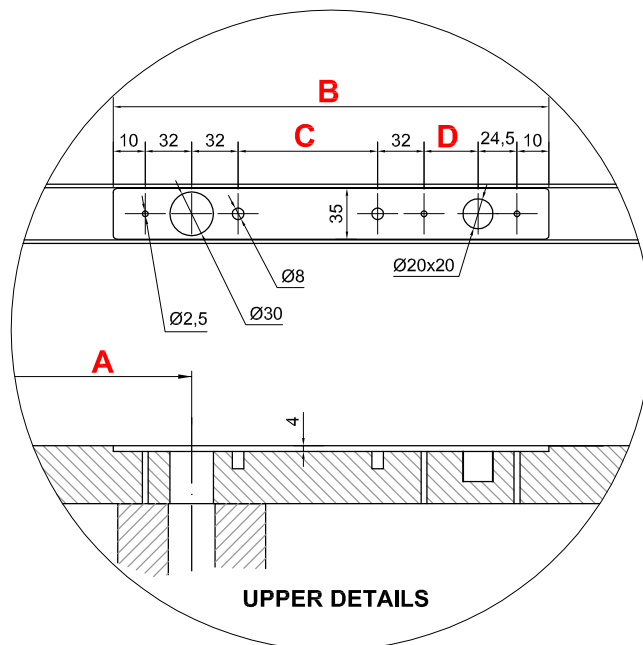
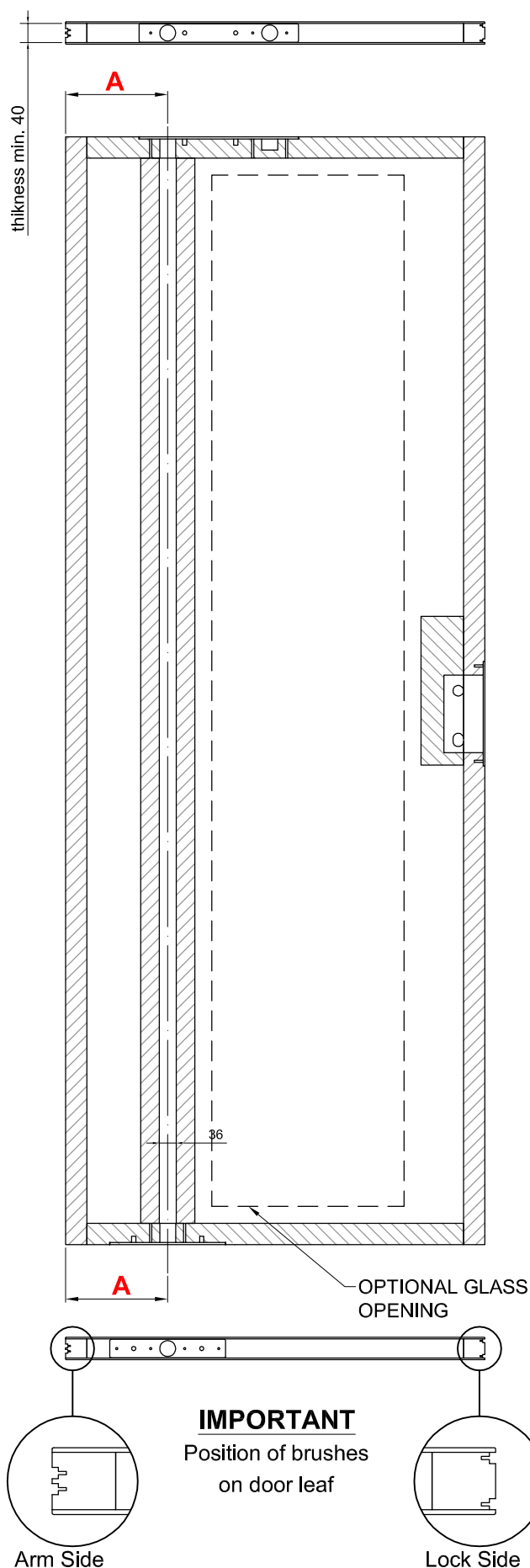
VERTICAL DIMENSIONS			
STANDARD HEIGHT	HP= (HFM-50) HA= (HFM-66)		
	HFM WALL HOLE HEIGHT	HP HEIGHT PASSAGE DIMENSION	HA DOOR LEAF HEIGHT
	1950	1900	1884
	2000	1950	1934
	2050	2000	1984
	2100	2050	2034
	2150	2100	2084
	2200	2150	2134
	2250	2200	2184
Available standard dimension. It is possible to have other dimensions, even intermediate dimensions, by purchasing the adjusting rod kit (see page 18) or rod kit with extension (see page 19). For getting rods in special sizes, kindly contact Celegon S.r.l..			

Minimum dimension with "Soft Opening" SMALL arm

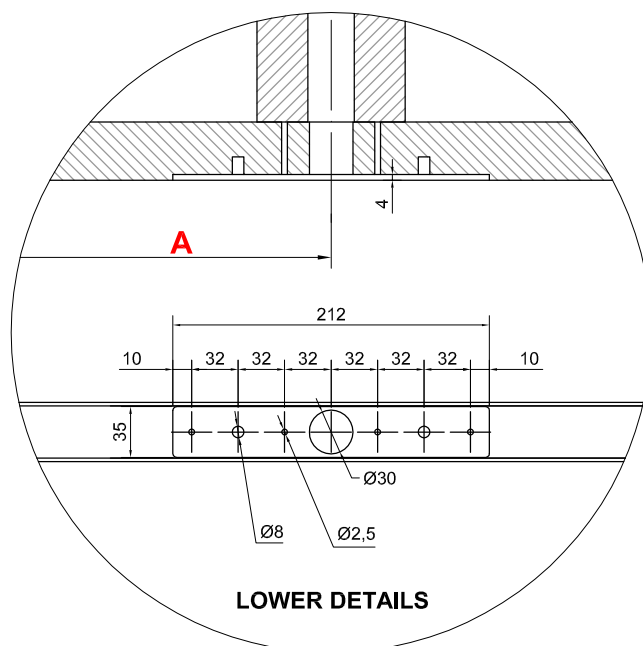
Minimum dimension with "Soft Opening" BASE arm

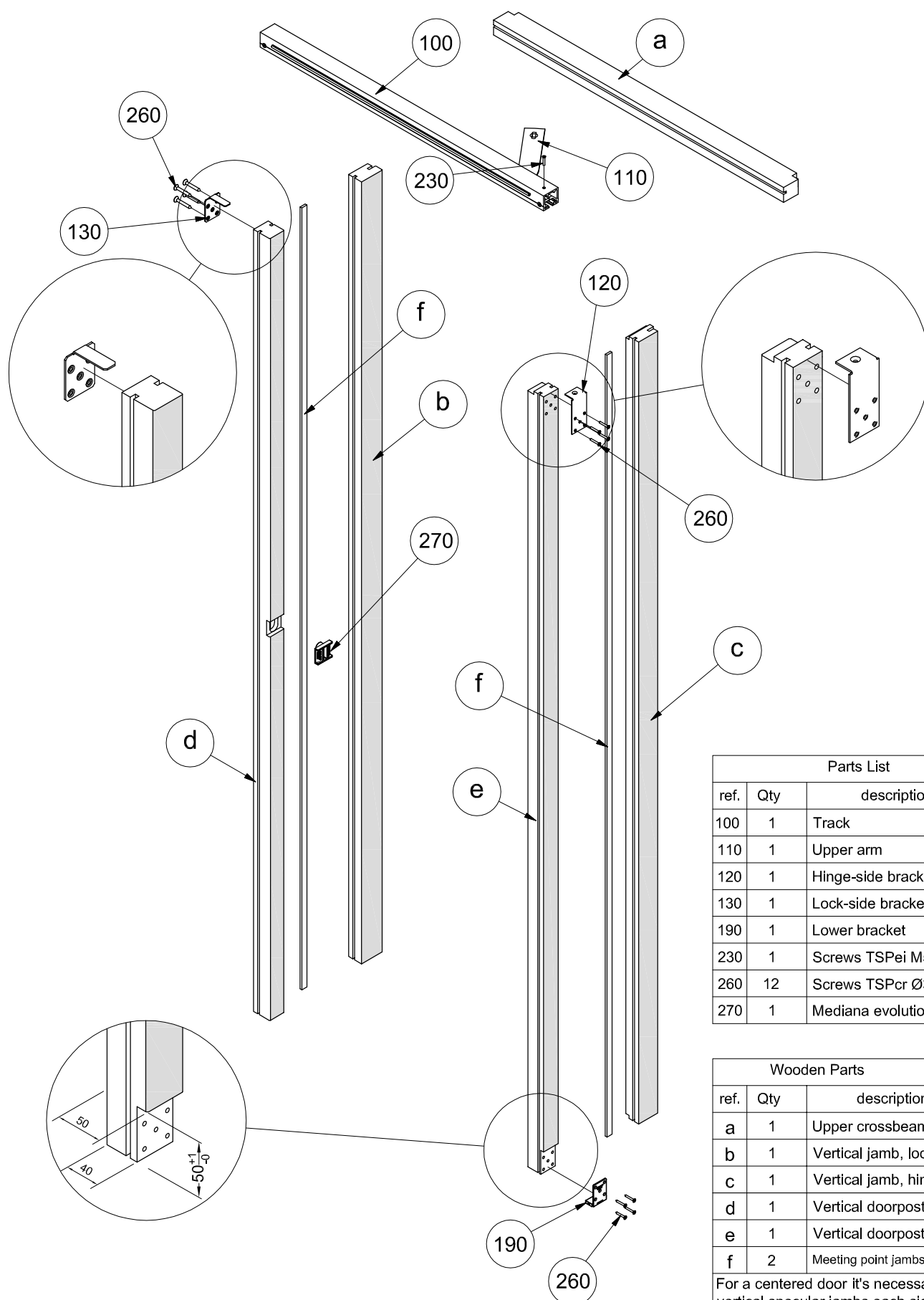
Minimum dimension with "Soft Opening" LARGE arm

HORIZONTAL DIMENSION					
LARGE	BASE	SMALL	LP= (LFM-140) LA= (LFM-111)		
			LFM WALL HOLE WIDTH	LP WIDTH PASSAGE DIMENSION	LA DOOR LEAF WIDTH
		●	610	450	479
		●	650	490	519
	●	●	700	540	569
	●	●	750	590	619
	⊙	⊙	800	640	669
	⊙		850	690	719
	⊙		900	740	769
	⊙		950	790	819
	⊙		1000	840	869
	⊙		1050	890	919
●	⊙		1100	940	969
●			1150	990	1019
●			1200	1040	1069
●			1250	1090	1119
⊙			1300	1140	1169
●			1350	1190	1219
●			1400	1240	1269
⊙			1450	1290	1319
⊙	Available Standard dimension				
●	Available dimensions, by adjusting the track, see page 17 (it is possible to have intermediate dimensions)				



Variable measures according to arm used				
	A	B	C	D
BASE arm	192	276	96	39,5
SMALL arm	144	227,3	47,3	39,5
LARGE arm	306	390	224	25,5



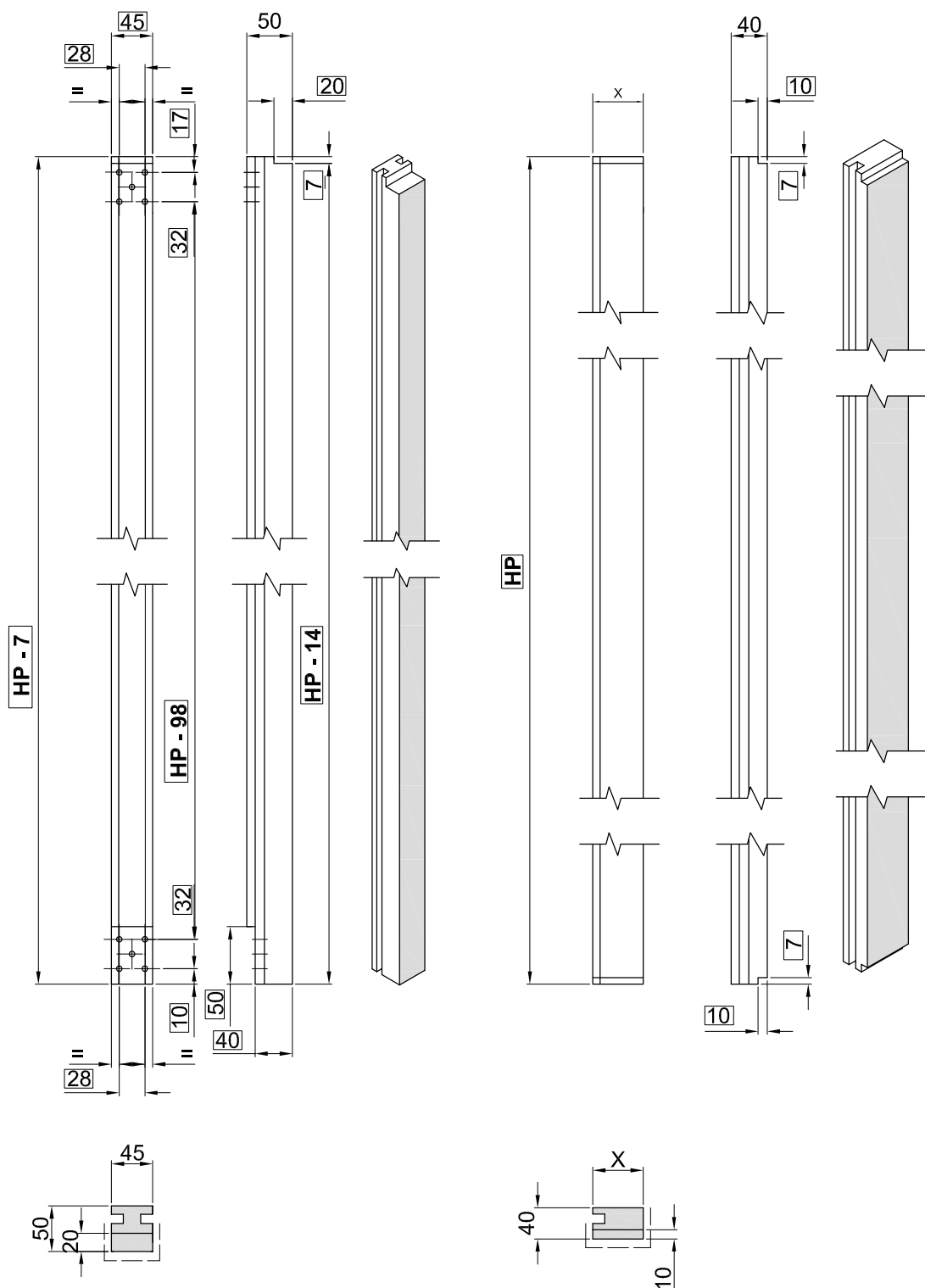


Parts List		
ref.	Qty	description
100	1	Track
110	1	Upper arm
120	1	Hinge-side bracket
130	1	Lock-side bracket
190	1	Lower bracket
230	1	Screws TSPei M5x12
260	12	Screws TSPcr Ø3,5x30
270	1	Mediana evolution lock set

Wooden Parts		
ref.	Qty	description
a	1	Upper crossbeam
b	1	Vertical jamb, lock side
c	1	Vertical jamb, hinge side
d	1	Vertical doorpost, lock side
e	1	Vertical doorpost, hinge side
f	2	Meeting point jambs and uprights
For a centered door it's necessary two vertical specular jambs each side and two upper crossbeams.		

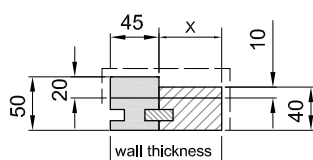
DOORPOST HINGE SIDE

JAMB HINGE SIDE



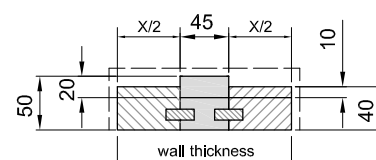
IMPORTANT DIMENSIONS THAT MUST BE ACCURATE
 X = WALL THICKNESS - 45
- - - VISIBLE SIDE
HP = PASSAGE DIMENSION

ORIENTED DOOR



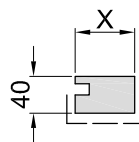
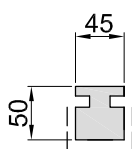
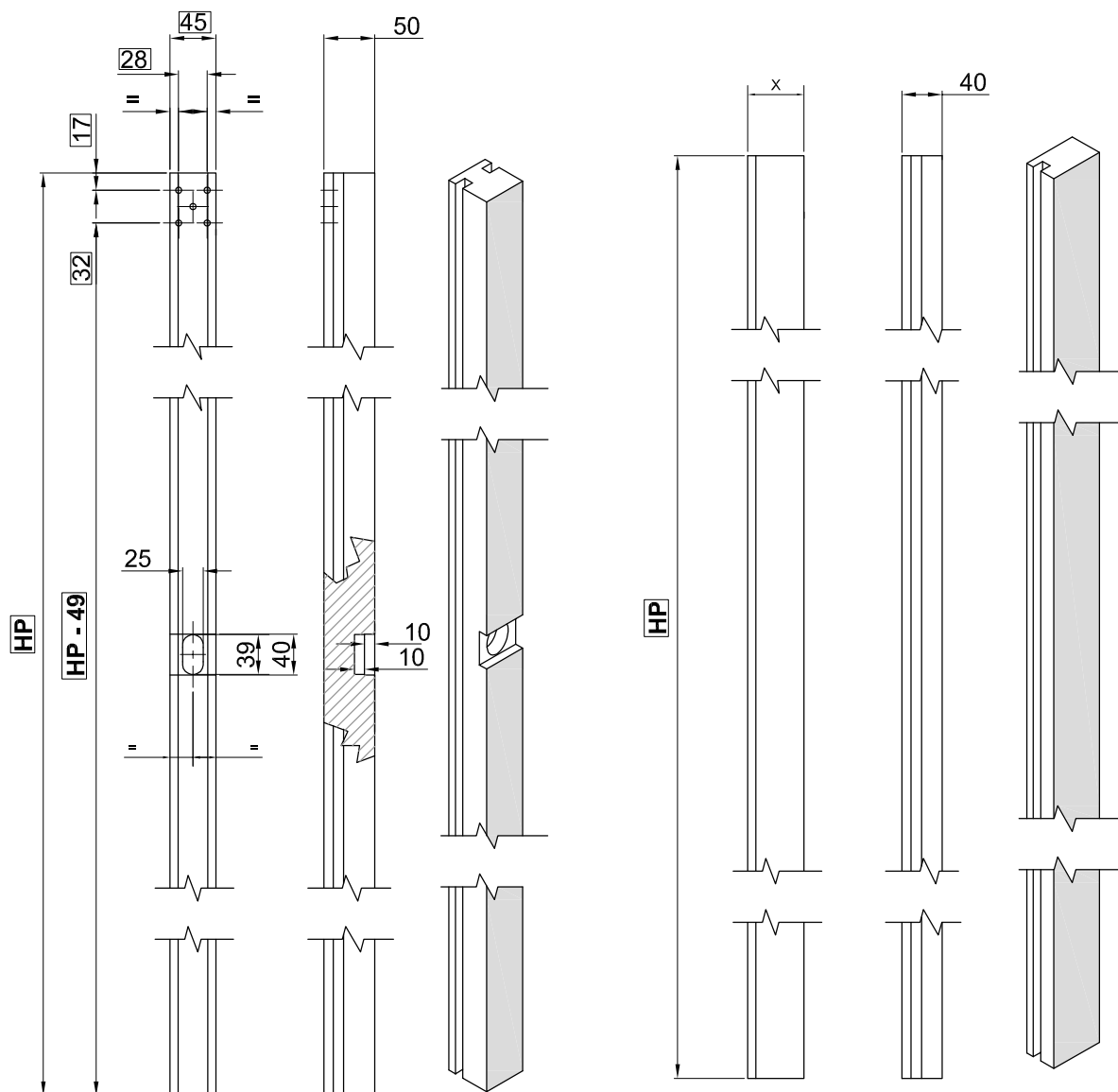
When the door is in the middle of the wall, you must have two specular jambs

CENTERED DOOR



DOORPOST LOCK SIDE

JAMB LOCK SIDE



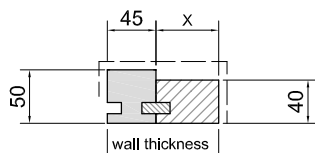
IMPORTANT DIMENSIONS THAT MUST BE ACCURATE

X = WALL THICKNESS - 45

--- VISIBLE SIDE

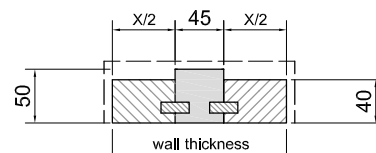
HP = PASSAGE DIMENSION

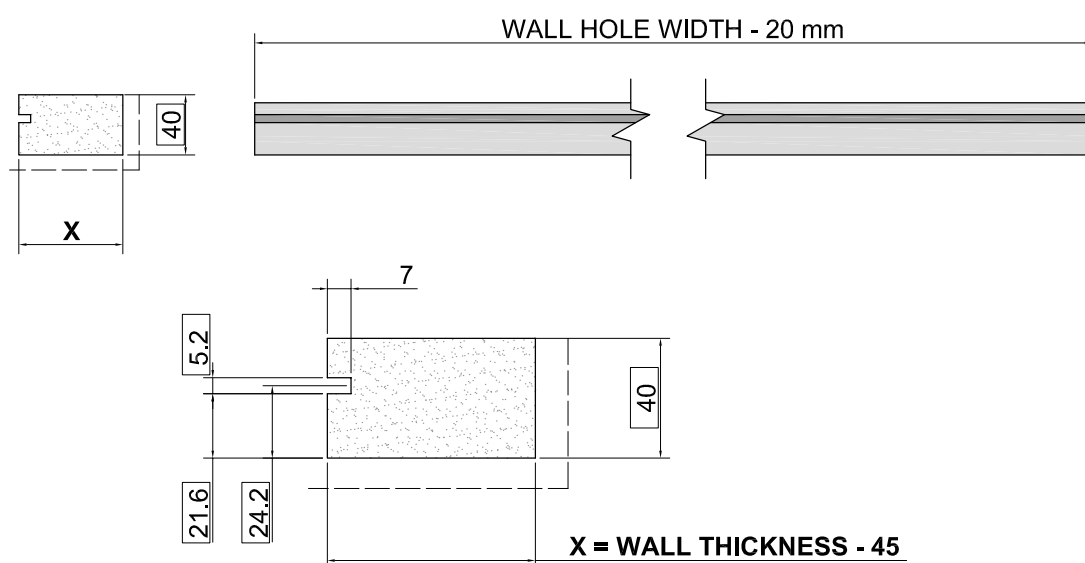
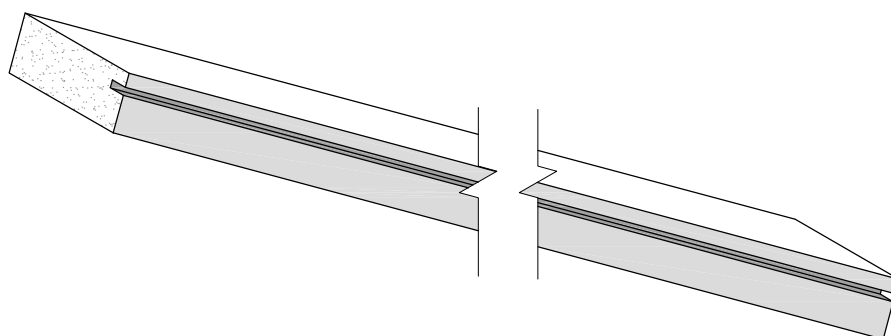
ORIENTED DOOR



When the door is in the middle of the wall, you must have two specular jambs

CENTERED DOOR



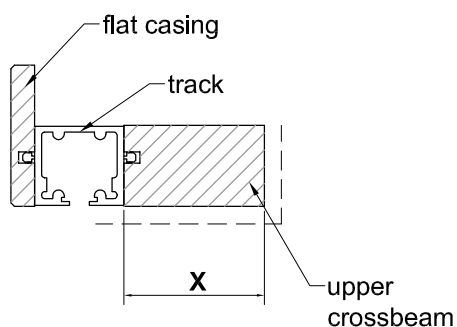


DIMENSION THAT BE ACCURATE

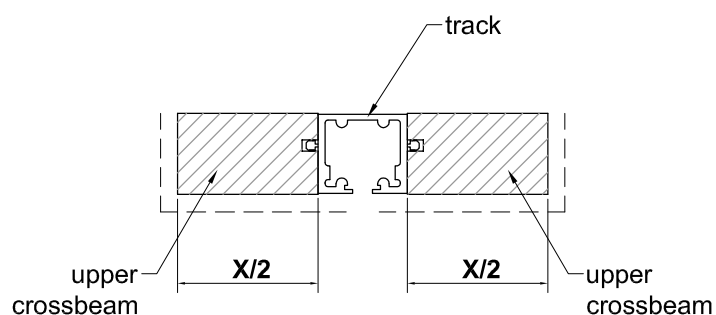
X = WALL THICKNESS - 45

--- VISIBLE SIDE

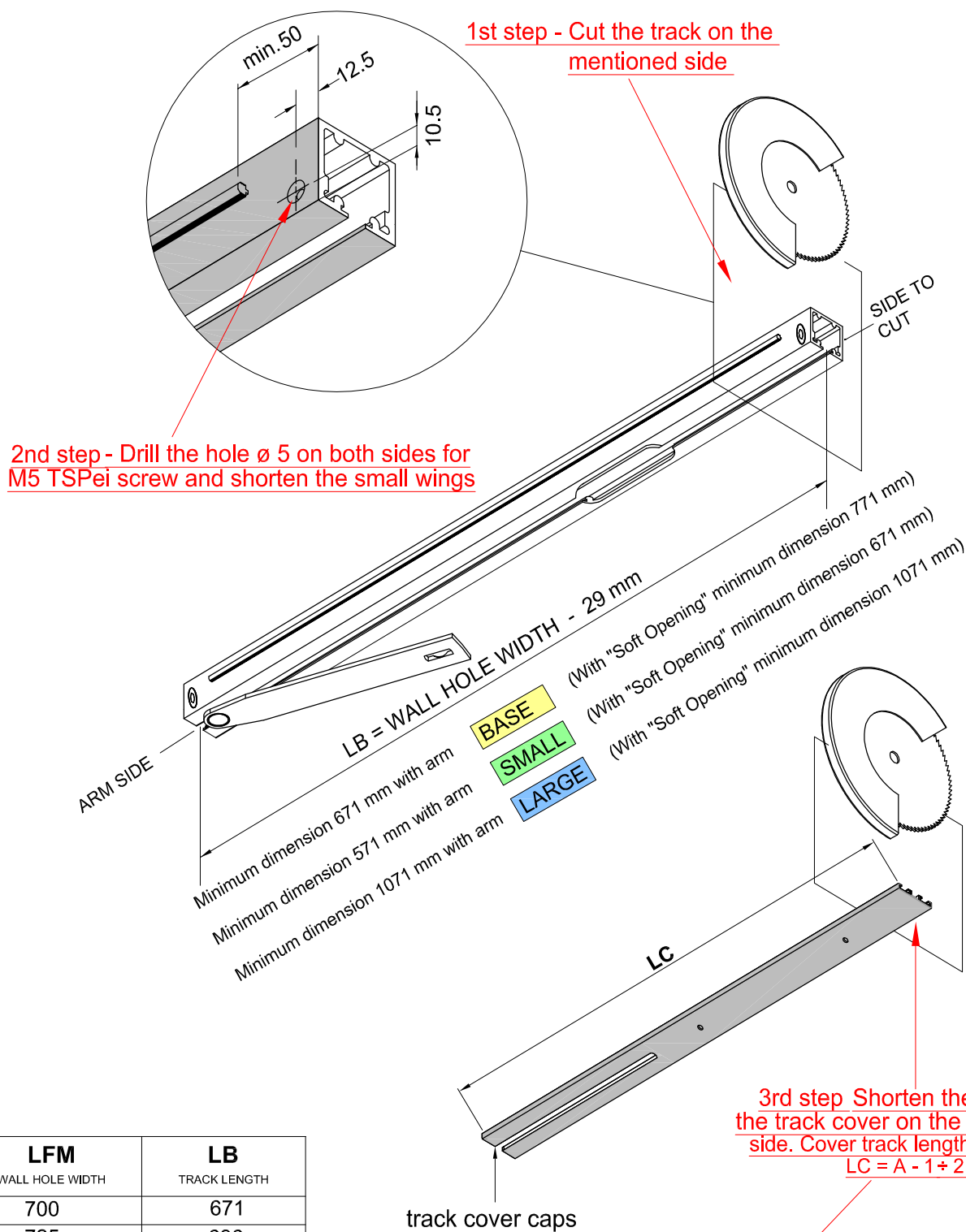
ORIENTED DOOR



CENTERED DOOR

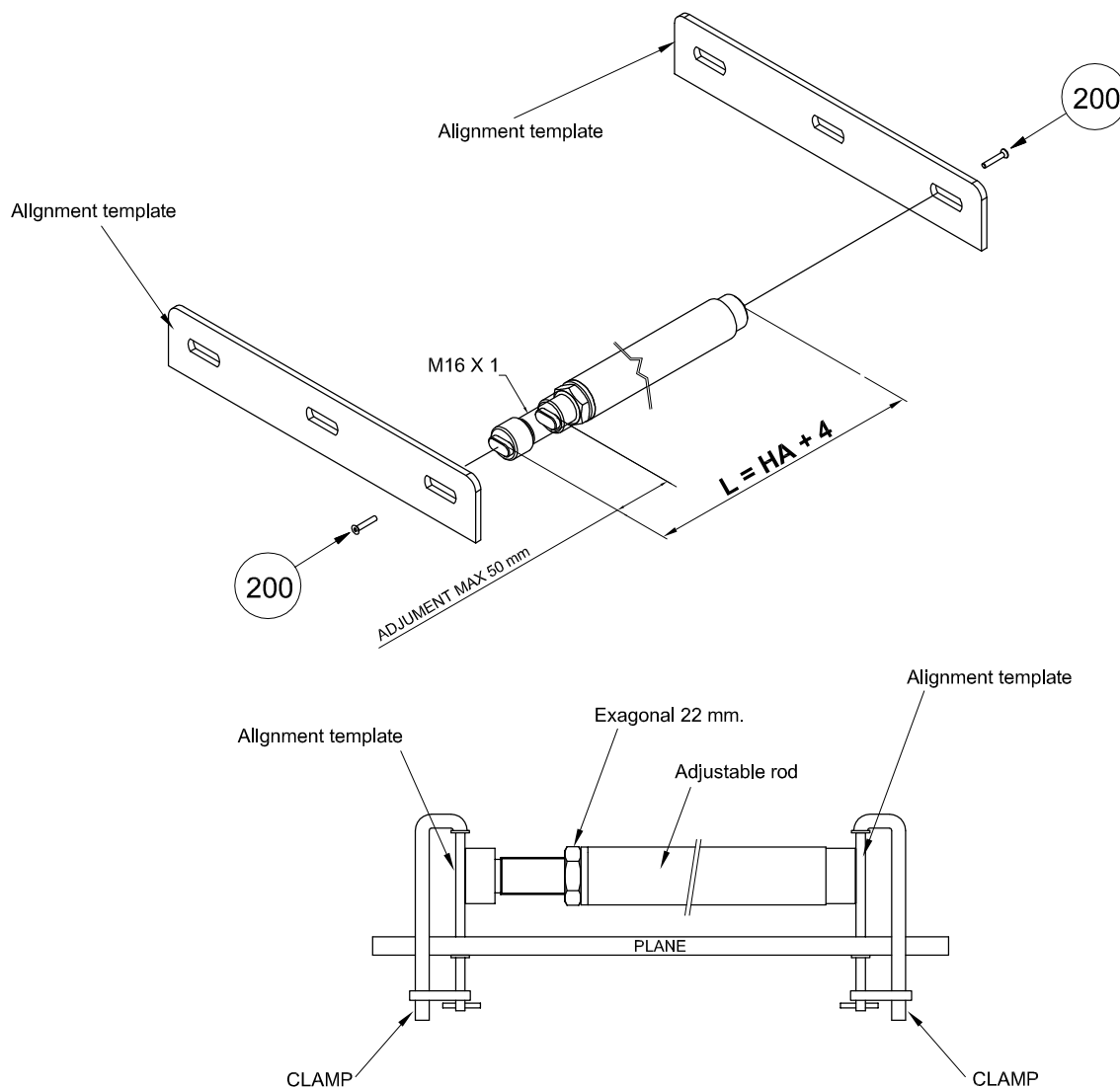


For the centered door it necessary to have two specular crossbeam.

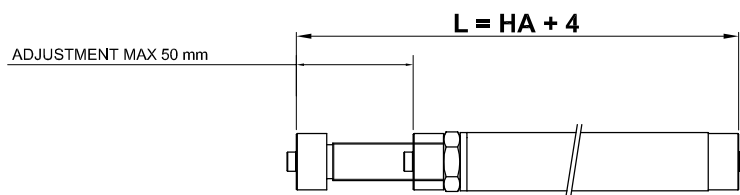


LFM WALL HOLE WIDTH	LB TRACK LENGTH
700	671
725	696
750	721
775	746
825	796
875	846
925	896
975	946
LB = LFM - 29	

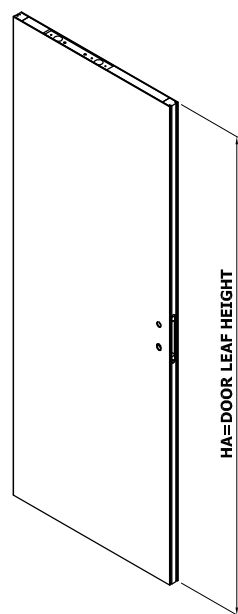
ADJUSTMENT OF THE CONNECTING ROD FOR NOT STANDARD HEIGHTS.



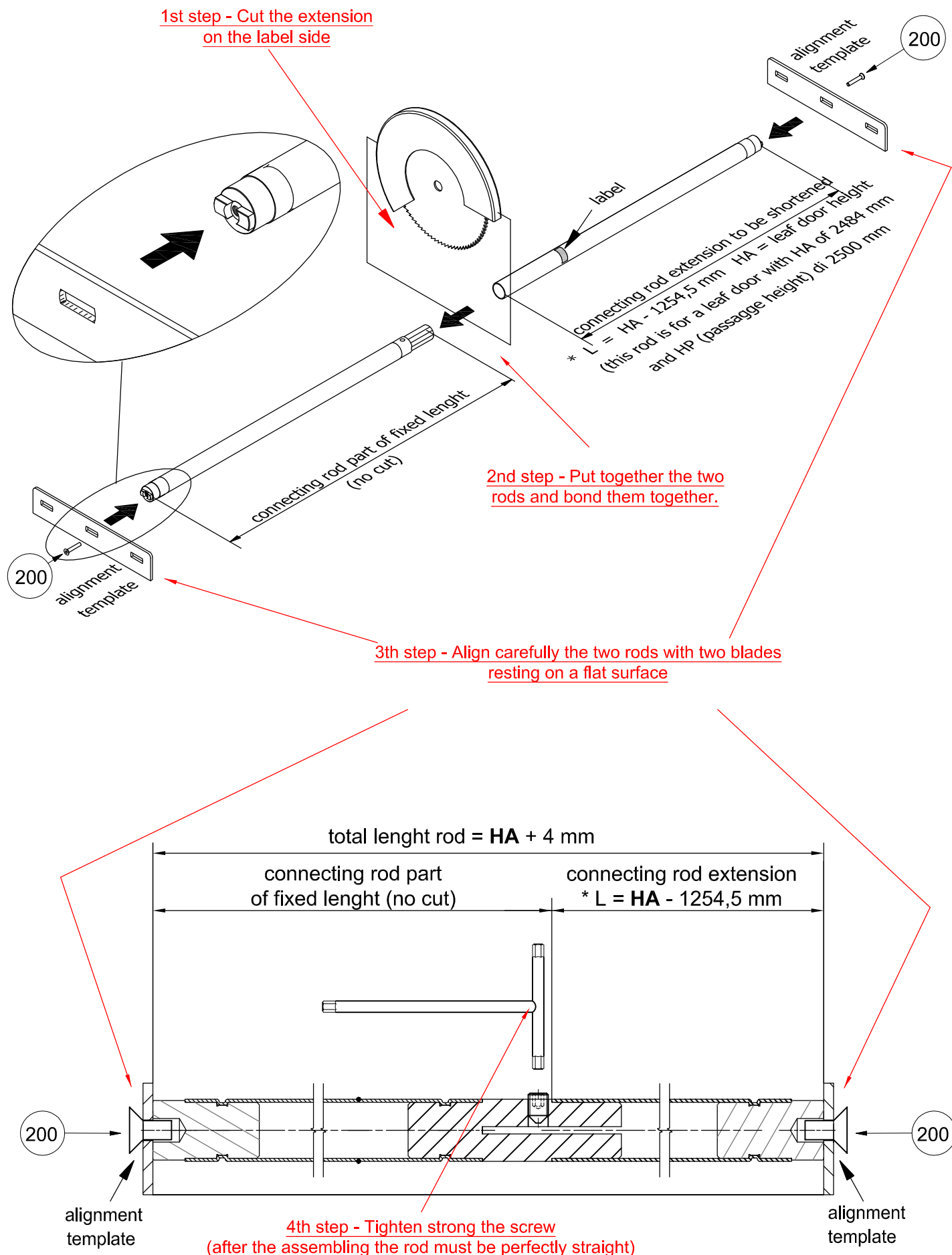
After having cut the alignment templates to measure and inserted them on the rod pins, **fix them firmly** to the plane before tightening the nut. Check the alignment of the pins.

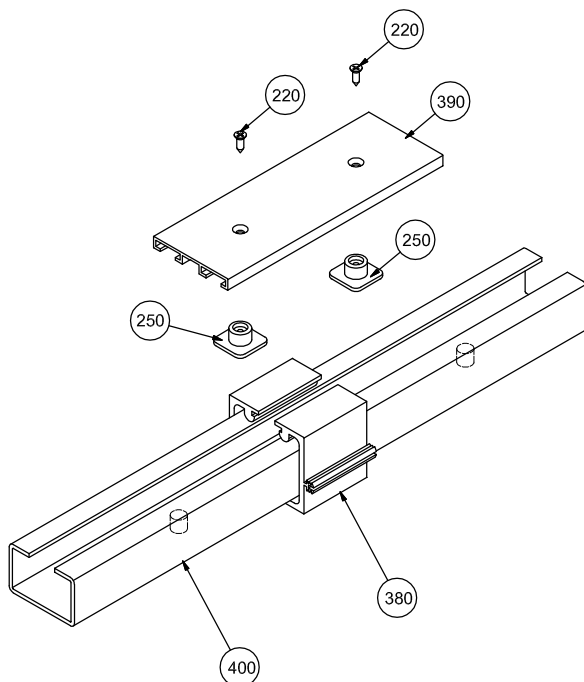


Insert the rod in the panel with the adjustable side in the upper part.

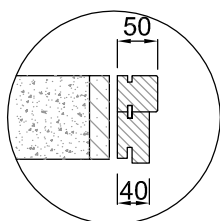


ADJUSTMENT OF THE CONNECTING ROD FOR NOT STANDARD HEIGHTS.

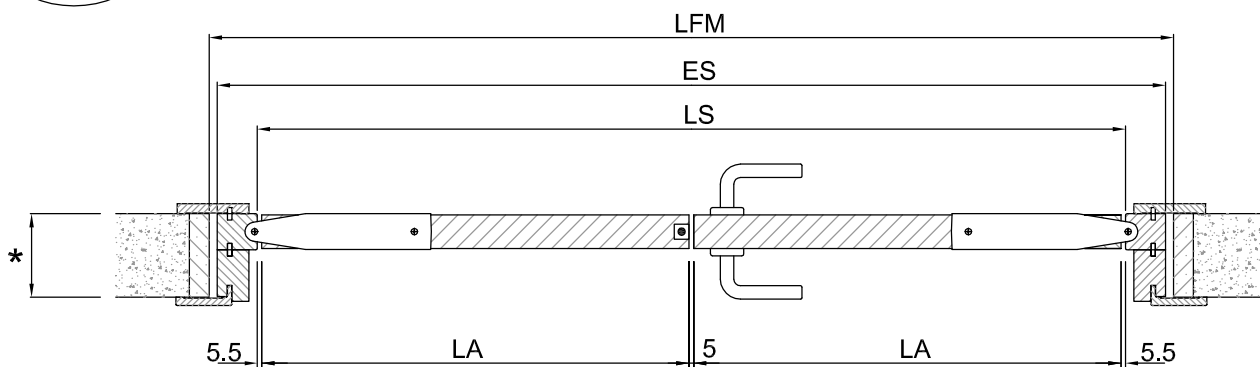




Part list		
ref.	q.ty	DESCRIPTION
220	1	Screw TSPcr Ø3X10
250	2	Track cover installation insert
380	1	Track extension
390	1	Track cover extension
400	1	Track graft junction



The measurements refer to a jamb with doorpost of 50 mm.



* N.B. For the limits of the wall thickness see page 5-6-7-8-9-10 in this manual.

LFM min. 1600 mm. with **BASE** arm
with "Soft Opening" **LFM** min. 1700 mm.

LFM min. 1400 mm. with **SMALL** arm
with "Soft Opening" **LFM** min. 1500 mm.

LFM min. 2300 mm. with **LARGE** arm
with "Soft Opening" **LFM** min. 2300 mm.

Legend

LP = Passage Dimension (LFM - 200)

LA = Door Leaf Width ($\frac{\text{LFM} - 136}{2}$)

LS = Door Jamb Opening (LFM - 120)

ES = Outer Jamb (LFM - 20 = length of the track and upper crossbeam)

LFM = Wall Hole Width

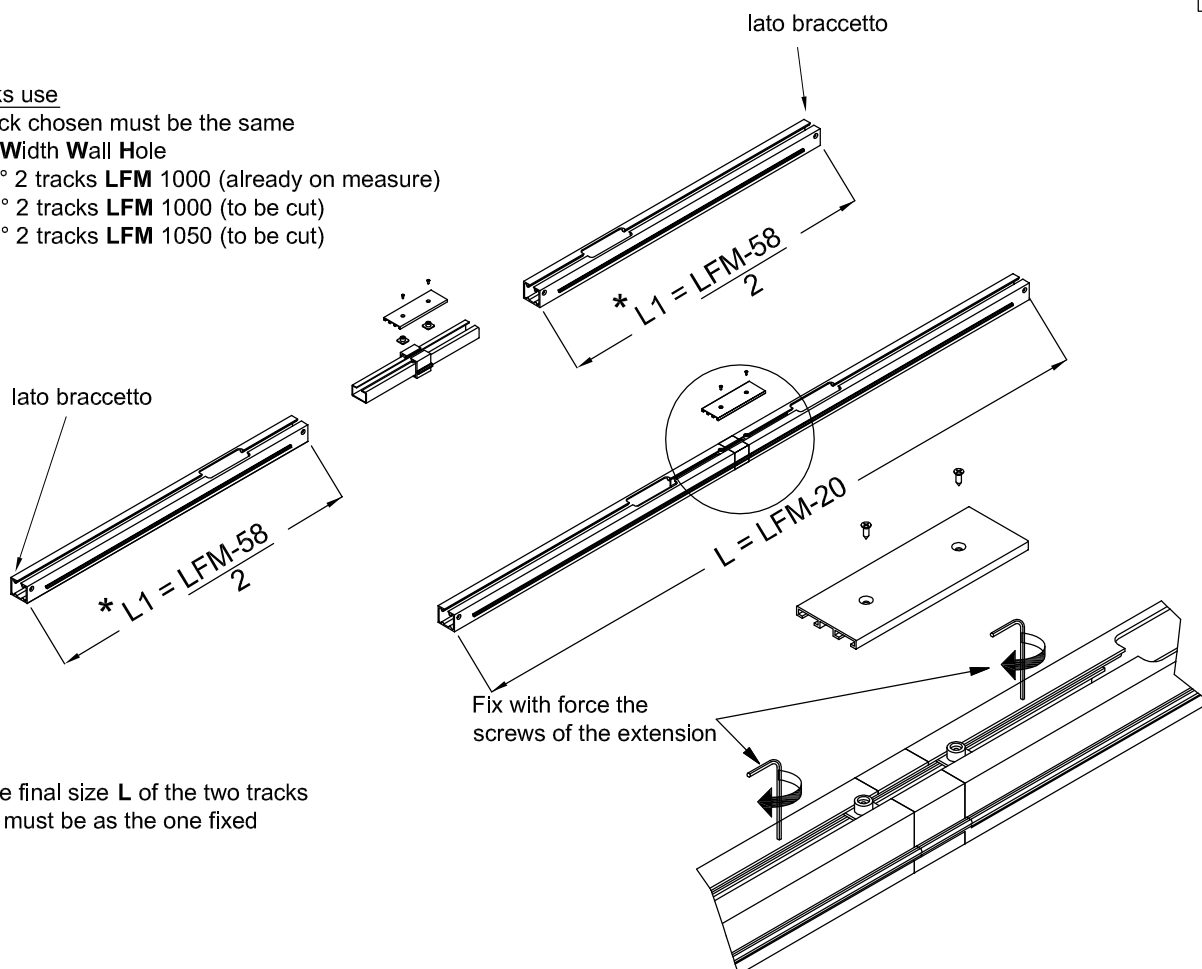
Choice of the tracks use

The sum of the track chosen must be the same or higher than the **Width Wall Hole**

ex. : **LFM 2000** n.° 2 tracks **LFM 1000** (already on measure)

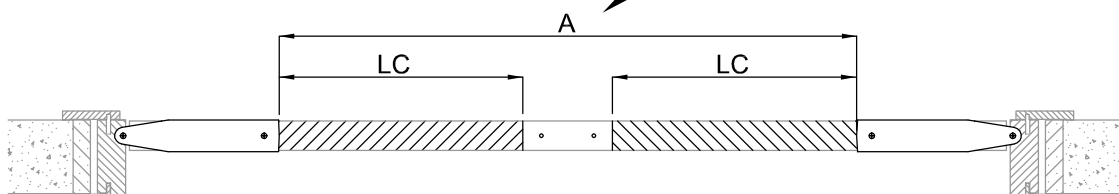
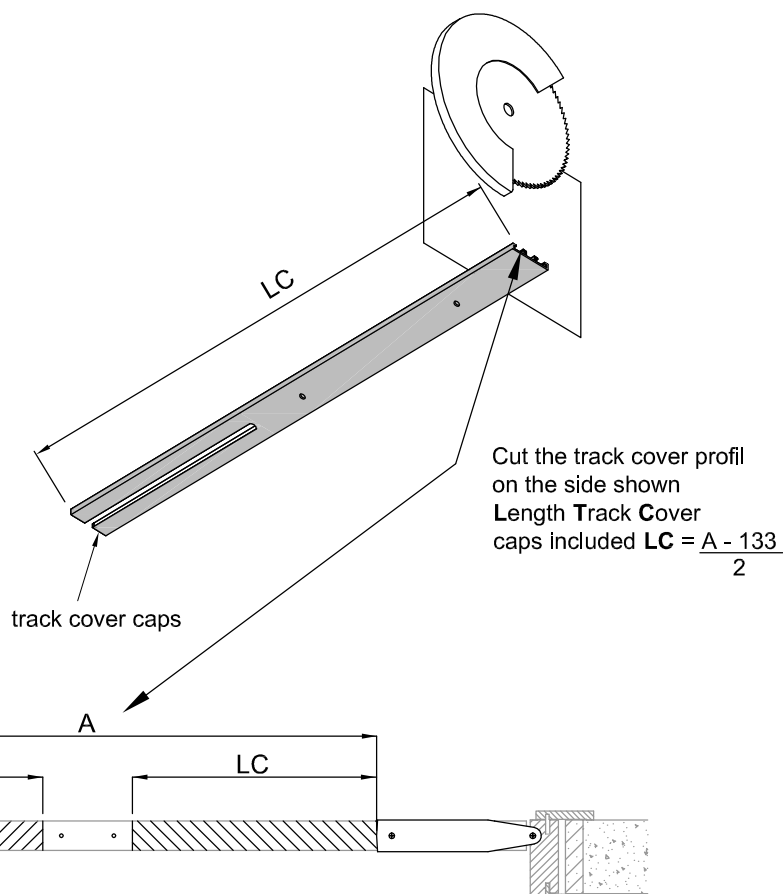
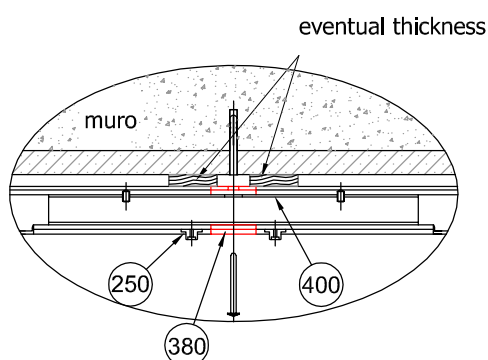
LFM 1960 n.° 2 tracks **LFM 1000** (to be cut)

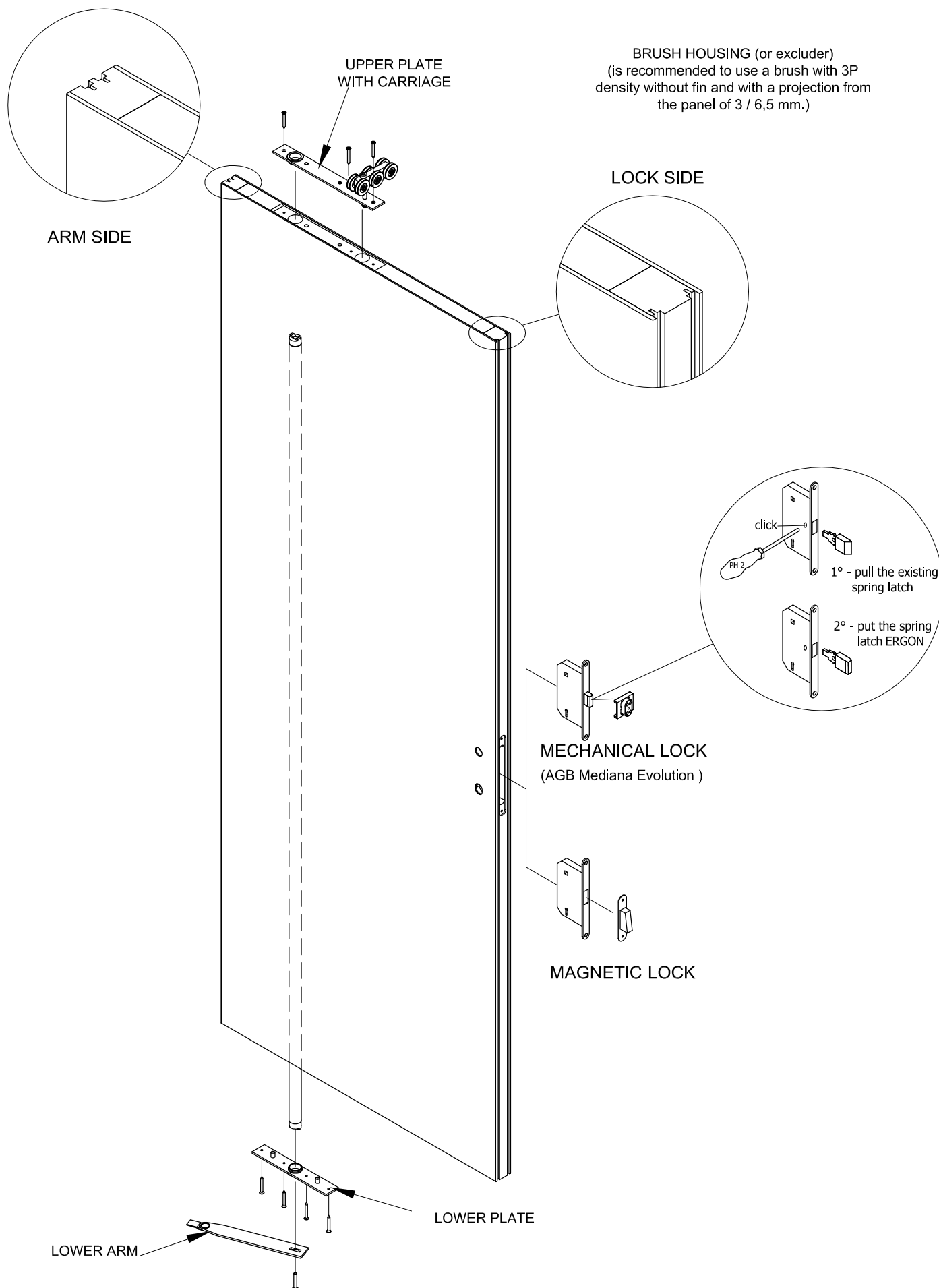
LFM 2060 n.° 2 tracks **LFM 1050** (to be cut)

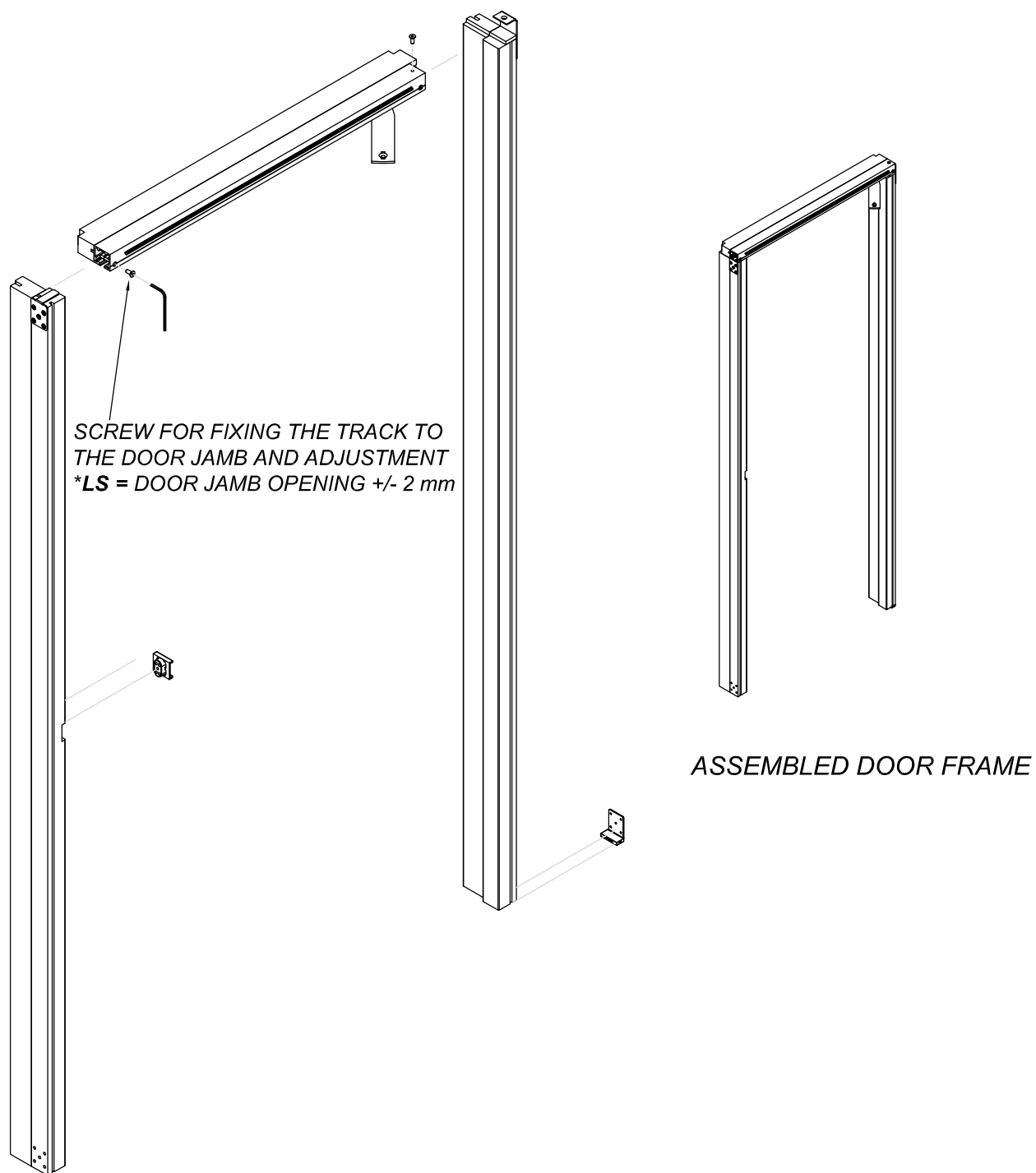


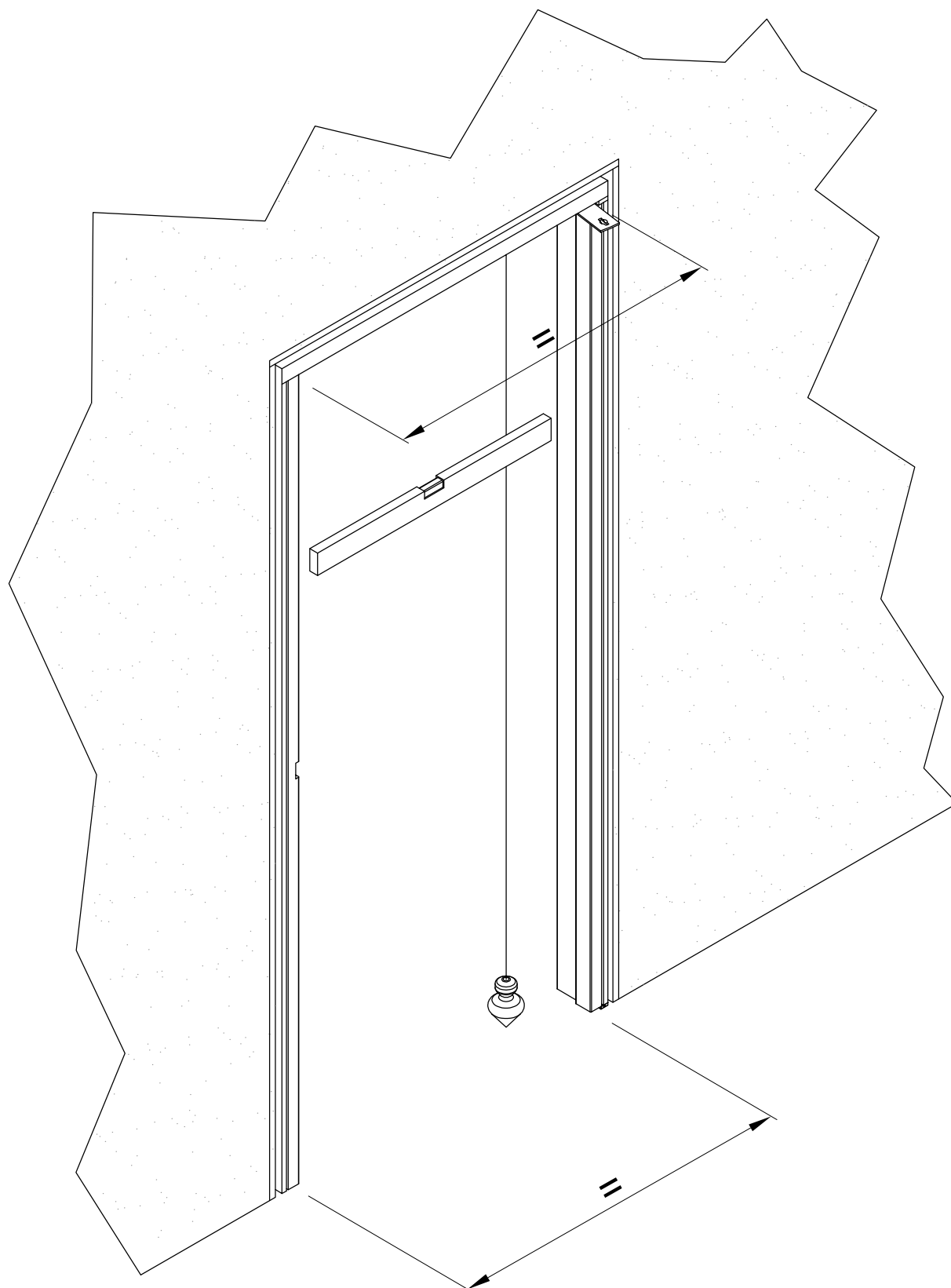
- * Pay attention to the final size **L** of the two tracks assembled, which must be as the one fixed

Fix properly the track to the upper wall through the hole you see on the track extension (380). Before installing the doors be sure that internal track are clean.





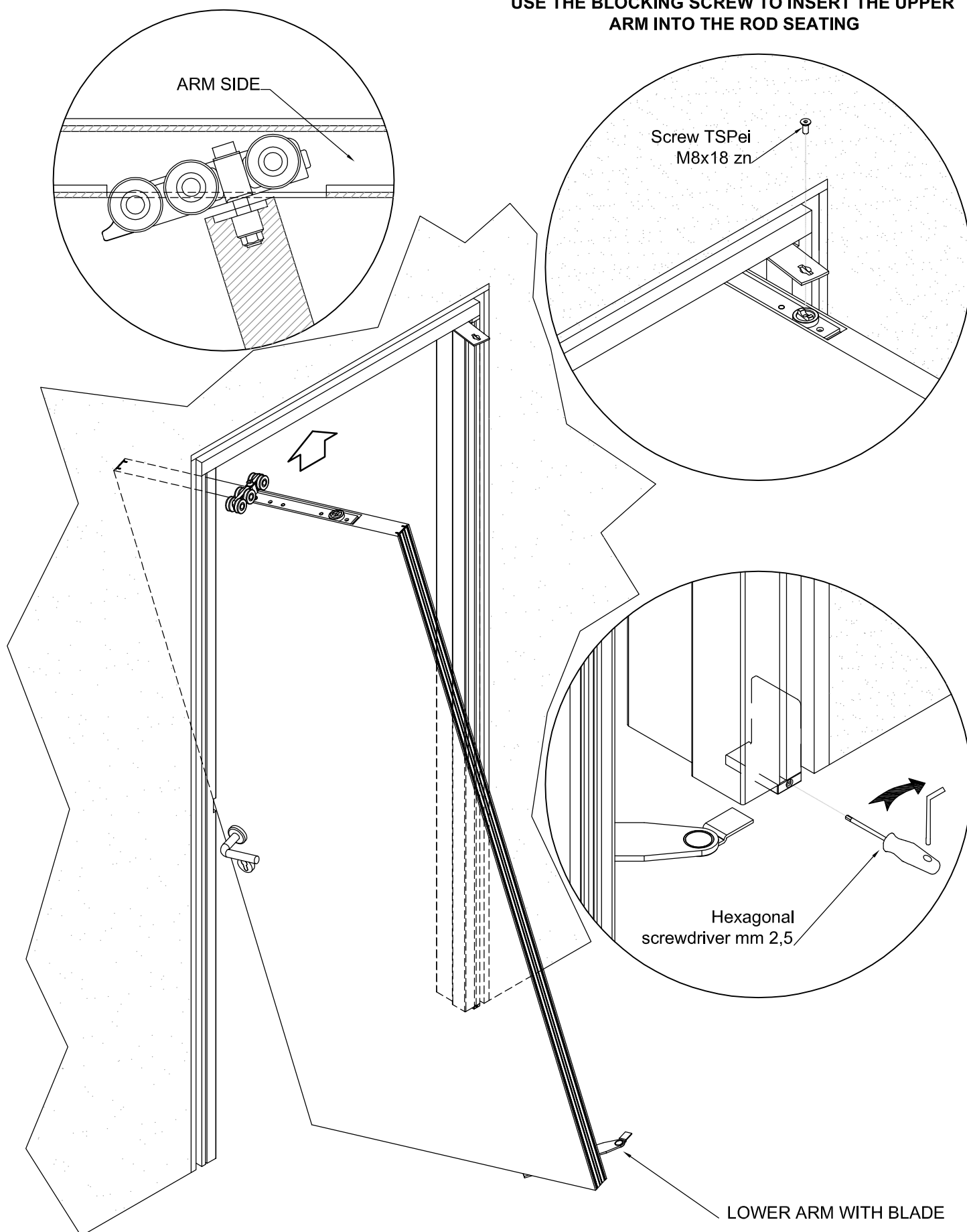


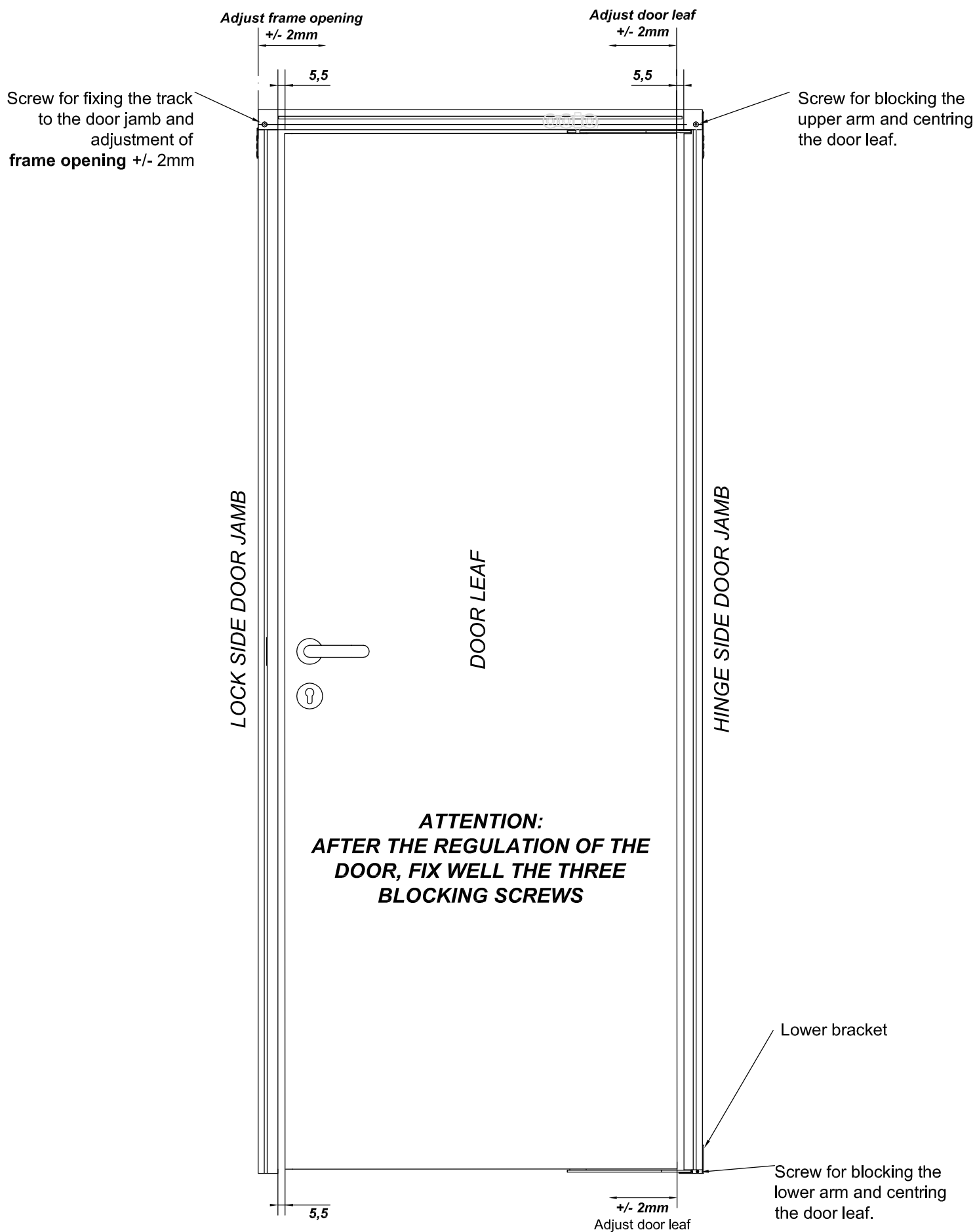


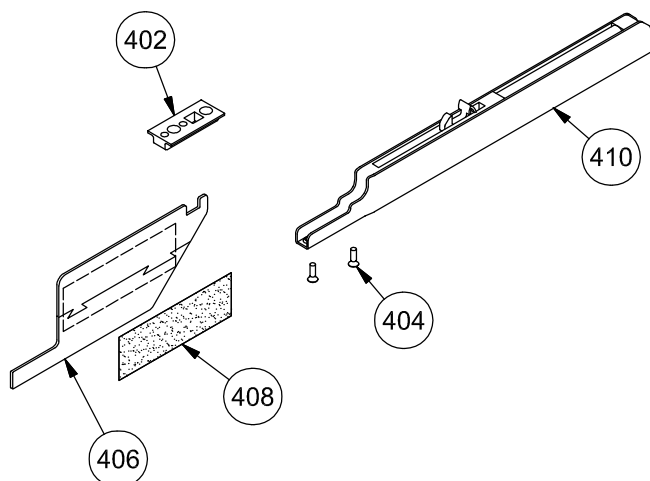
NOTE:

THE LEVELLING OF THE TRACK AND THE PLUMB OF THE DOOR JAMBS MUST BE PRECISE

**USE THE BLOCKING SCREW TO INSERT THE UPPER
ARM INTO THE ROD SEATING**



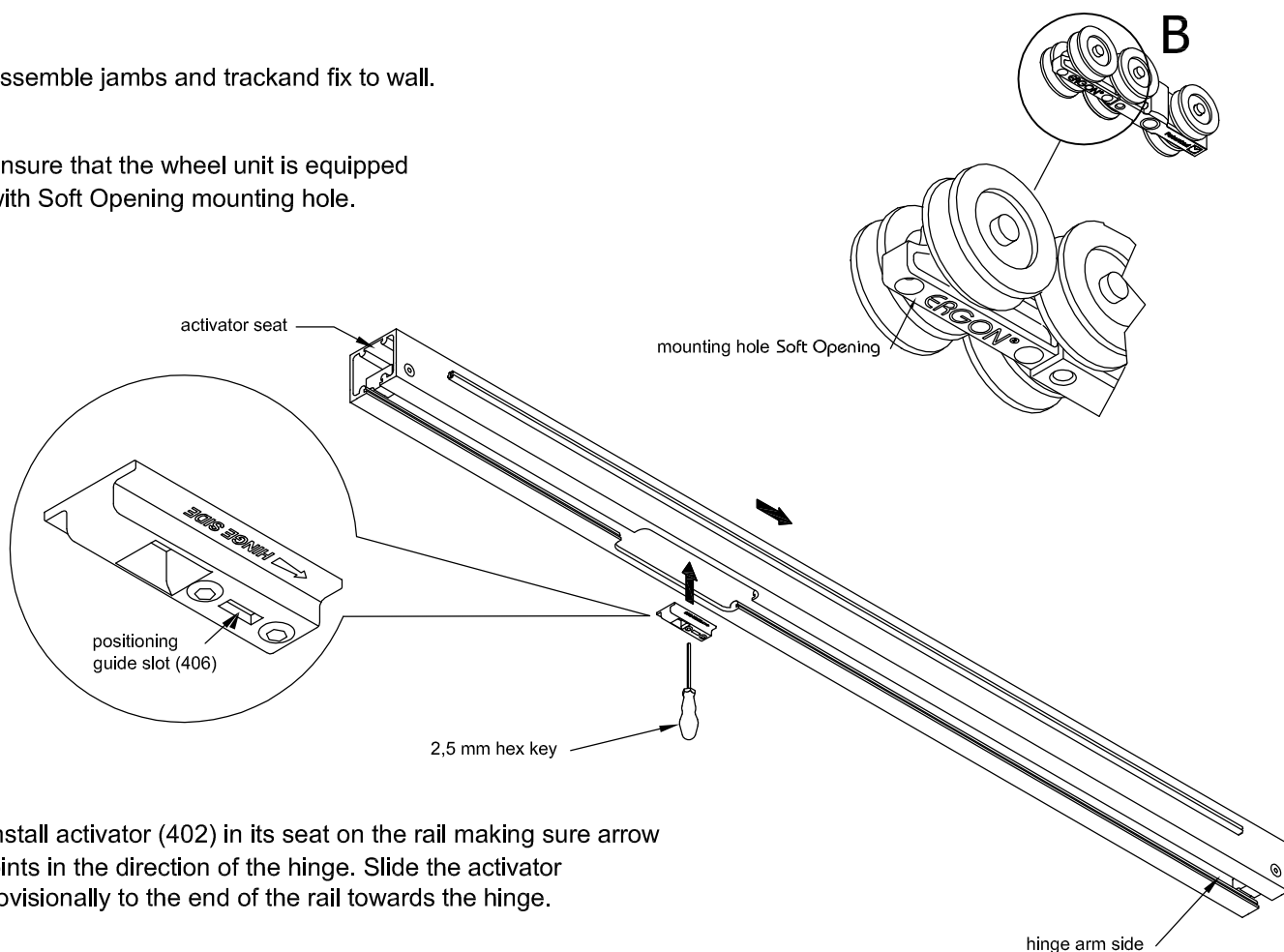




List of Components		
Ref.	Q.ty	Description
402	1	Activator
404	2	Screw TSP+ M3x8 - ISO 7046
406	1	Activator positioning template
408	1	Sticker
410	1	Soft Opening

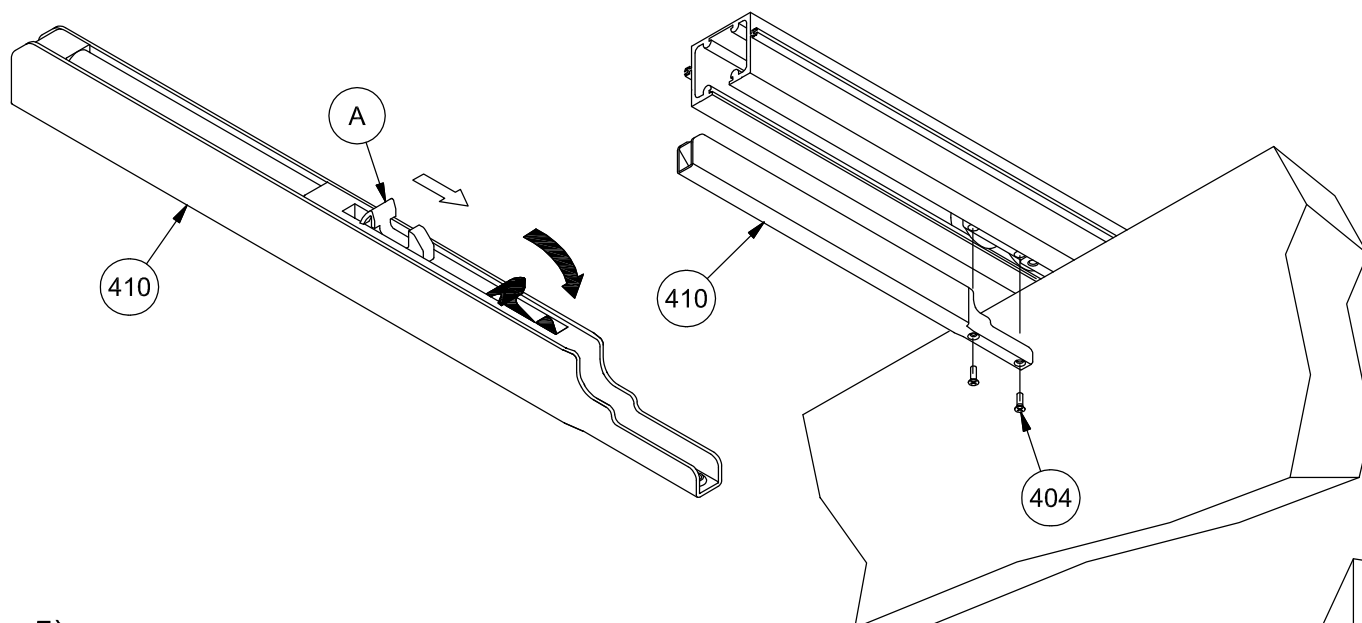
Installation

- 1) Assemble jambs and track and fix to wall.
- 2) Ensure that the wheel unit is equipped with Soft Opening mounting hole.

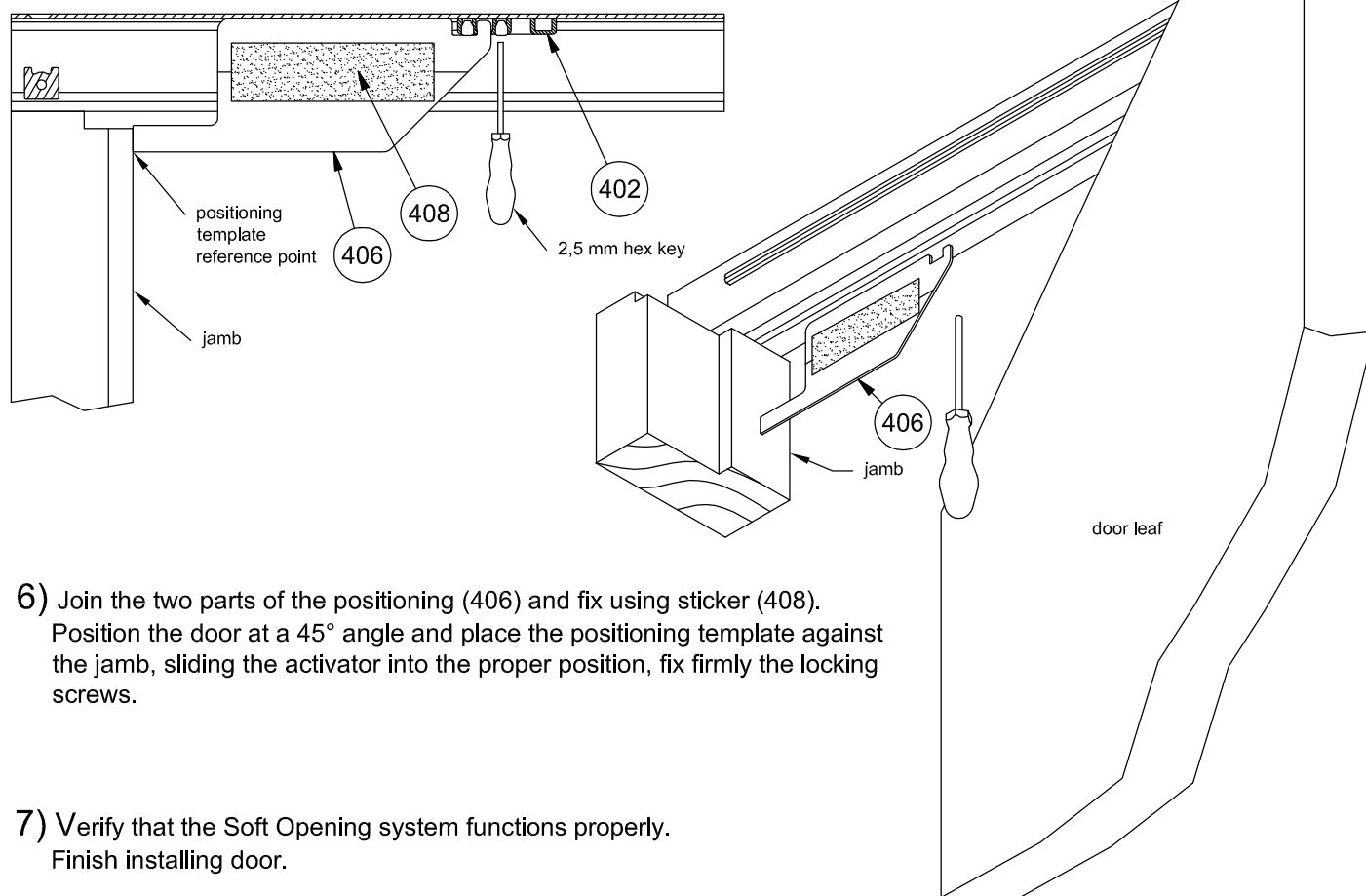


- 3) Install activator (402) in its seat on the rail making sure arrow points in the direction of the hinge. Slide the activator provisionally to the end of the rail towards the hinge.
- 4) Hang the door and mount the hinge arm. Adjust the door normally and open it all the way.

N.B. If the door is already installed, remove the track cover and then install the activator in its seat on the rail.

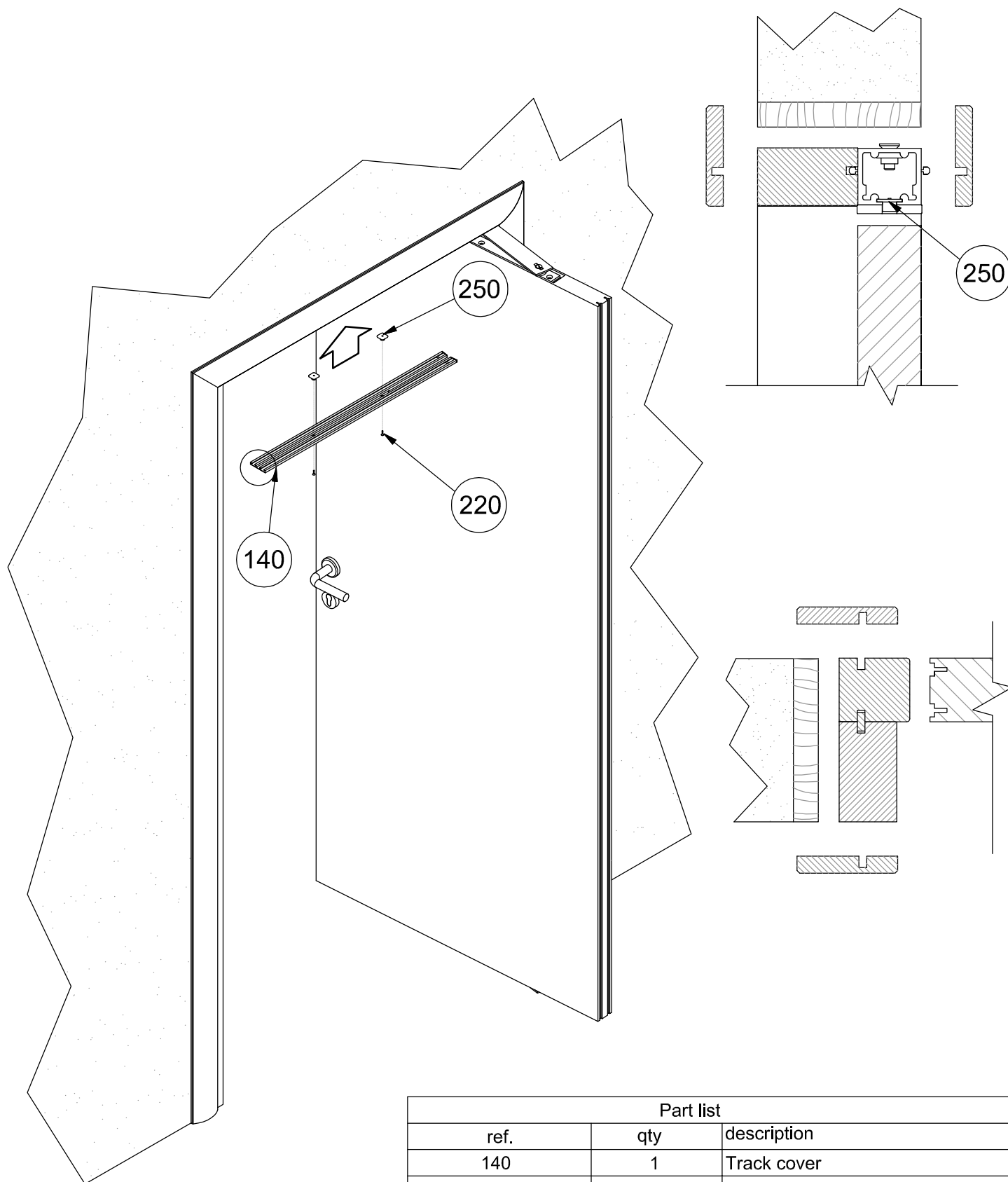


- 5) Push hook (A) to set the Soft Opening unit (410).
Mount Soft Opening unit to wheel unit using the screws provided (404).



- 6) Join the two parts of the positioning (406) and fix using sticker (408).
Position the door at a 45° angle and place the positioning template against the jamb, sliding the activator into the proper position, fix firmly the locking screws.
- 7) Verify that the Soft Opening system functions properly.
Finish installing door.

IF THE FRAME WITH DOORPOST IS USED (SEE THE FIGURE HERE BELOW), THE TRACK COVER MUST BE SHORTENED BY 20 mm ON THE SIDE MARKED WITH THE CIRCLE.



Part list		
ref.	qty	description
140	1	Track cover
250	2	Insert for cover track fixing
220	2	Screw TSPcr Ø3X10



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