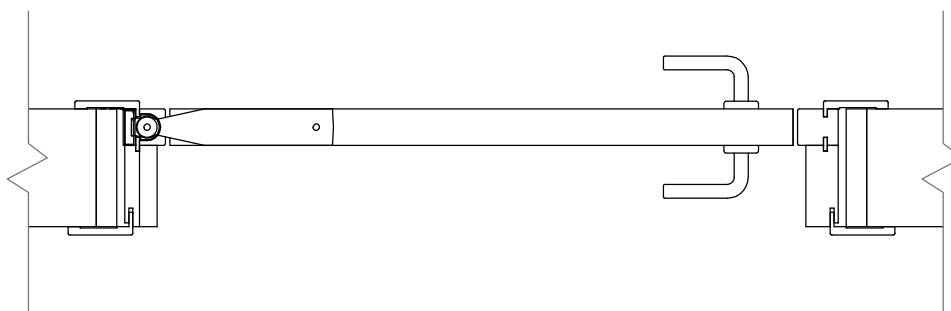


ERGON[®]

L I V I N G

SERIES T.E. HOME

technical construction manual
swinging-sliding door with connecting rod in the door jamb



INTRODUCTION

Ergon T.E. version extend the possibilities of use **ERGON** technology for internal residential doors, which are built for doors unsuitable to contain the connecting rod between the two arms, such as glass, mirror, solid wood doors, etc. To guarantee the reliability and practicality provided by thousands of produced models, the components used for the T.E. version come from **ERGON LIVING S40** and **ERGON COMMUNITY** models. These models are certified by the research institute and test laboratory CATAS according to EN 1119 standards and they passed severe tests about the system resistance to repeated door's opening and closing (100.000 cycles).

In the version T.E. the rod is foreseen inside the jamb and not inside the panel, so that it is possible to use the same panels as the sliding doors. In addition the door can have a minimal thickness of 35 mm and a maximum weight of 70 kg.

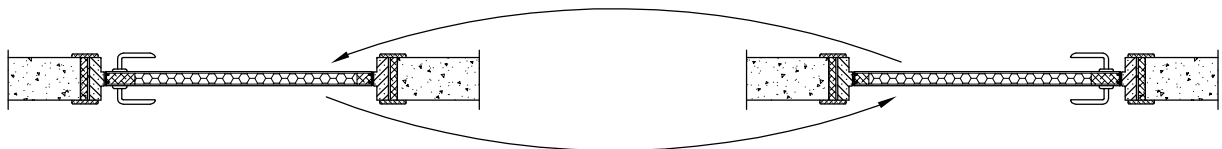
The standard finishes available for the T.E. version are silver and black.

In order to reduce the hindrances to the door movement, we propose three different kind of arms:

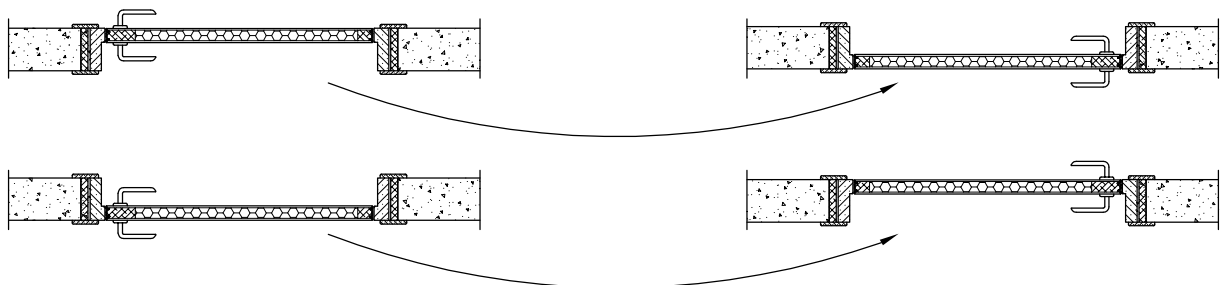
- . "Basic": especially suitable for LFM (wall hole opening) from 800 to 1100 mm;
- . "Small": especially suitable for LFM (wall hole opening) from 610 to 800 mm;
- . "Large": especially suitable for LFM (wall hole opening) from 1100 to 1450 mm;

Depending on particular requirements, the door with the **ERGON LIVING T.E.** hardware can be built so that the door can be situated in any position inside the wall thickness. However to make the description simpler, hereafter there is the description of the two limit positions and it is used the same terminology of this manual:

- 1) "centered door" when the leaf is in the middle of the thickness of the wall; this solution offers the advantage in the construction of the lock, which do not depend from its laying. Indeed since the door is in the middle of the wall and it has two way of opening, the laying position could also be decided in the same time of the installation without make any modifications to the door.



- 2) "oriented door" when the door is flush with one of the two sides of the wall; in this case the door must be appositely built according to the laying and and its orientation.



According to the wall hole width, the T.E. series is available in different standard dimensions for each kind of arm (basic, Small, Large). Once the right kind has been chosen, it is possible to have intermediate dimensions, by cutting the track and the track cover (page 18).

With regard to the wall hole height, in case it is necessary a different dimension from the standard one, the special kit is to required, thanks to which it is possible to have the required dimension by cutting the doorpost profile (page 19) and the connecting rod (pag 20).

WALL THICKNESS

With the **ERGON system** it's important to pay attention to the wall thickness limits, which change with the different arm used (BASE - SMALL - LARGE):

- for BASE arm version see at pag. 5-6
- for SMALL arm version see at pag. 8-9
- for LARGE arm version see at pag. 11-12

LOCK

ERGON LIVING double way of opening.

ERGON System double opening way doors permit the use of two different types of latch/lock mechanisms, each with its own functional characteristics:

- Magnetic latch. This type of latch was designed for traditional doors that open one way only. If used with a double opening way, it does not work well unless the door is moved by hand to the closed position. If the door is pushed, even lightly, the magnetic latch is not activated and the door continues its swing past the closed position.
- "Mediana Evolution" (AGB) latch/lock mechanism. The use of this type of closure, opportunely modified by replacing the standard latch with the **ERGON** latch (included with the guides), allows the door to close in a manner similar to a standard door with stop. Unlike the magnetic latch, even if the door is pushed with some force it will stop in the closed position.

ERGON LIVING one opening way with stop.

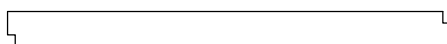
With **ERGON System** one opening way, you can use any latch mechanism, although optimal function is provided by a magnetic latch.

ATTENTION: **ERGON** kits for one-way doors with stop are identical to those used for double opening way.

RABBET DOOR WITH ONE-WAY OPENING

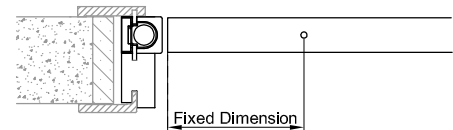
In some home's rooms can be more suitable using rabbet doors with **ERGON**, this is possible by putting some rabbets on the vertical door sides. In this way there's not more the double-way opening, but there is a better acoustic isolation inside the room by using a gasket for the tightness.

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 "A" which has to be added to the "Fixed Dimension", mentioned at pag. 7-10-13 of the present manual instruction.

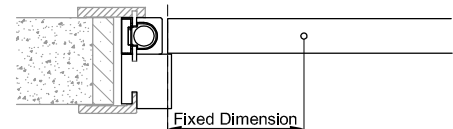


(Fig. 4)

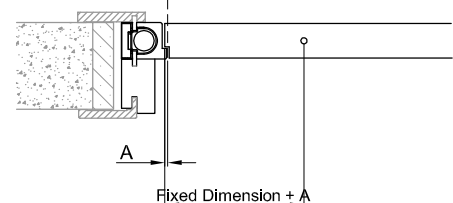
DOUBLE WAY OF OPENING (Fig.1)



EXAMPLE OF RABBET DOOR (Fig.2)

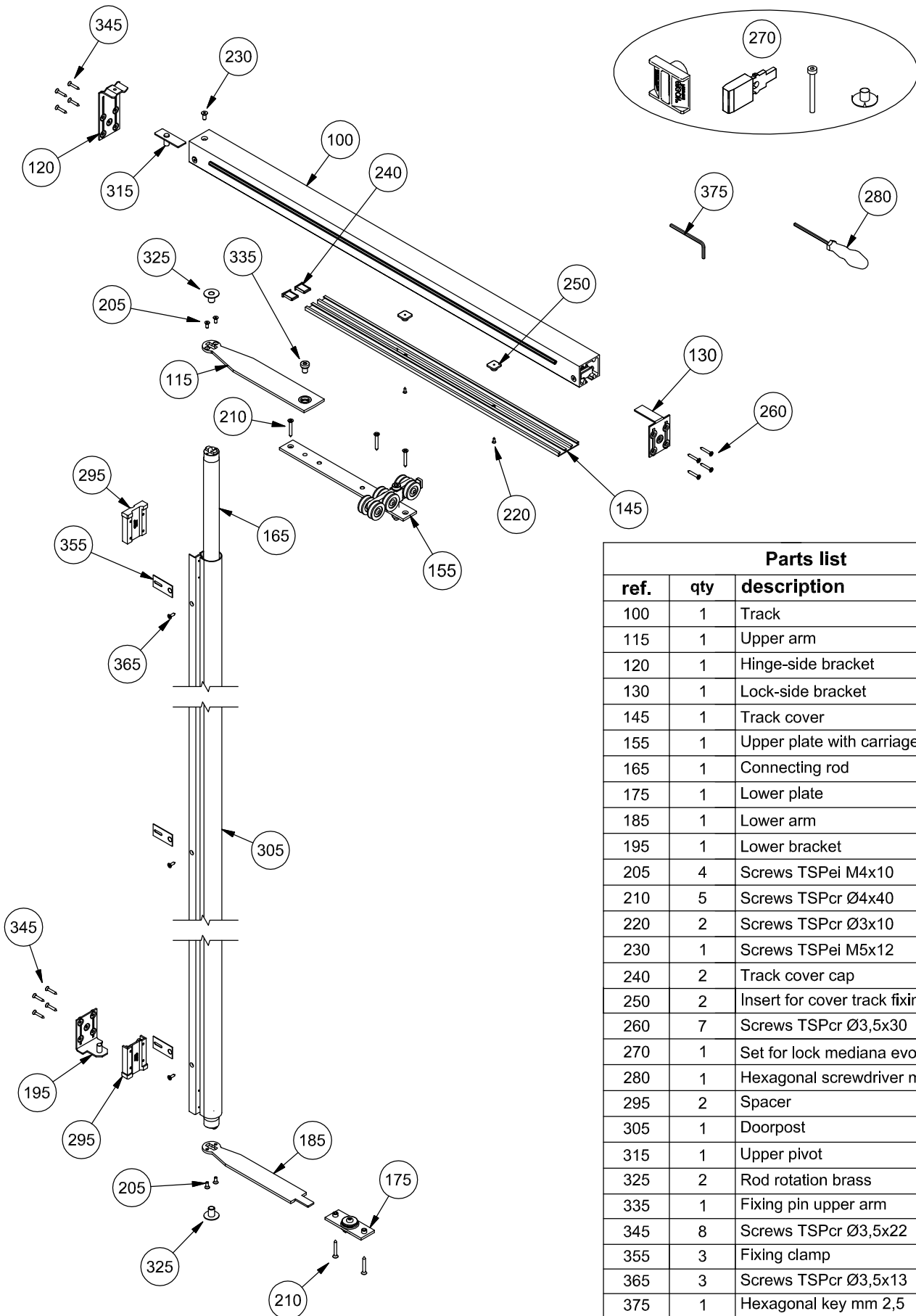


EXAMPLE OF RABBET DOOR (Fig.3)



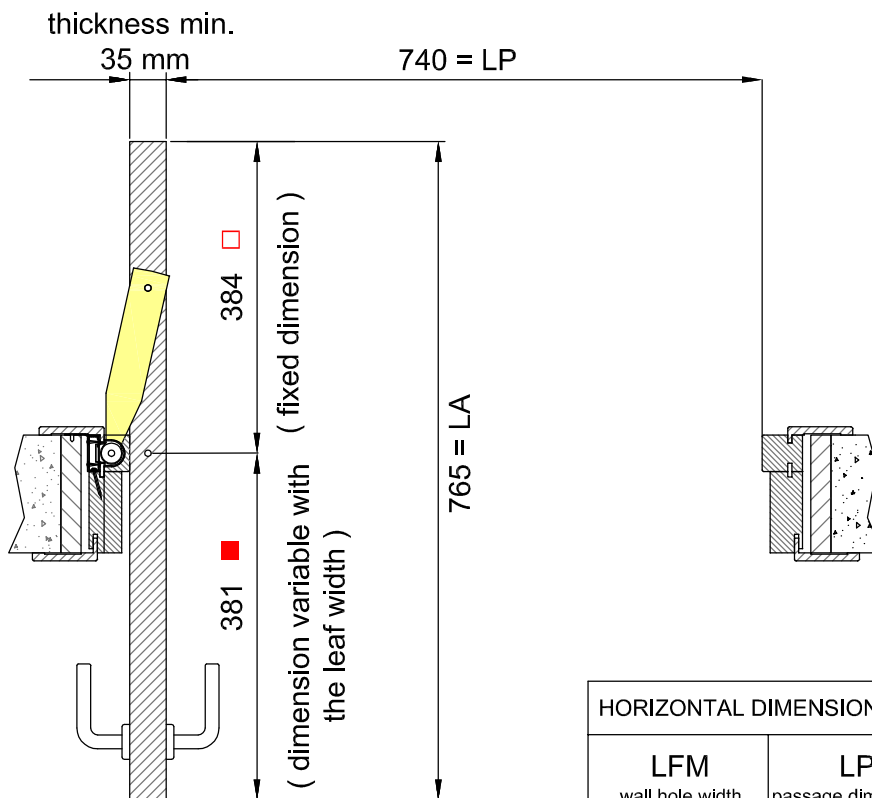
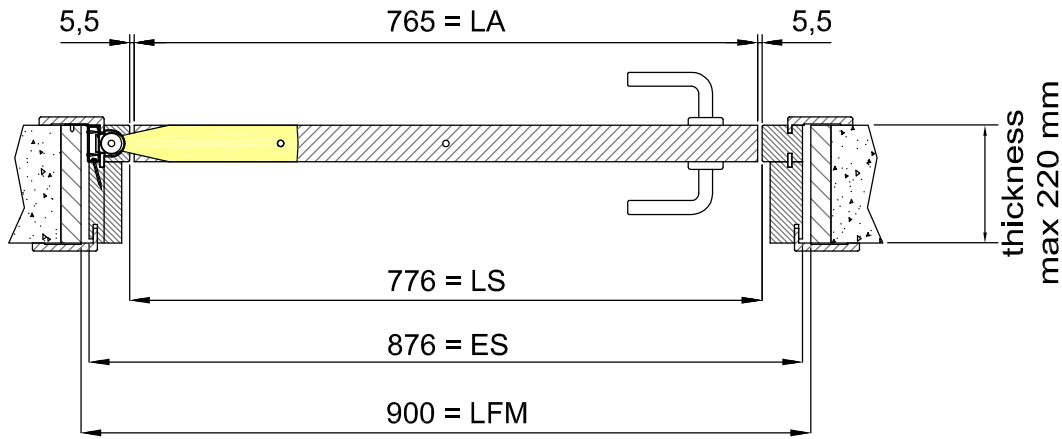
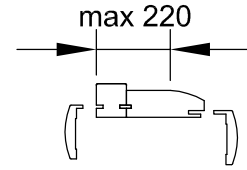
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WALL THICKNESS UP TO 220 mm

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



HORIZONTAL DIMENSIONS AND ENCUMBRANCE OF THE DOOR			
LFM wall hole width	LP passage dimensions	LA leaf width	max. encumbrance of the open door
* 800	640	665	384 □
* 850	690	715	384 □
* 900	740	765	384 ■□
* 950	790	815	431 ■
* 1000	840	865	481 ■
* 1050	890	915	531 ■
* 1100	940	965	581 ■

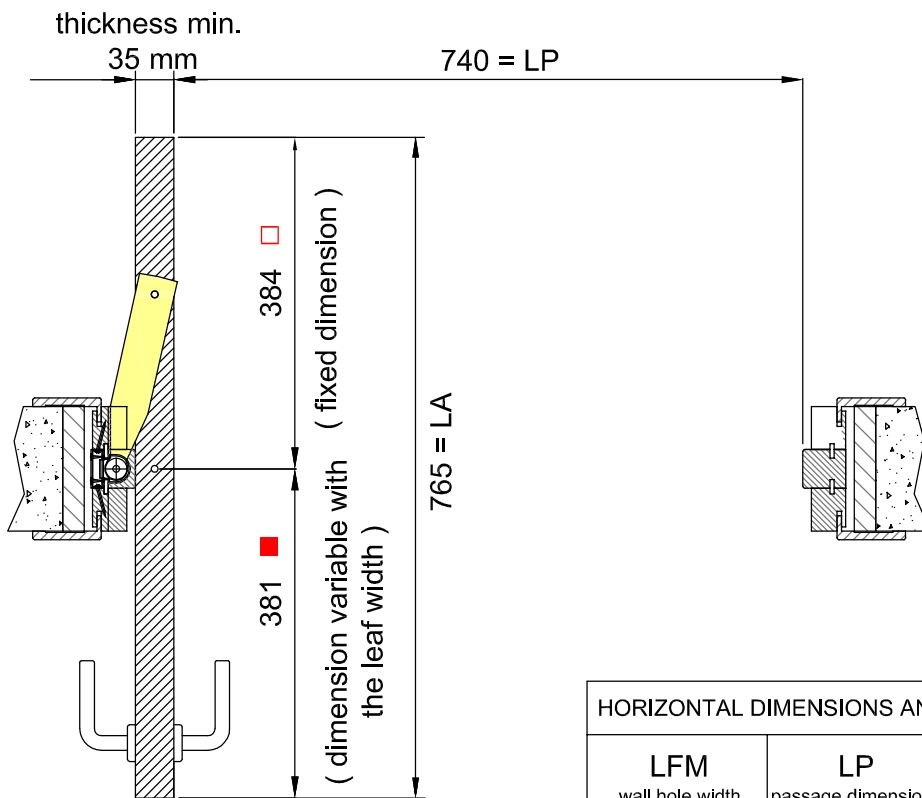
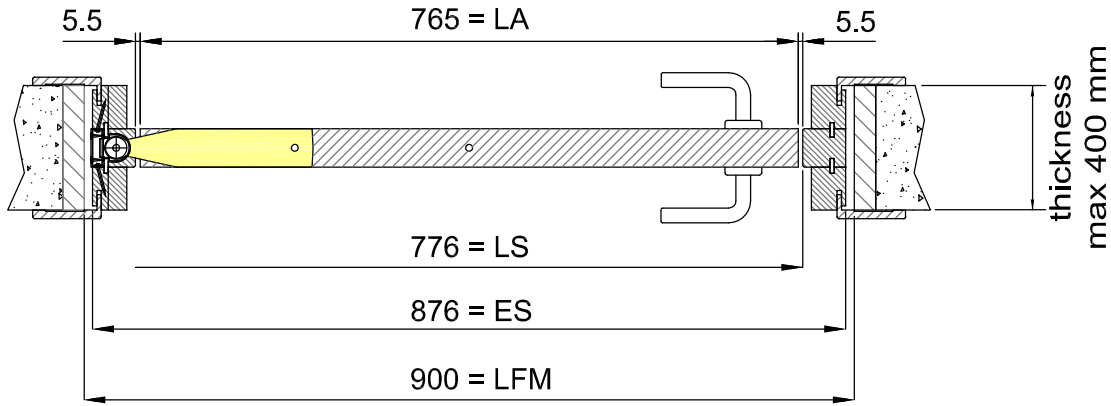
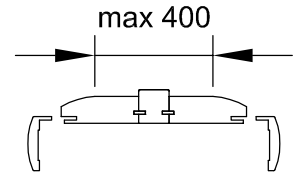
* Available standard dimensions: it is possible to have other dimensions, even intermediate dimensions (see page 18) by adjusting the track.

LEGEND
LP = Passage dimensions (LFM - 160)
LA = Leaf Width (LFM - 135)
LS = Door Jamb opening (LFM - 124)
ES = Outer Jamb (LFM - 24) = lenght of the upper crossbeam
LFM = Wall Hole Width
The dimensions on the technical drawings refer to the 900 Wall Hole Width and it is the dimension in which the encumbrance of the open door is symmetric.

DIMENSIONAL DIAGRAM OF THE CENTERED DOOR WITH ARM BASE

WALL THICKNESS UP TO 400 mm

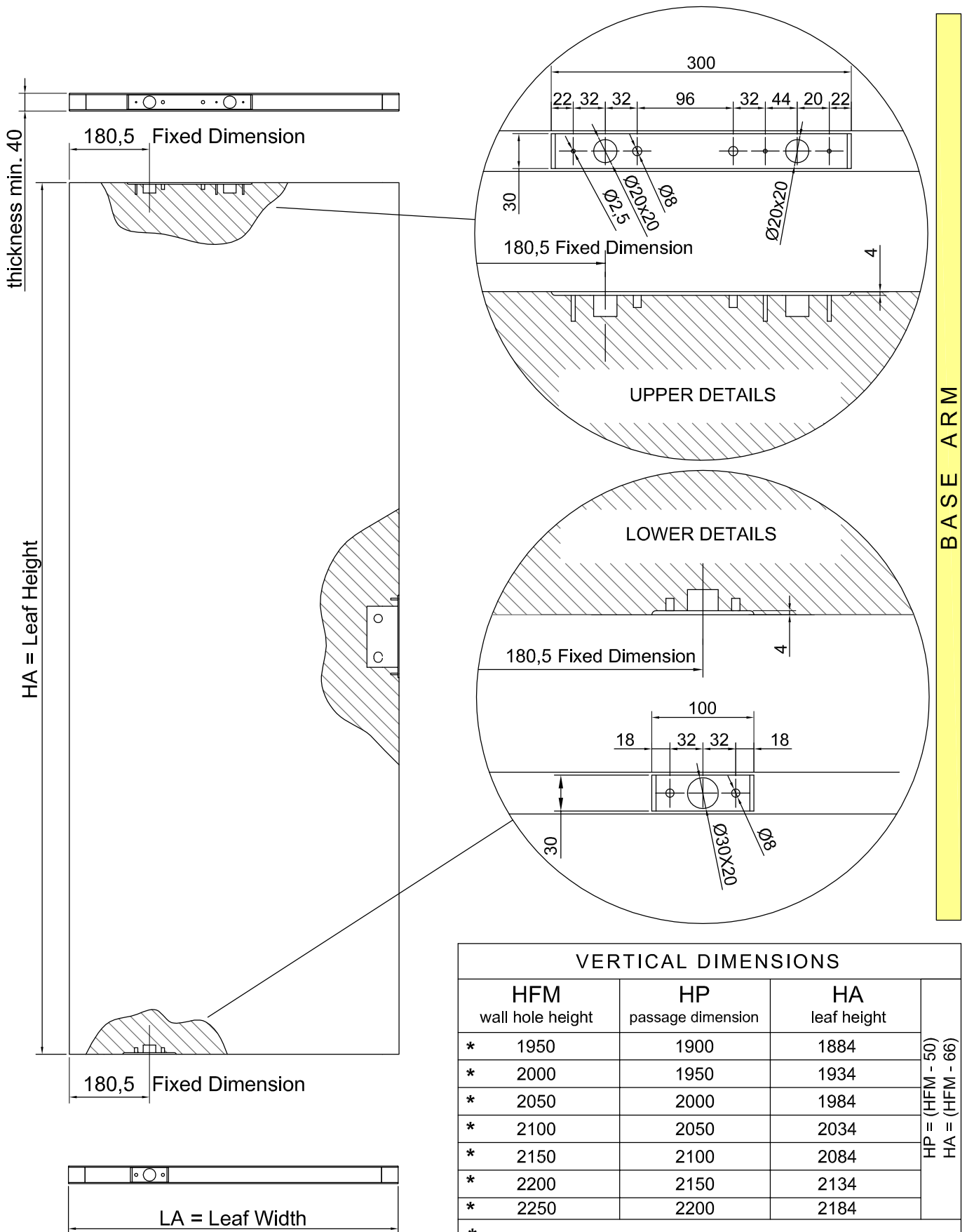
If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.



HORIZONTAL DIMENSIONS AND ENCUMBRANCE OF THE DOOR			
LFM wall hole width	LP passage dimensions	LA leaf width	max. encumbrance of the open door
* 800	640	665	384 □
* 850	690	715	384 □
* 900	740	765	384 ■□
* 950	790	815	431 ■
* 1000	840	865	481 ■
* 1050	890	915	531 ■
* 1100	940	965	581 ■

* Available standard dimensions: it is possible to have other dimensions, even intermediate dimensions (see page 18) by adjusting the track.

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LP = Passage dimensions (LFM - 160)
LA = Leaf Width (LFM - 135)
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The dimensions on the technical drawings refer to the 900 Wall Hole Width and it is the dimension in which the encumbrance of the open door is symmetric.



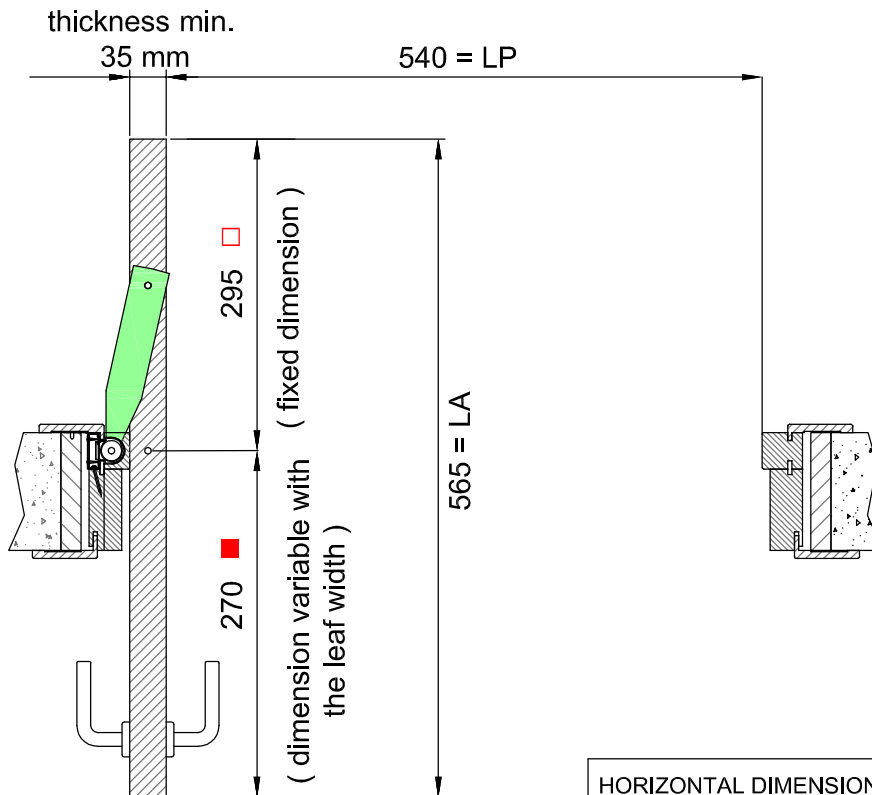
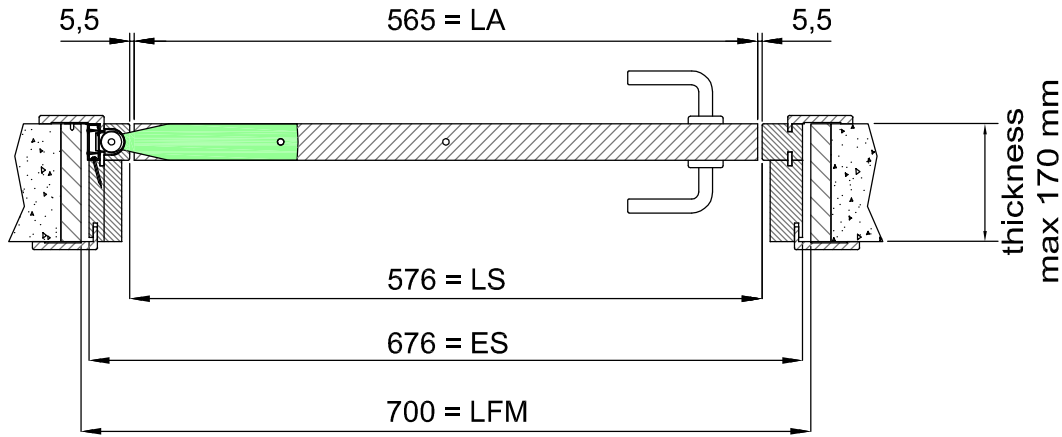
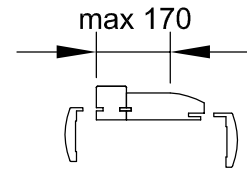
BASE ARM

VERTICAL DIMENSIONS			
HFM wall hole height	HP passage dimension	HA leaf height	
* 1950	1900	1884	HP = (HFM - 50) HA = (HFM - 66)
* 2000	1950	1934	
* 2050	2000	1984	
* 2100	2050	2034	
* 2150	2100	2084	
* 2200	2150	2134	
* 2250	2200	2184	
* Available standard dimensions; it is possible to have other dimensions, even intermediate dimensions, by adjusting the doorpost (see page 19) and the connecting rod (see page 20) of the arranged kit for not standard dimension (see page 18).			

DIMENSIONAL DIAGRAM OF THE ORIENTED DOOR WITH ARM SMALL

WALL THICKNESS UP TO 170 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

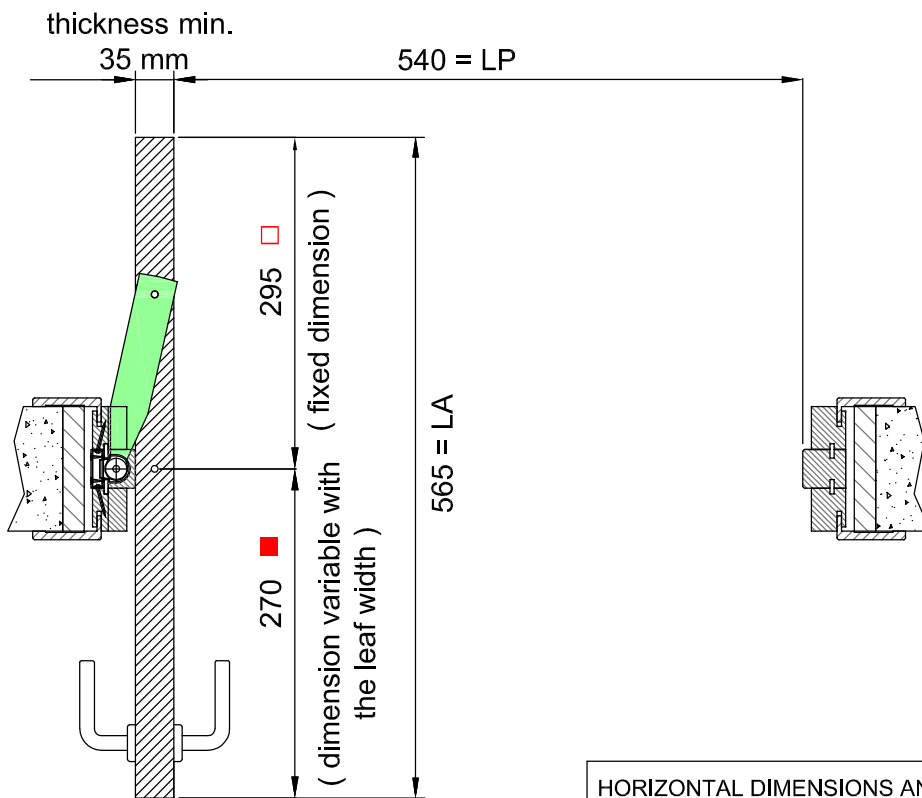
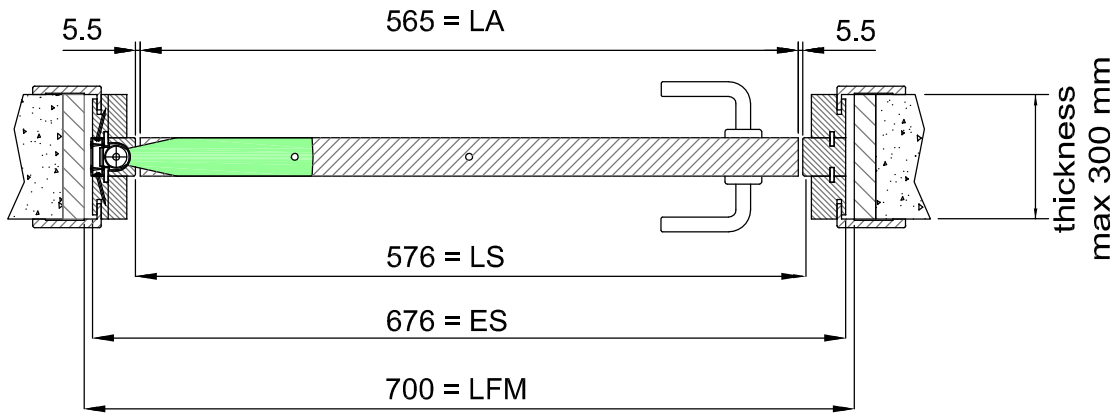
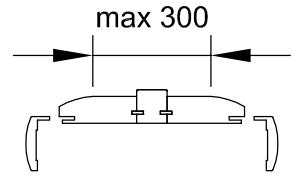
LEGEND	
LP	= Passage dimensions (LFM - 160)
LA	= Leaf Width (LFM - 135)
LS	= Door Jamb opening (LFM - 124)
ES	= Outer Jamb (LFM - 24) = lenght of the upper crossbeam
LFM	= Wall Hole Width
The dimensions on the technical drawings refer to the 700 Wall Hole Width and it is the dimension in which the encumbrance of the open door is symmetric.	

HORIZONTAL DIMENSIONS AND ENCUMBRANCE OF THE DOOR			
LFM wall hole width	LP passage dimensions	LA leaf width	max. encumbrance of the open door
610	450	475	295 □
650	490	515	295 □
700	540	565	295 ■□
750	590	615	320 ■
* 800	640	665	370 ■
* Available standard dimensions: it is possible to have other dimensions, even intermediate dimensions (see page 18) by adjusting the track.			

DIMENSIONAL DIAGRAM OF THE CENTERED DOOR WITH ARM SMALL

WALL THICKNESS UP TO 300 mm

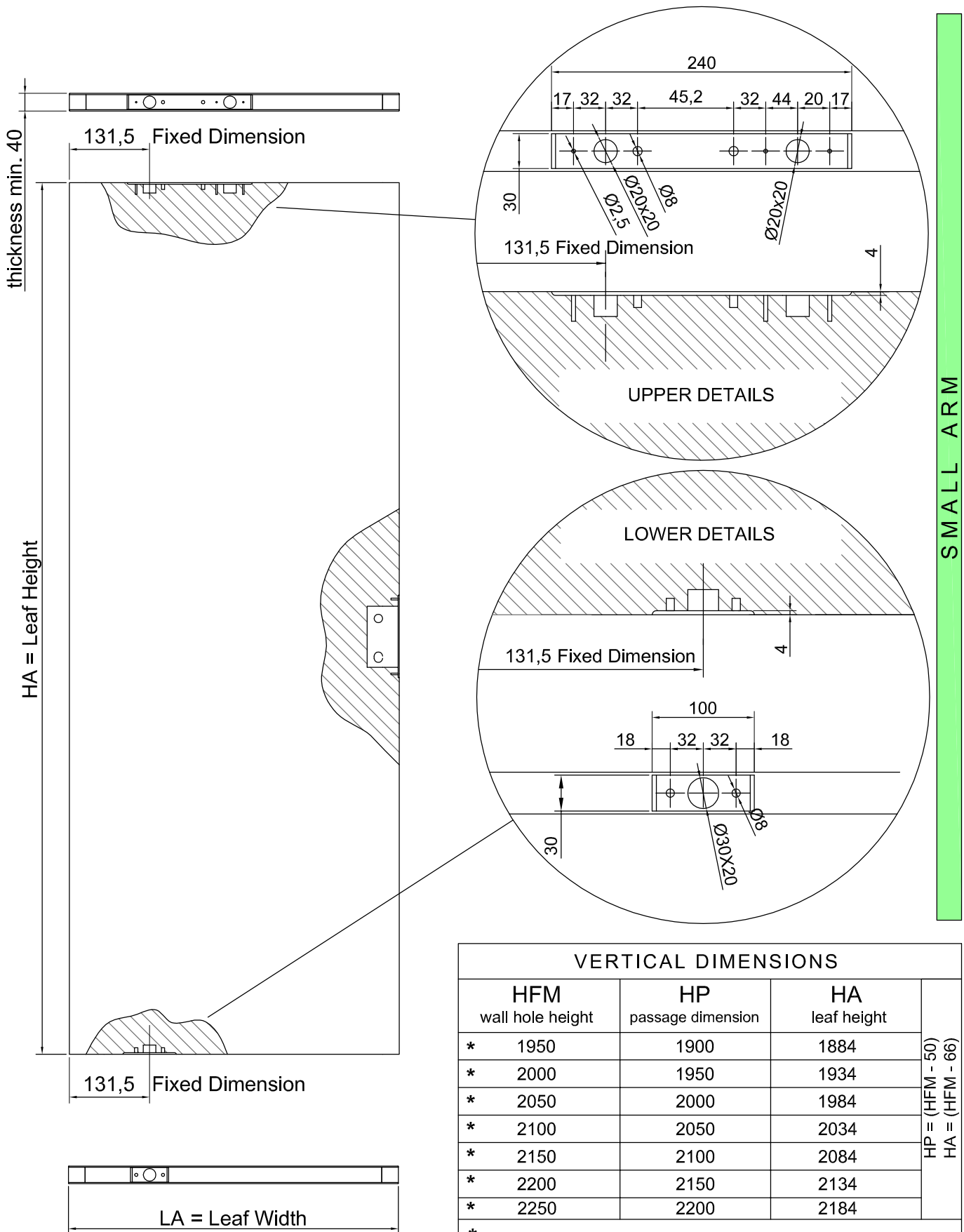
If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.



SMALL ARM

LEGEND	
LP	= Passage dimensions (LFM - 160)
LA	= Leaf Width (LFM - 135)
LS	= Door Jamb opening (LFM - 124)
ES	= Outer Jamb (LFM - 24) = lenght of the upper crossbeam
LFM	= Wall Hole Width
The dimensions on the technical drawings refer to the 700 Wall Hole Width and it is the dimension in which the encumbrance of the open door is symmetric.	

HORIZONTAL DIMENSIONS AND ENCUMBRANCE OF THE DOOR			
LFM wall hole width	LP passage dimensions	LA leaf width	max. encumbrance of the open door
610	450	475	295 □
650	490	515	295 □
700	540	565	295 ■□
750	590	615	320 ■
* 800	640	665	370 ■
* Available standard dimensions: it is possible to have other dimensions, even intermediate dimensions (see page 18) by adjusting the track.			



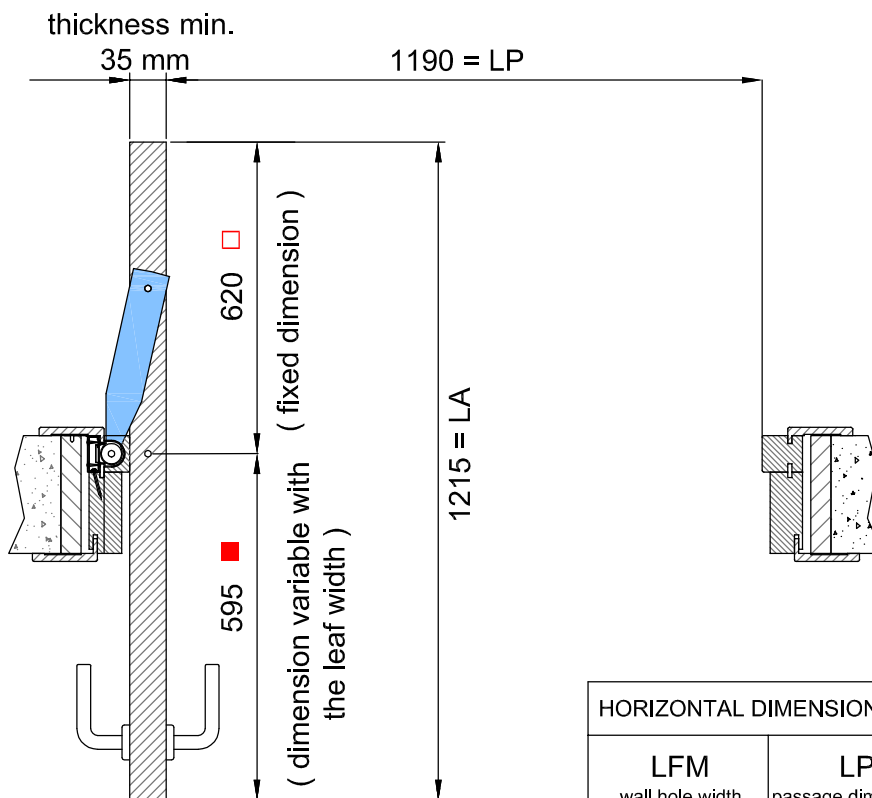
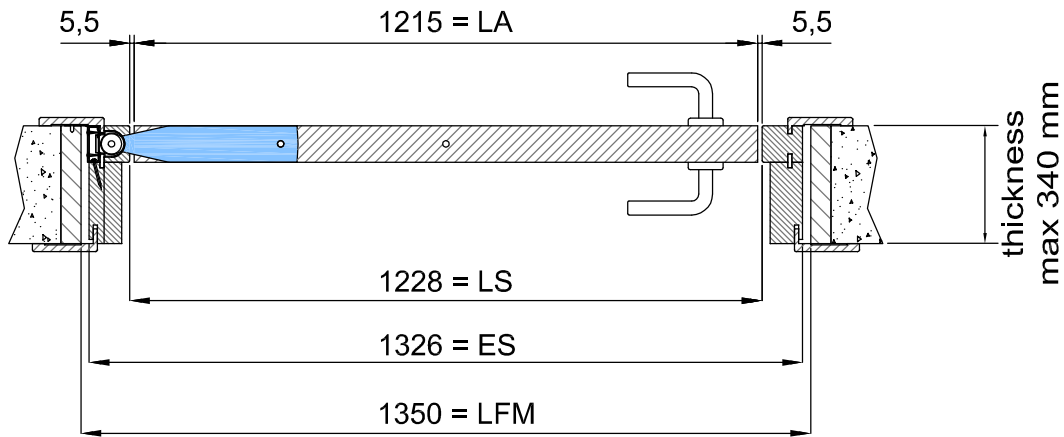
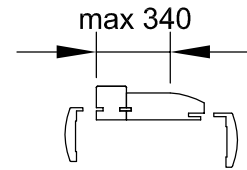
SMALL ARM

VERTICAL DIMENSIONS			
HFM wall hole height	HP passage dimension	HA leaf height	
* 1950	1900	1884	HP = (HFM - 50) HA = (HFM - 66)
* 2000	1950	1934	
* 2050	2000	1984	
* 2100	2050	2034	
* 2150	2100	2084	
* 2200	2150	2134	
* 2250	2200	2184	
* Available standard dimensions; it is possible to have other dimensions, even intermediate dimensions, by adjusting the doorpost (see page 19) and the connecting rod (see page 20) of the arranged kit for not standard dimension, (see page 18).			

DIMENSIONAL DIAGRAM OF THE ORIENTED DOOR WITH ARM LARGE

WALL THICKNESS UP TO 340 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.



L A R G E A R M

HORIZONTAL DIMENSIONS AND ENCUMBRANCE OF THE DOOR			
LFM wall hole width	LP passage dimensions	LA leaf width	max. encumbrance of the open door
1150	990	1015	620 □
1200	1040	1065	620 □
1250	1090	1115	620 □
* 1300	1140	1165	620 □
1350	1190	1215	620 ■□
1400	1240	1265	645 ■
* 1450	1290	1315	695 ■

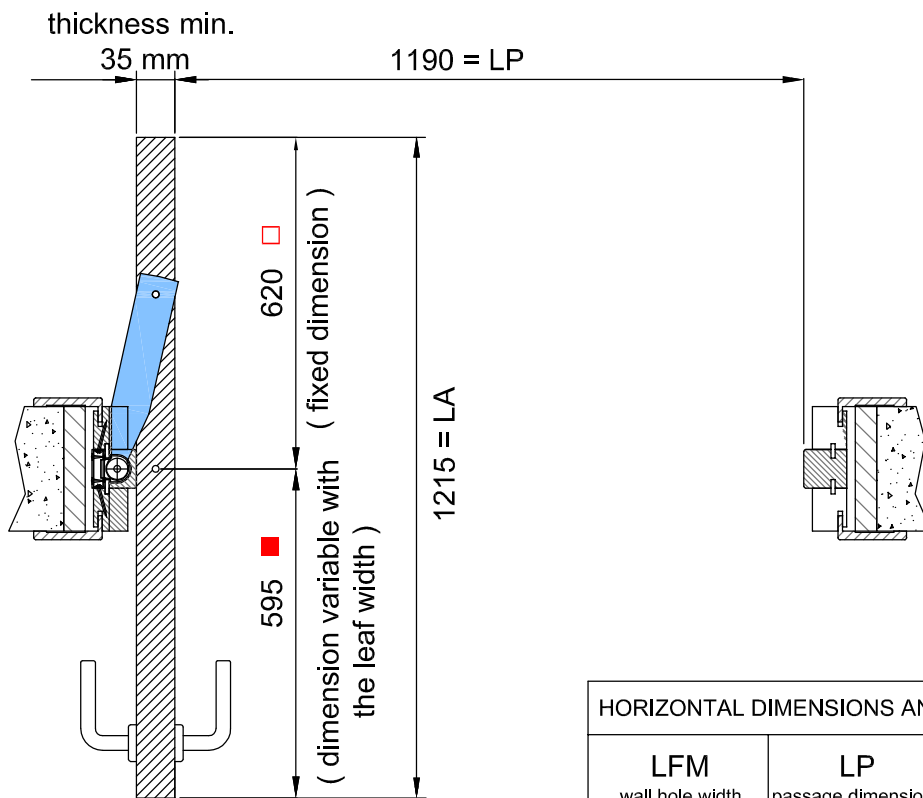
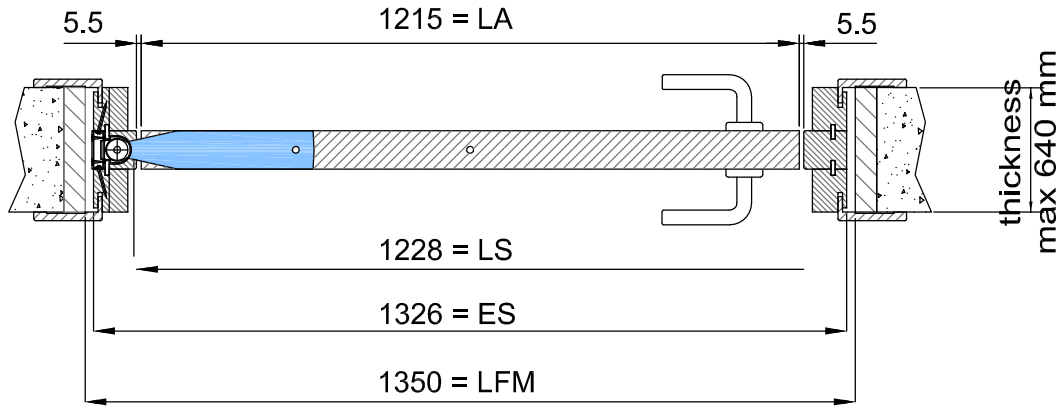
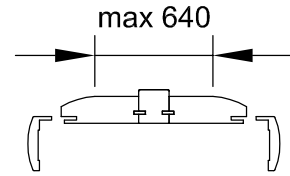
* Available standard dimensions: it is possible to have other dimensions, even intermediate dimensions (see page 18) by adjusting the track.

LEGEND
LP = Passage dimensions (LFM - 160)
LA = Leaf Width (LFM - 135)
LS = Door Jamb opening (LFM - 124)
ES = Outer Jamb (LFM - 24) = lenght of the upper crossbeam
LFM = Wall Hole Width
The dimensions on the technical drawings refer to the 1350 Wall Hole Width and it is the dimension in which the encumbrance of the open door is symmetric.

DIMENSIONAL DIAGRAM OF THE CENTERED DOOR WITH ARM LARGE

WALL THICKNESS UP TO 640 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.

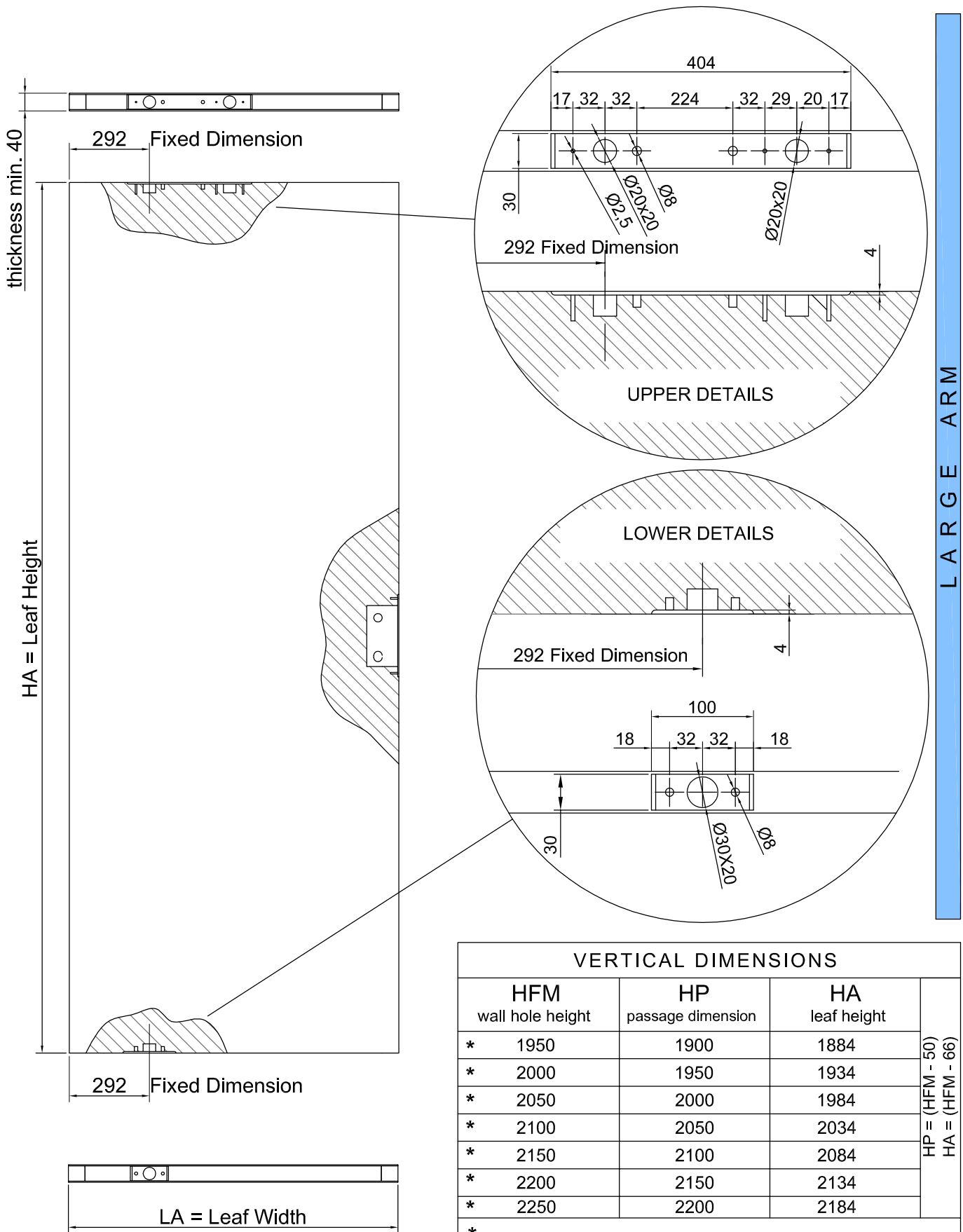


LARGE ARM

HORIZONTAL DIMENSIONS AND ENCUMBRANCE OF THE DOOR			
LFM wall hole width	LP passage dimensions	LA leaf width	max. encumbrance of the open door
1150	990	1015	620 □
1200	1040	1065	620 □
1250	1090	1115	620 □
* 1300	1140	1165	620 □
1350	1190	1215	620 ■□
1400	1240	1265	645 ■
* 1450	1290	1315	695 ■

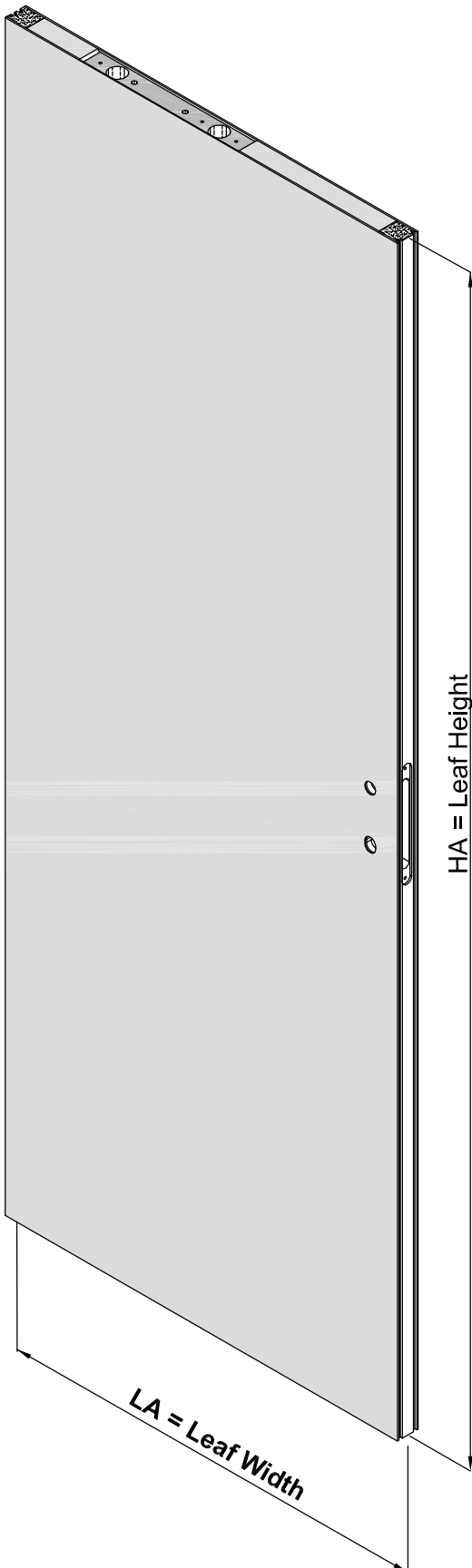
* Available standard dimensions: it is possible to have other dimensions, even intermediate dimensions (see page 18) by adjusting the track.

LEGEND
LP = Passage dimensions (LFM - 160)
LA = Leaf Width (LFM - 135)
LS = Door Jamb opening (LFM - 124)
ES = Outer Jamb (LFM - 24) = lenght of the upper crossbeam
LFM = Wall Hole Width
The dimensions on the technical drawings refer to the 1350 Wall Hole Width and it is the dimension in which the encumbrance of the open door is symmetric.



LARGE ARM

VERTICAL DIMENSIONS			
HFM wall hole height	HP passage dimension	HA leaf height	
* 1950	1900	1884	HP = (HFM - 50) HA = (HFM - 66)
* 2000	1950	1934	
* 2050	2000	1984	
* 2100	2050	2034	
* 2150	2100	2084	
* 2200	2150	2134	
* 2250	2200	2184	
* Available standard dimensions; it is possible to have other dimensions, even intermediate dimensions, by adjusting the doorpost (see page 19) and the connecting rod (see page 20) of the arranged kit for not standard dimension.			



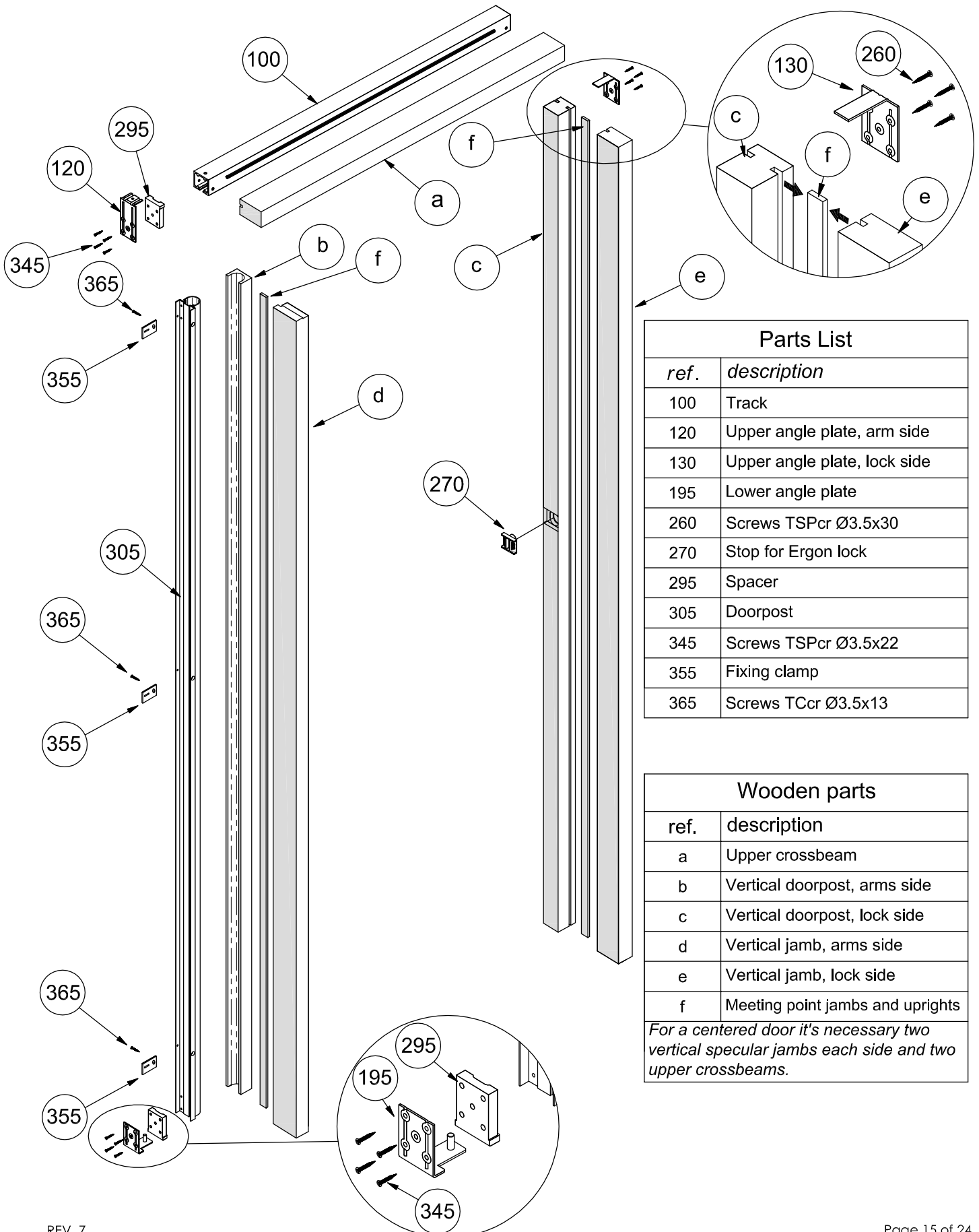
VERTICAL DIMENSIONS			
STANDARD HEIGHT	HP = (HFM - 50)		HA = (HFM - 66)
	HFM	HP	HA
	WALL HOLE HEIGHT	HEIGHT PASSAGE DIMENSION	LEAF HEIGHT
	1950	1900	1884
	2000	1950	1934
	2050	2000	1984
	2100	2050	2034
	2150	2100	2084
	2200	2150	2134
	2250	2200	2184

Available standard dimensions: it's possible to have other dimensions, even intermediate dimensions, by adjusting the doorpost (see page 19) and the connecting rod (see page 20) of the arranged kit for not standard dimension.

HORIZONTAL DIMENSIONS					
LARGE	BASIC	SMALL	LP = (LFM - 160)		LA = (LFM - 135)
			LFM	LP	LA
			WALL HOLE WIDTH	WIDTH PASSAGE DIMENSION	LEAF WIDTH
		●	610	450	475
		●	650	490	515
	●	●	700	540	565
	●	●	750	590	615
	●	●	800	640	665
	●		850	690	715
	●		900	740	765
	●		950	790	815
	●		1000	840	865
	●		1050	890	915
●	●		1100	940	965
●			1150	990	1015
●			1200	1040	1065
●			1250	1090	1115
●			1300	1140	1165
●			1350	1190	1215
●			1400	1240	1265
●			1450	1290	1315

● Available Standard dimensions

● Available dimensions, by adjusting the track, see page 18 (it is possible to have intermediate dimensions)



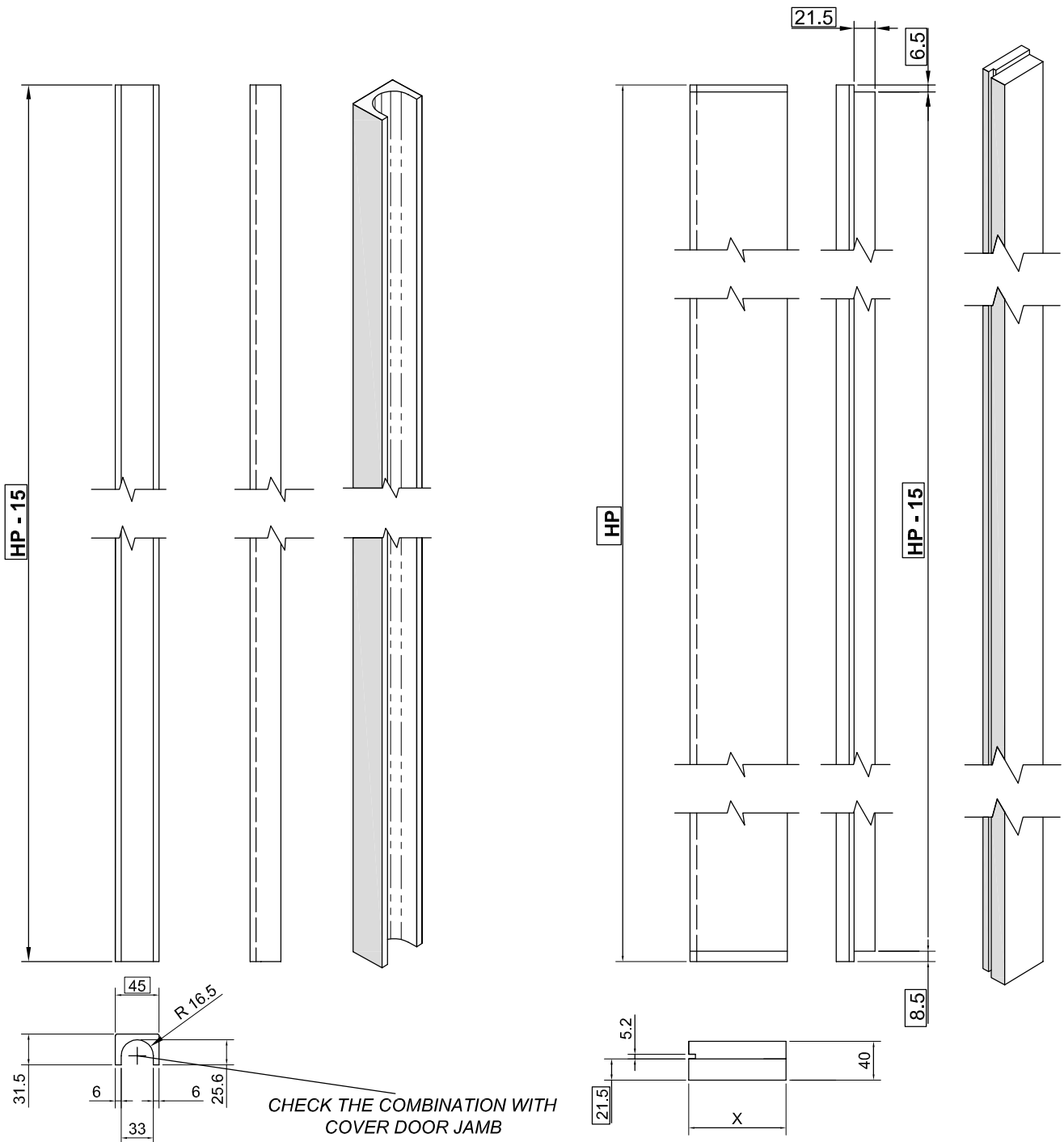
Parts List	
ref.	description
100	Track
120	Upper angle plate, arm side
130	Upper angle plate, lock side
195	Lower angle plate
260	Screws TSPcr Ø3.5x30
270	Stop for Ergon lock
295	Spacer
305	Doorpost
345	Screws TSPcr Ø3.5x22
355	Fixing clamp
365	Screws TCcr Ø3.5x13

Wooden parts	
ref.	description
a	Upper crossbeam
b	Vertical doorpost, arms side
c	Vertical doorpost, lock side
d	Vertical jamb, arms side
e	Vertical jamb, lock side
f	Meeting point jambs and uprights

For a centered door it's necessary two vertical specular jambs each side and two upper crossbeams.

DOORPOST

JAMB



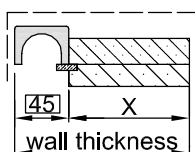
DIMENSION THAT MUST BE ACCURATE

X = WALL THICKNESS - 45

HP = HEIGHT PASSAGE DIMENSION

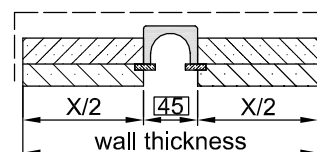
--- VISIBLE SIDE

ORIENTED DOOR



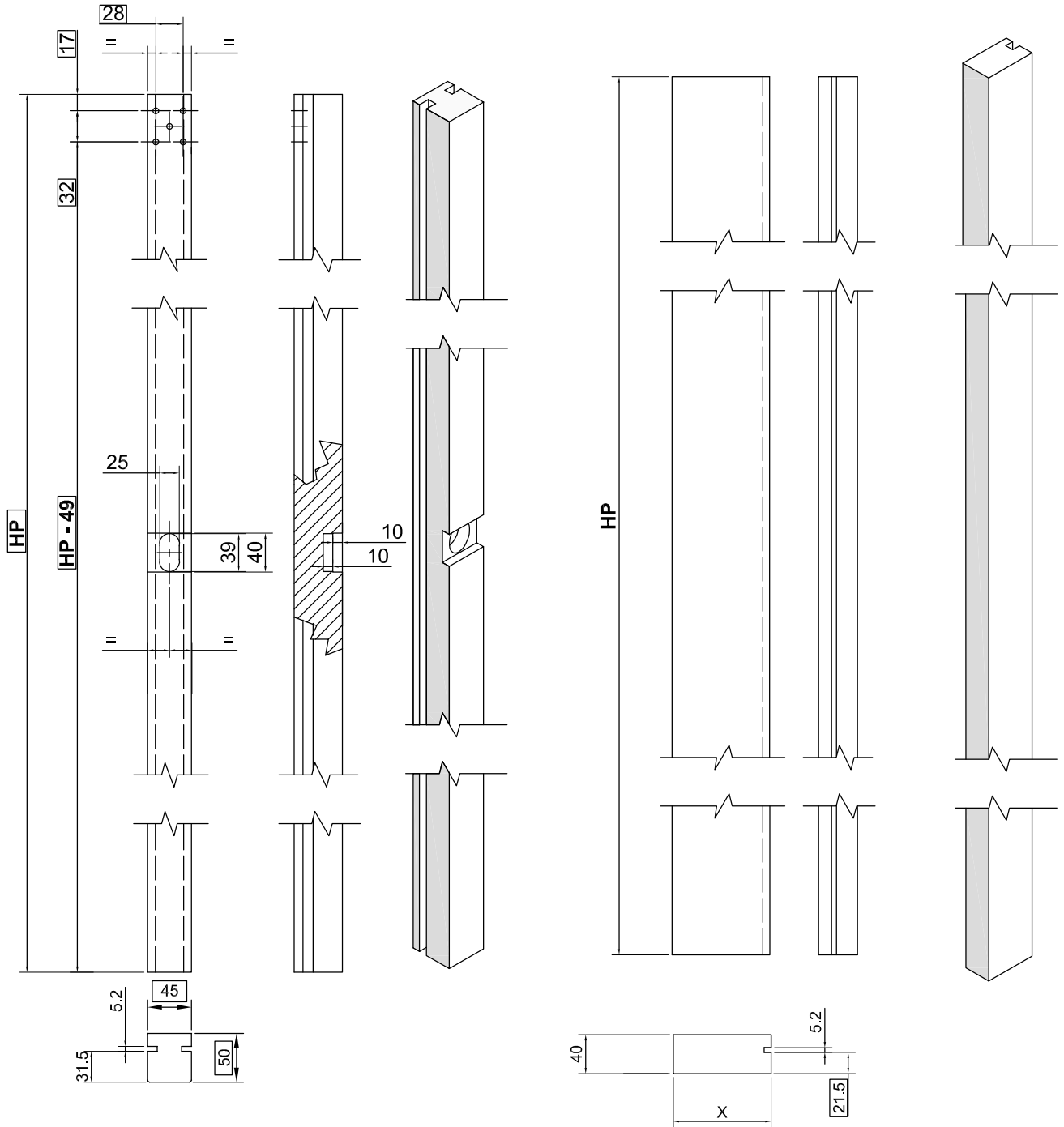
When the door is in the middle of the wall, you must have two specular jambs

CENTERED DOOR



DOORPOST

JAMB



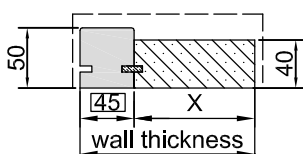
DIMENSION THAT MUST BE ACCURATE

X = WALL THICKNESS - 45

HP = HEIGHT PASSAGE DIMENSION

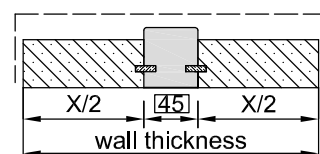
--- VISIBLE SIDE

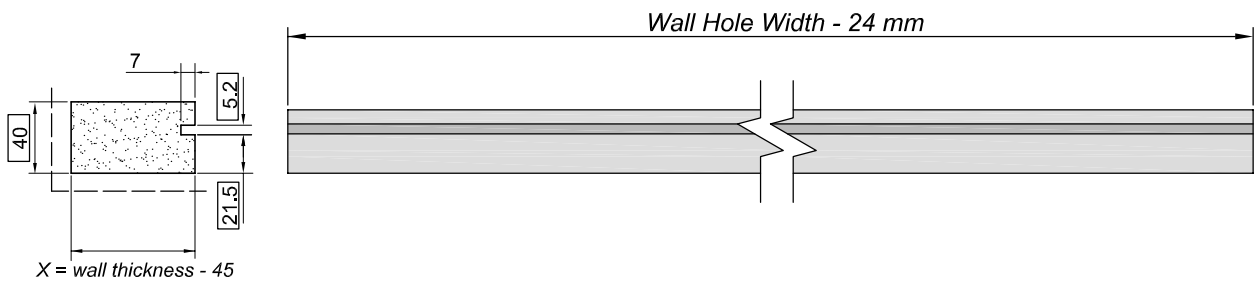
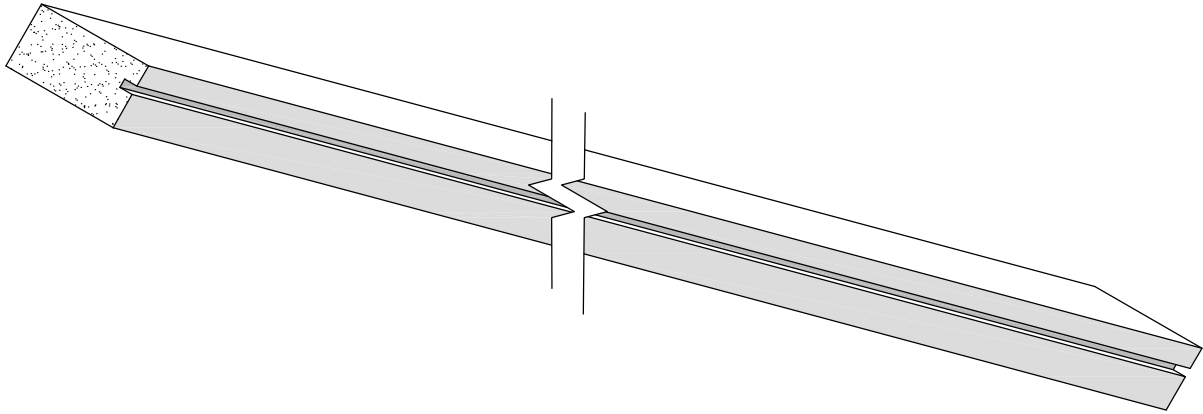
ORIENTED DOOR



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

CENTERED DOOR





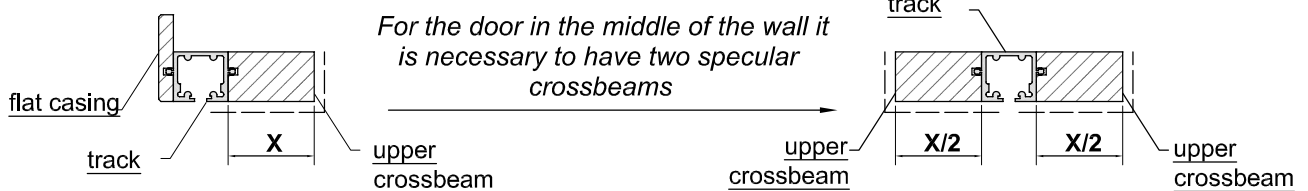
DIMENSION THAT MUST BE ACCURATE

$X = \text{WALL THICKNESS} - 45$

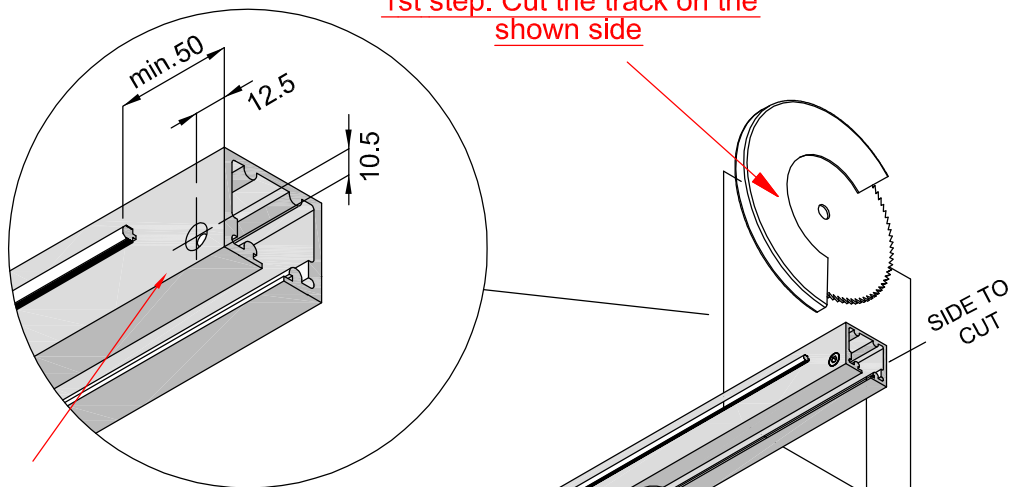
VISIBLE SIDE

ORIENTED DOOR

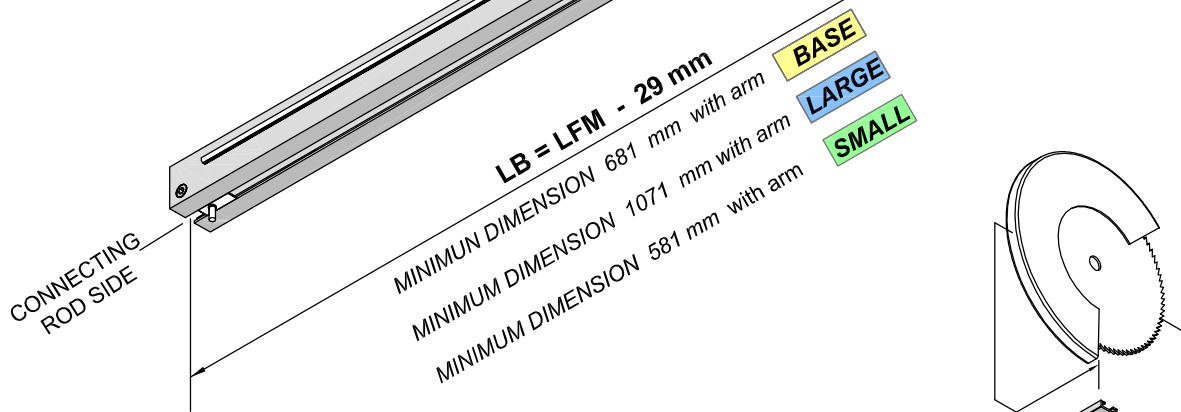
CENTERED DOOR



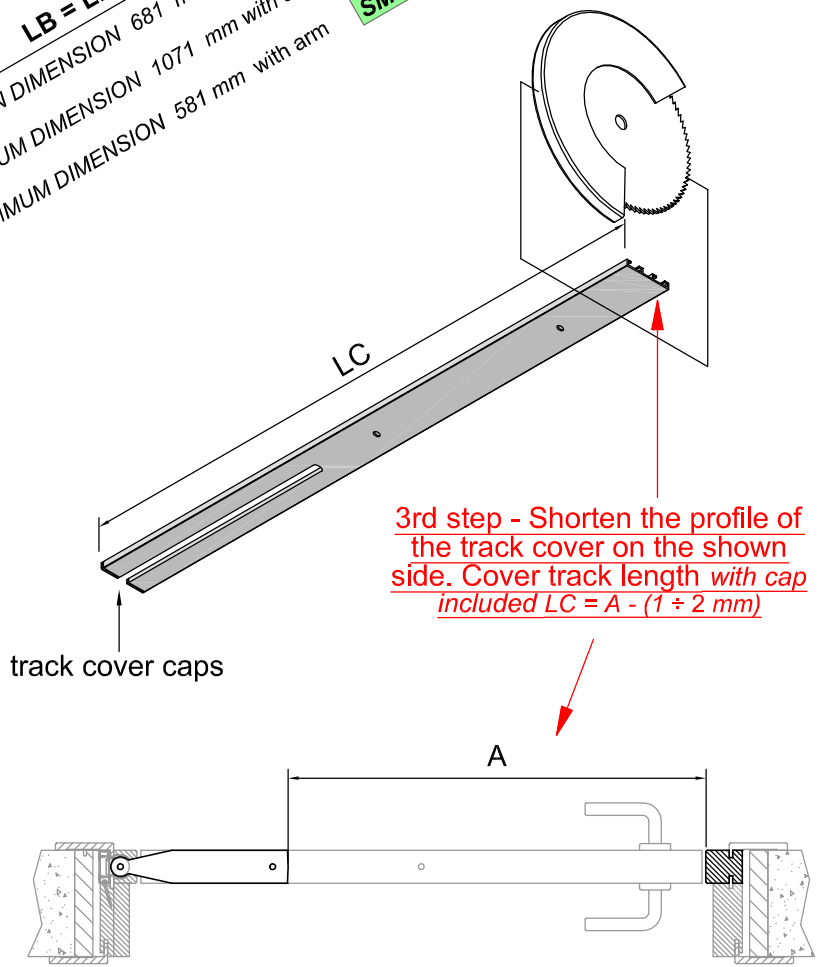
1st step: Cut the track on the shown side



2nd step - Drill the hole $\varnothing 5$ on both sides for M5 TSPei screw and shorten the small wings

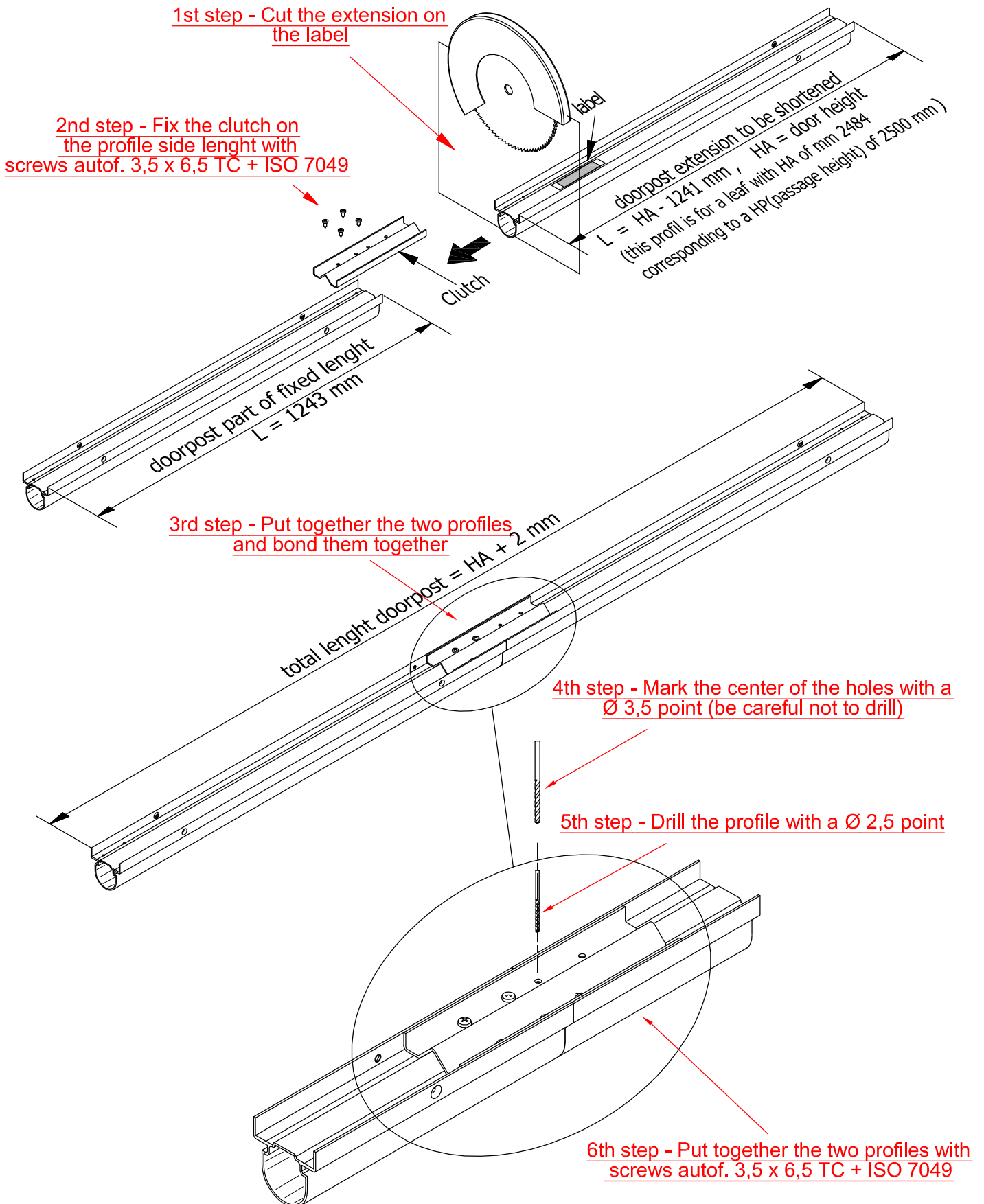


3rd step - Shorten the profile of the track cover on the shown side. Cover track length with cap included $LC = A - (1 \div 2 \text{ mm})$



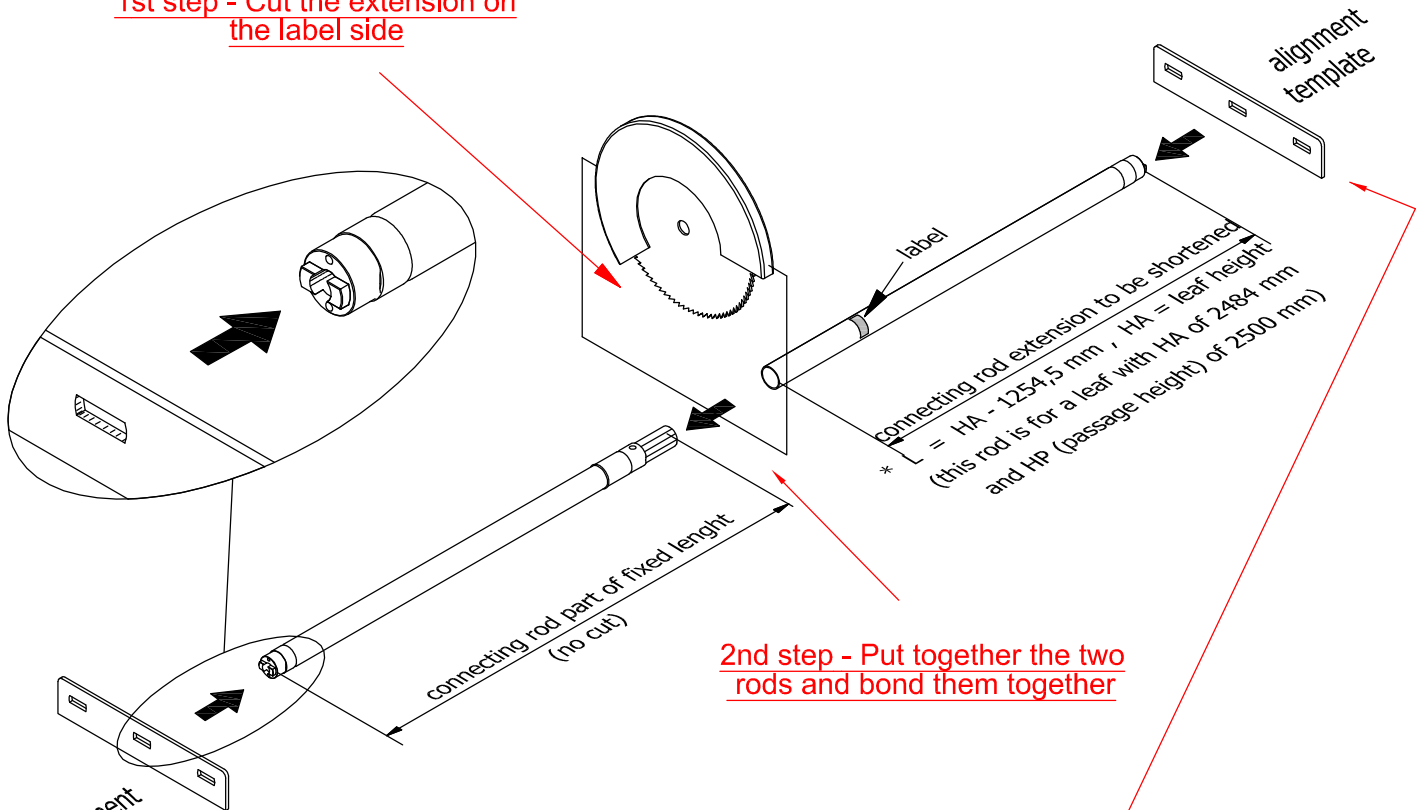
LFM WALL HOLE WIDTH	LB TRACK LENGTH
700	671
725	696
750	721
775	746
825	796
875	846
925	896
975	946
LB = LFM - 29	

CUTTING OF THE DOORPOST FOR NOT STANDARD HEIGHTS.



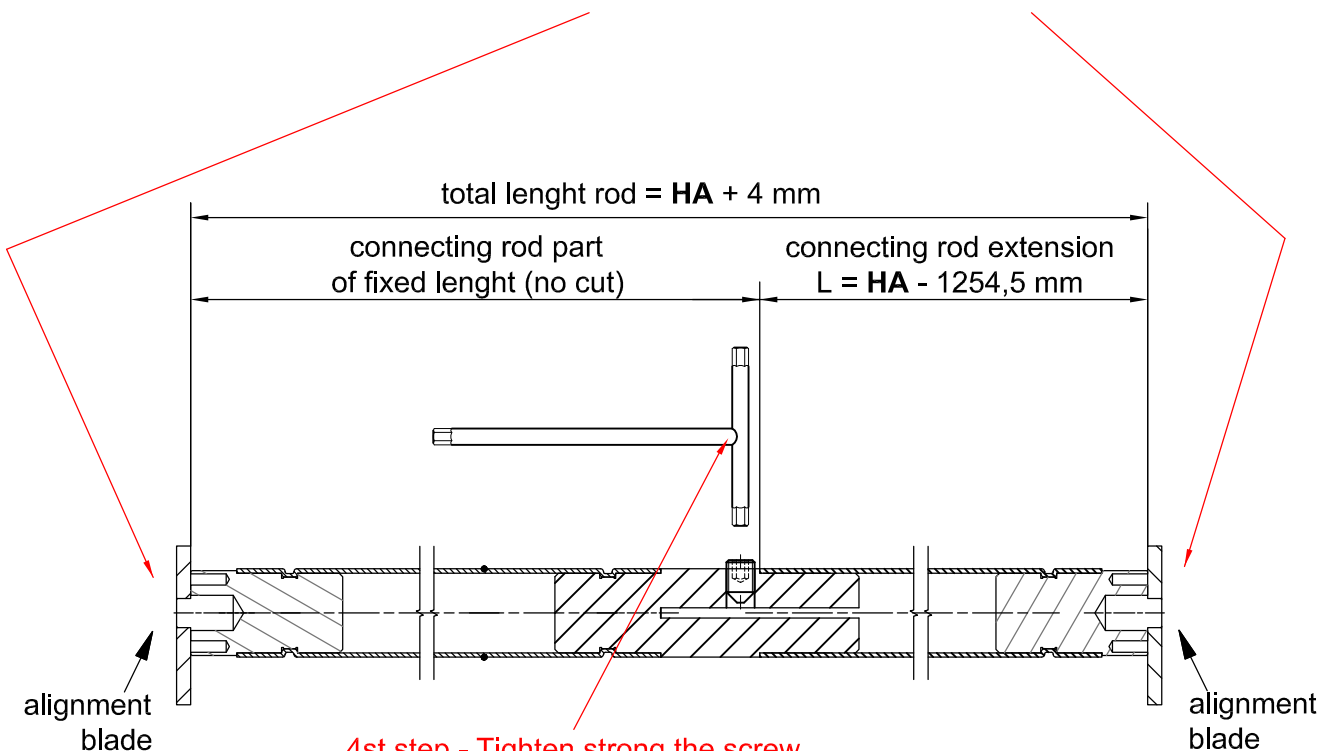
CUTTING OF THE CONNECTING ROD FOR NOT STANDARD HEIGHTS.

1st step - Cut the extension on the label side

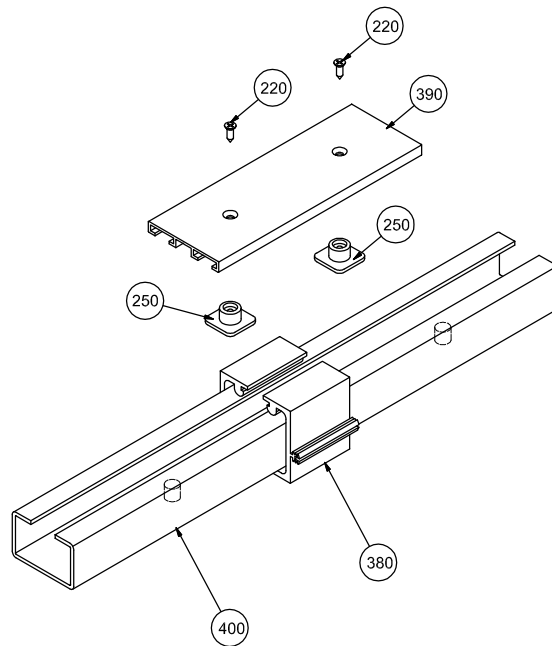


2nd step - Put together the two rods and bond them together

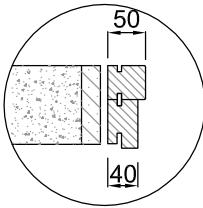
3rd step - Align carefully the two rods with two blades resting on a flat surface



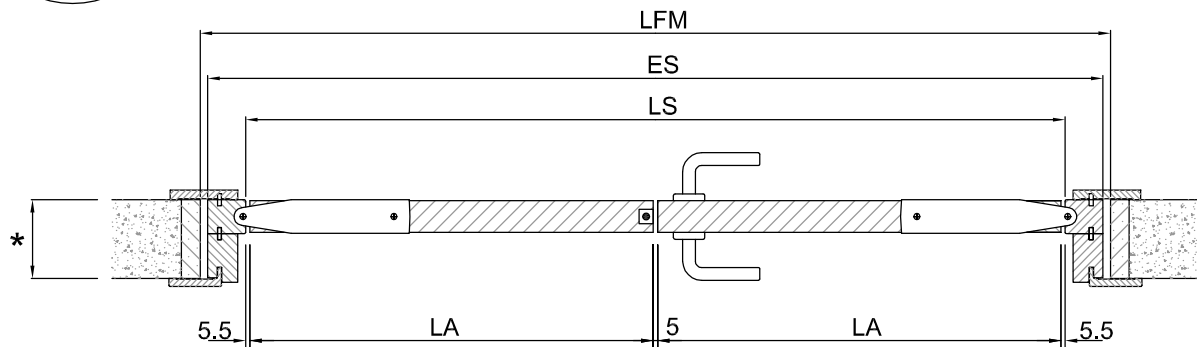
4th step - Tighten strong the screw (after the assembling the rod must be perfectly straight)



Part list		
rif.	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 5-6-8-9-11-12 in this manual.

LFM minimum 1600 mm. with **BASE** arm

LFM minimum 2300 mm. with **LARGE** arm

LFM minimum 1400 mm. with **SMALL** arm

Legend
LP = Passage Dimension ($LFM - 200$)
LA = Door Leaf Width ($\frac{LFM - 136}{2}$)
LS = Door Jamb Opening ($LFM - 120$)
ES = Outer Jamb ($LFM - 20$ = length of the track and upper crossbeam)
LFM = Wall Hole Width

3

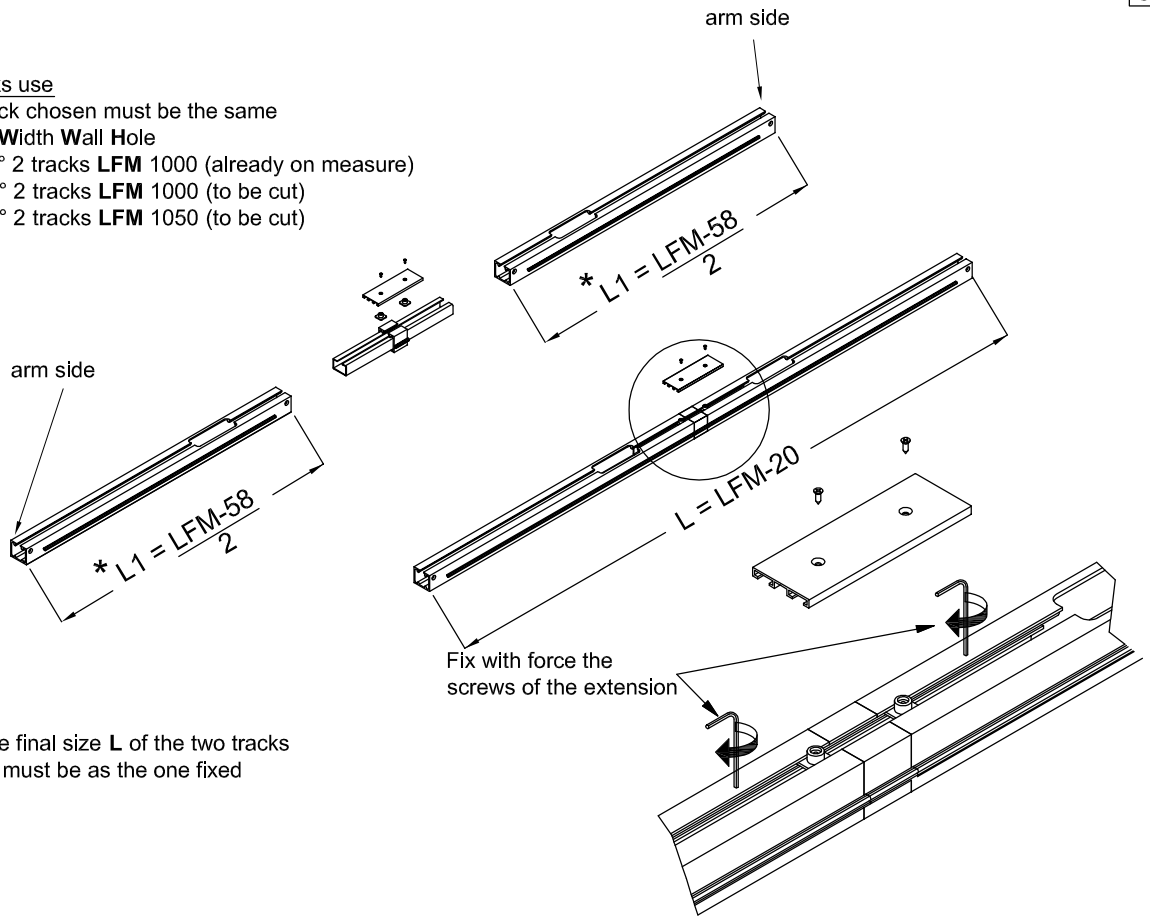
Choice of the tracks use

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

4

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.

