



TECHNICAL MANUAL - CONSTRUCTION AND INSTALLATION

swinging sliding door with connecting rod in the door leaf

JAMB THICKNESS 40/50 mm

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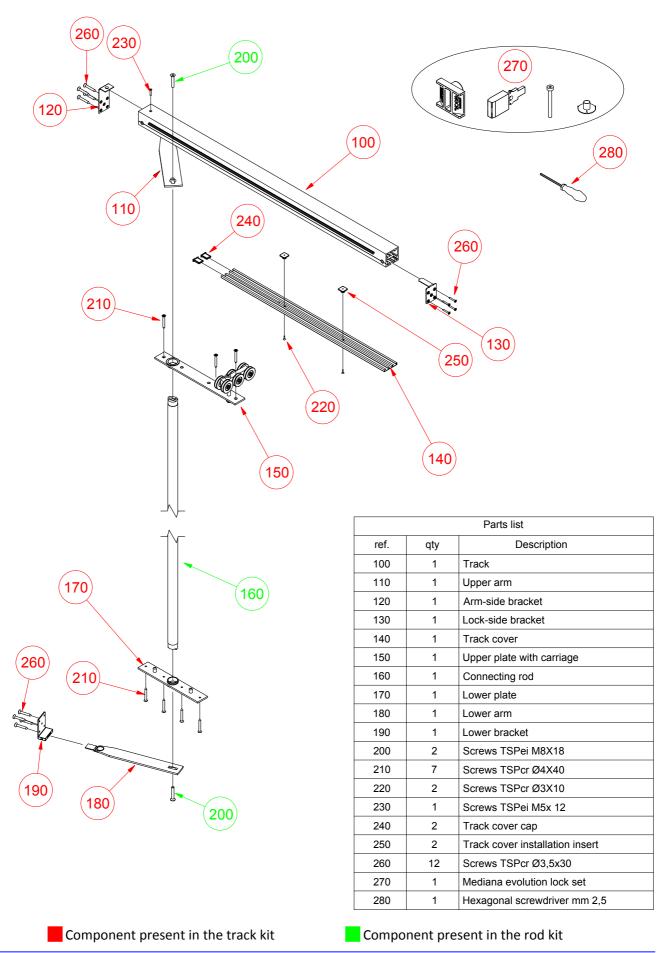


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EXPLODED VIEW OF THE HARDWARE





INTRODUCTION

ERGON LIVING S40 hardware is designed to be applied only on hollow-cored panels, for internal doors for interior residental 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 LIVING S40 version, by doing some simple work as indicated in this manual.

The standard finishes offered for the ERGON LIVING S40 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:

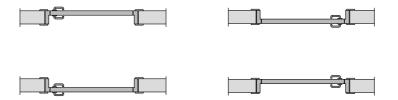
- "Base" particularly suitable for LFM (wall hole opening) from 800 to 1100 mm;
- "Small" particularly suitable for LFM (wall hole opening) from 610 to 800 mm;
- "Large" particularly suitable for LFM (wall hole opening) from 1100 to 1450mm.

According to specific requirements, with the ERGON LIVING S40 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 indipendent 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 <u>passage widths</u> the ERGON LIVING 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 18).

As regards the <u>actual passage height</u>, fixed-size are offered, 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 abtained.



FRAME SPECIFICATION

With ERGON LIVING S40 two types of frames can be used: jamb with doorpost and straight jamb.

JAMB WITH DOORPOST

1) 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).

Moreover, the jamb can be placed indistinctly on the right or left side of the doorpost; in this way, it can be used for internal, external or central flush doors.

The adiacent doorpost, even if simple, is an extra element that must be constructed.

2) A suitably modified Mediana Evolution lock, using simple pressure to substitute the standard spring lock with the **ERGON** lock (presente su ogni confezione di ferramenta), allows the door to close similarly to a door with a rabbet. A magnetic lock can be used too.

STRAIGHT JAMB

- 1) It's possible to use a simple flat casing., normally used to cover the wall where installation of a door was not previouslyplanned.
- **2)** Makes it necessary to use a magnetic lock which is functional only if the door is not more than 3 mm from the frame.

The doo jamb near the lock is visually applealing in that no element of the lock or its release is visible.

The movement of the door leads to having limits in the thickness of the walls which may vary depending on the type of frame used or on the type of bracket used (BASE, SMALL, LARGE); on page 10 there are some solutions to manage these limits in the best way possible.

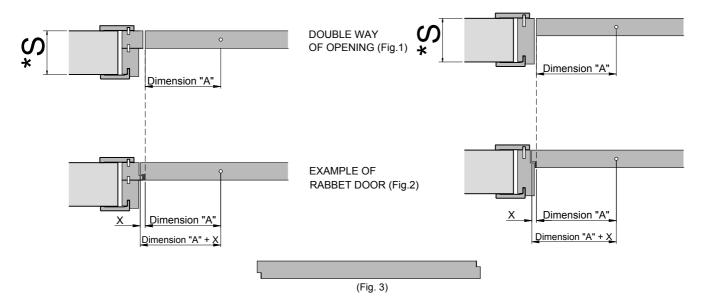
RABBET DOOR WITH ONE-WAY OPENING

In some rooms of the house, it may be appropriate to use doors with stops, with the **ERGON** system; this is possible by simply creating stops in the vertical sides of the door using the same kit.

In this way there's not more the double-way opening, but there is a better acustic isolation inside the room by using a seal for the tightness.

With the **ERGON** system with one-way opening, any type of lock can be used.

Fig. 2 below shows a constructive example of an **ERGON** door with stop; to create the stops both on the door and on the frame, they must be specular (fig. 3) and it is necessary to pay attention to value "X" which must be added to value "A", indicated on page 11 of this manual, to keep the panel connection rod insertion point in the exact position.



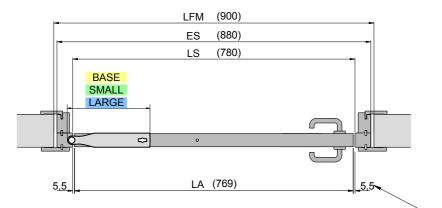


min. 40

0

SINGLE DOOR HORIZONTAL DIMENSION DIAGRAM

(example dimensional)



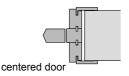
LP

⋖

QV (377)
(dimension variable with the door leaf width)

(740)

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

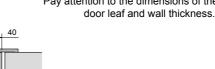


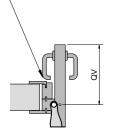
See page 10 for information on managing wall thickness.

If a magnetic lock is used, it is recommented to reduce the gap to 3 mm on this side only.

ATTENTION:

On doors with reduced widths the handle may collide with the jamb. Pay attention to the dimensions of the handle,





The values shown in this table refer to a door with frame thickness 50 mm and door leaf thickness 45 mm; if a flat frame with a thickness of 40 mm is used, the LP, LA, LS and QV values are increased by 20 mm.

			_							
	炽	BASE	ⅎ	WIDTH DIMENSION						
	ARGE		SMALL	LFM	LP	LA	Q	F	Q	V
	-		(O)	WALL HOLE WIDTH	PASSAGE DIMENSION	DOOR LEAF WIDTH	FIXED DII	MANSION	VARIABLE I	DIMENSION
			•	610	450	479	29	95	17	7 4
			•	650	490	519	29	95	22	24
Minimum dimension for "Soft Opening" SMALL arm		•	•	700	540	569	392	295	177	274
		•	•	750	590	619	392	295	227	324
Minimum dimension for "Soft Opening" BASE arm		\odot	•	800	640	669	392	295	277	374
		•		850	690	719	39	92	32	27
		\odot		900	740	769	39	92	37	77
		\odot		950	790	819	39	92	42	27
		\odot		1000	840	869	39	92	47	77
		•		1050	890	919	39	92	52	27
Minimum dimension for "Soft Opening" LARGE arm	•	\odot		1100	940	969	620	392	349	577
	•			1150	990	1019	62	20	39	99
	•			1200	1040	1069	62	20	44	19
LEGEND				1250	1090	1119	62	20	49	99
	O			1300	1140	1169	62	20	54	19
LFM = WALLL HOLE WIDTH	•			1350	1190	1219	62	20	59	99
LP = PASSAGE DIMENSION (LFM - 160)	•			1400	1240	1269	62	20	64	19
LA = DOOR LEAF WIDTH (LFM - 131)	O			1450	1290	1319	62	20	69	99

- LA LS = DOOR JAMB OPENING (LFM - 120) • = Available standard dimensions
 - = Several examples of dimensions that can be obtained by shortening the track. Intermediate dimesions are also possible.

For other custom dimensions, contact Celegon in regards to feasibility.

= OUTER JAMB (LFM - 20)

= FIXED DIMENSION ENCUMBRANCE ARM-SIDE

= VARIABLE DIMENSION ENCUMBRANCE HANDLE-SIDE

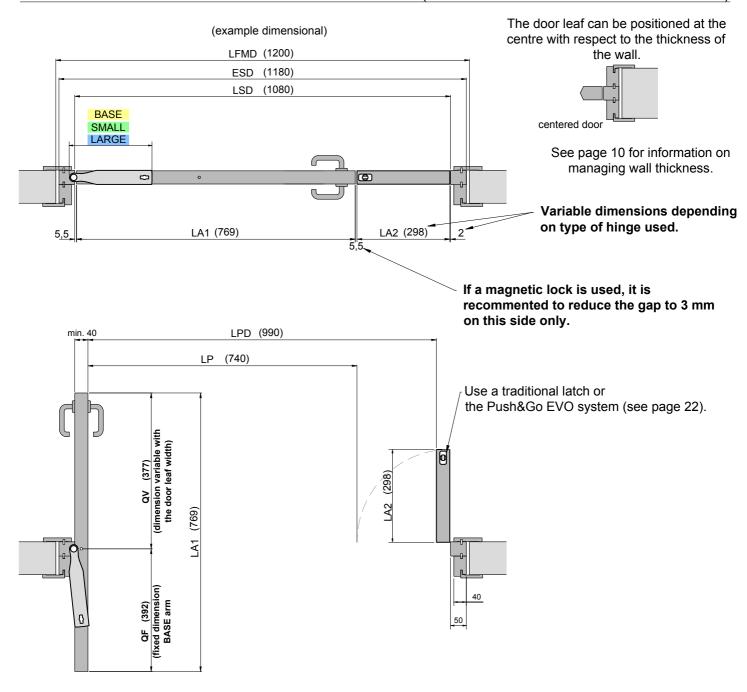
ES

QF

ΩV



DOUBLE DOOR HORIZONTAL DIMENSIONAL DIAGRAM (ERGON DOOR LEAF AND RABBET DOOR)



The values shown in this table refer to a **door with frame thickness 50 mm and ddor leaf thickness 45 mm,** if a flat frame with a thickness of 40 mm is used, the LP and LS values increase by 20 mm and the LA and QV values increase by 10 mm.

When ordering hardware, the dimensions of the wall opening (LFMD) and the type of arm that will be used must be provided.

A custom track kit will be supplied based on the dimensions provided.

LEGEND

LFMD = WALL HOLE WIDTH

LPD = PASSAGE DIMENSION (LFMD - 210)

LA1 = DOOR LEAF WIDTH (see table on page 5)

LA2 = DOOR LEAF WIDTH (LFMD - LA1 - 133 variable depending on door leaf LA1 dimensions and type of hinge used)

LSD = DOOR JAMB OPENING (LFMD - 120)

ESD = OUTER JAMB (LFMD - 20)

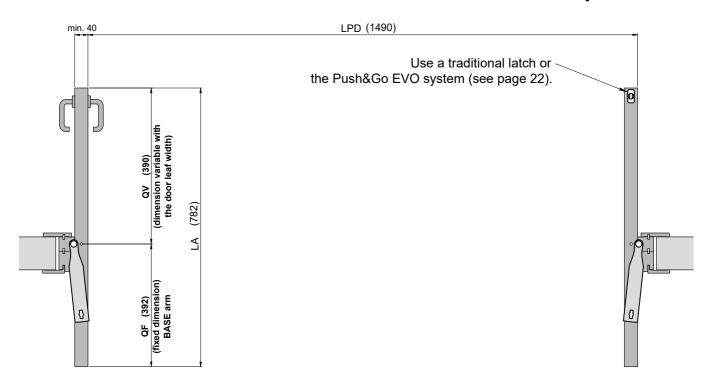
QF = FIXED DIMENSION ENCUMBRANCE ARM-SIDE (see table on page 5 based on type of arm used)

QV = VARIABLE DIMENSION ENCUMBRANCE HANDLE-SIDE (see table on page 5 based on type of arm used and the dimensions of door leaf LA1)



DOUBLE DOOR HORIZONTAL DIMENSIONAL DIAGRAM (TWO ERGON DOOR LEAVES)

(example dimensional) LFMD (1700) ESD (1680) LSD (1580) BASE SMALL LARGE LA (782) If a magnetic lock is used, it is recommented to reduce the gap to 3 mm on this side only.



The values shown in this table refer to a **door with frame thickness 50 mm and ddor leaf thickness 45 mm,** if a flat frame with a thickness of 40 mm is used, the LP and LS values increase by 20 mm and the LA and QV values increase by 10 mm.

In this case, it is possible to use track kits for single doors in combination with the dedicated union kit. For specifications, see pages 20-21-22.

LEGEND

LFMD = WALL HOLE DIMENSION

LPD = PASSAGE DIMENSION (LFMD - 210)

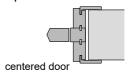
LA = DOOR LEAF WIDTH (LFMD - 136)

LSD = DOOR JAMB OPENING (LFMD - 120)

ESD = OUTER JAMB (LFMD - 20)

QF = FIXED DIMENSION ENCUMBRANCE ARM-SIDE
QV = VARIABLE DIMENSION ENCUMBRANCE HANDLE-SIDE

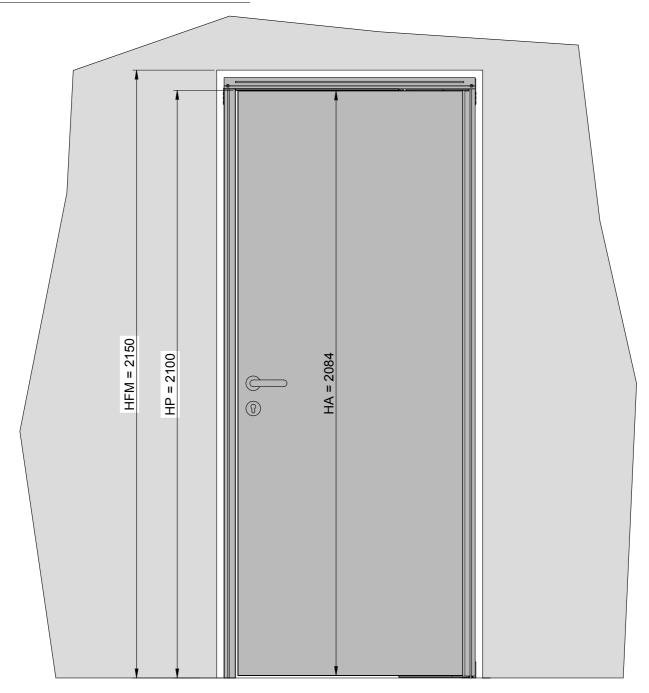
The door leaf can be positioned at the centre with respect to the thickness of the wall.



See page 10 for information on managing wall thickness.



VERTICAL DIMENSIONAL DIAGRAM



VERTICAL DIMENSIONAL								
HFM wall hole height	HP passage height	HA door leaf height						
* 1950	1900	1884						
* 2000	1950	1934						
* 2050	2000	1984	HP = (HFM - 50)					
* 2100	2050	2034	HA = (HFM - 66)					
* 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 rod kit shortnable (see page 19).

For getting rods in special sizes, kindly contact Celegon S.r.l..



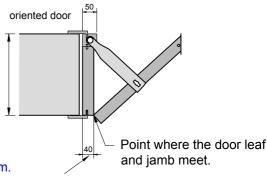
MANAGING WALL THICKNESS

The particular translation movement causes the door to retreat during opening, meaning wall thickness requires special attention to prevent the door leaf from colliding with the surface of the jamb (see drawing below).

The values shown in this page refer to a door leaf thickness 45 mm.

JAMB WITH DOORPOST

thickness max. 180 mm for SMALL arm thickness max. 260 mm for BASE arm thickness max. 390 mm for LARGE arm

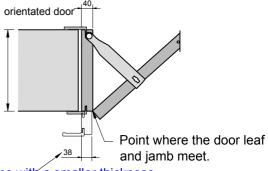


To increase the wall thickness, the jamb thickness can be reduced <40 mm.

By reducing the jamb to less than 40 mm, the wall thickness can beincrease by approximately 30 mm for every 2 mm (e.g. jamb thickness 38 mm = BASE arm wall thickness 290 mm).



thickness max. 60 mm for SMALL arm thickness max. 110 mm for BASE arm thickness max. 135 mm for LARGE arm



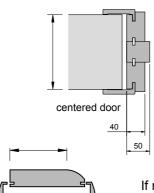
To increase the thickness of the wall, an element can be added to the frame with a smaller thickness than the frame itself (e.g. frame thickness 40 mm add 38 mm element).

In this way it is possible to increase the thickness of the wall by about 30 mm every 2 mm (e.g. adding a 38 mm element = wall thickness BASE bracket 140 mm).

By positioning the door at the centre of the jamb, the maximum wall thickness can be increased.

JAMB WITH DOORPOST

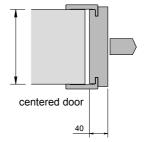
thickness max. 320 mm for SMALL arm thickness max. 480 mm for BASE arm thickness max. 740 mm for LARGE arm



STRAIGHT FRAME
thickness max. 80 mm for SMALL arm

thickness max. 150 mm for BASE arm

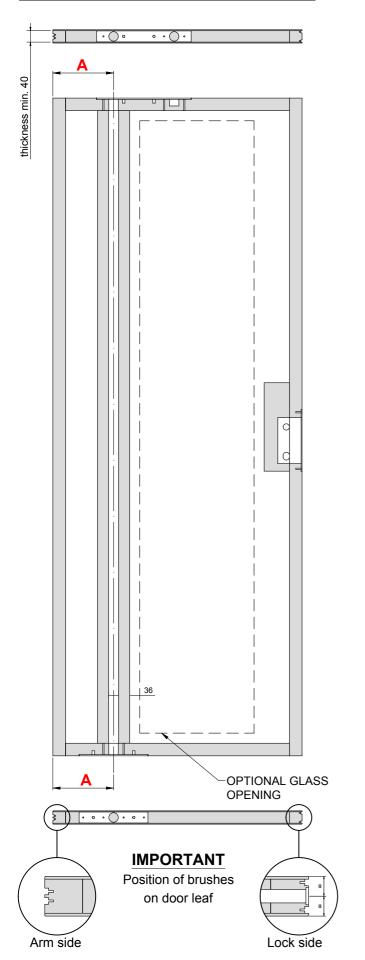
thickness max. 230 mm for LARGE arm

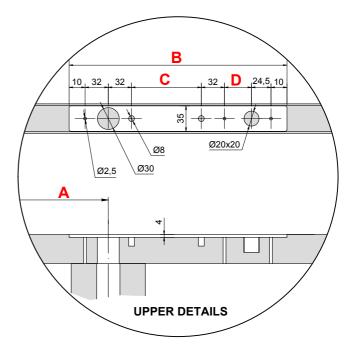


If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.

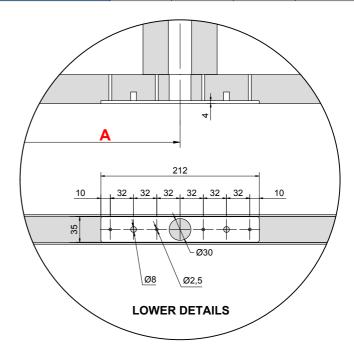


WORKING DOOR LEAF SPECIFICATION





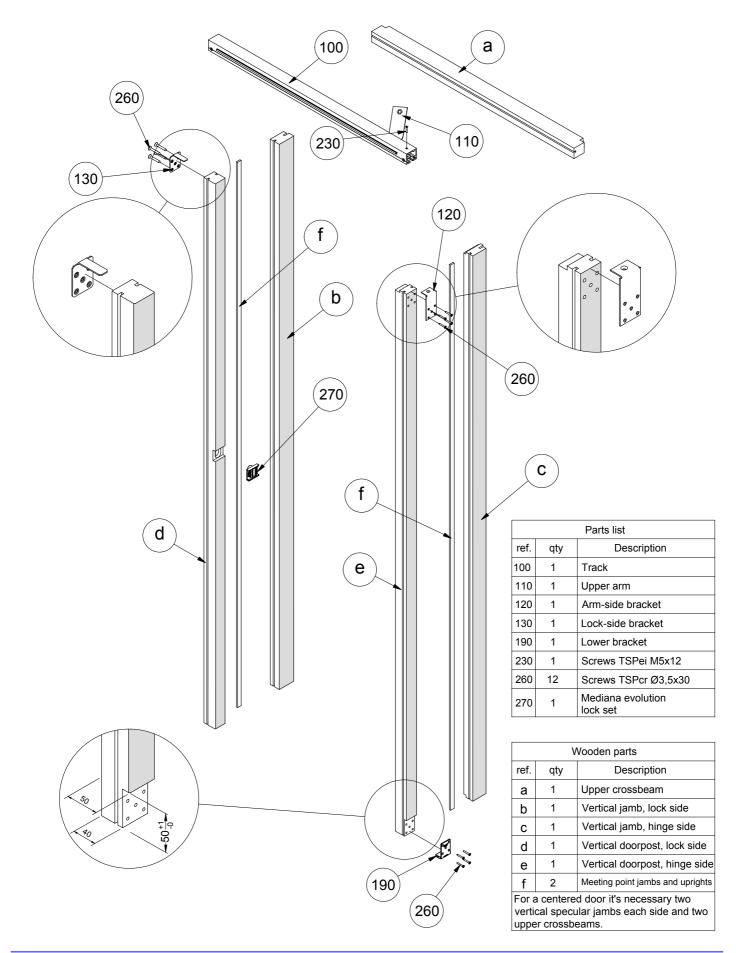
Variable measures accirding to arm used							
	A	В	С	D			
BASE arm	192	276	96	39,5			
SMALL arm	144	227,3	47,3	39,5			
LARGE arm	306	390	224	25,5			



It is recommended to use a lock with facing no larger than 18 mm.

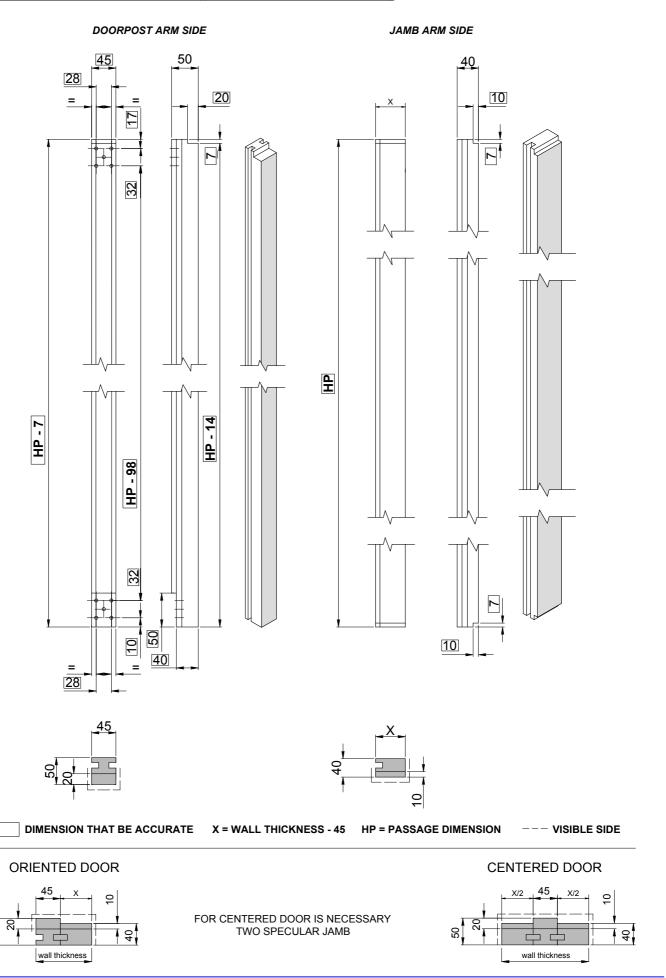


EXPLODED VIEW OF THE FRAME (JAMB WITH DOORPOST)





DETAILS FOR VERTICAL FRAME (JAMB WITH DOORPOST)

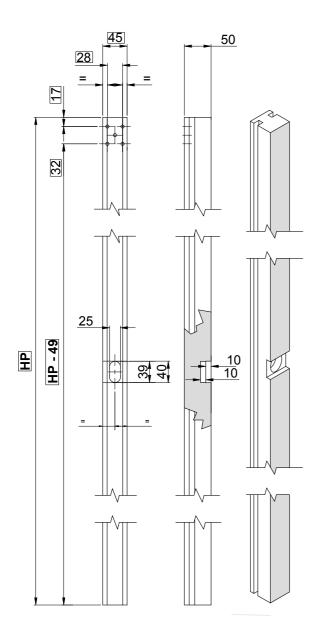


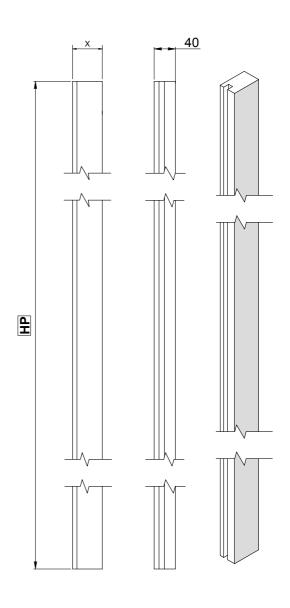


DETAILS FOR VERTICAL FRAME (JAMB WITH DOORPOST)

DOORPOST LOCK SIDE

JAMB LOCK SIDE



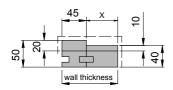






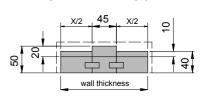
DIMENSION THAT BE ACCURATE X = WALL THICKNESS - 45 HP = PASSAGE DIMENSION --- VISIBLE SIDE

ORIENTED DOOR



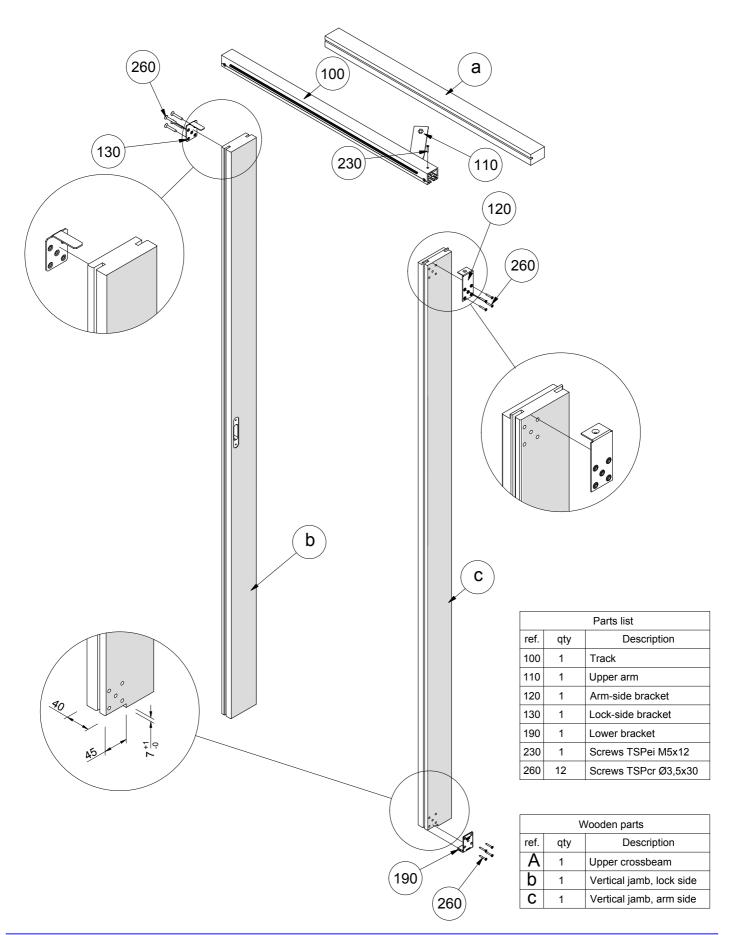
FOR CENTERED DOOR IS NECESSARY TWO SPECULAR JAMB

CENTERED DOOR



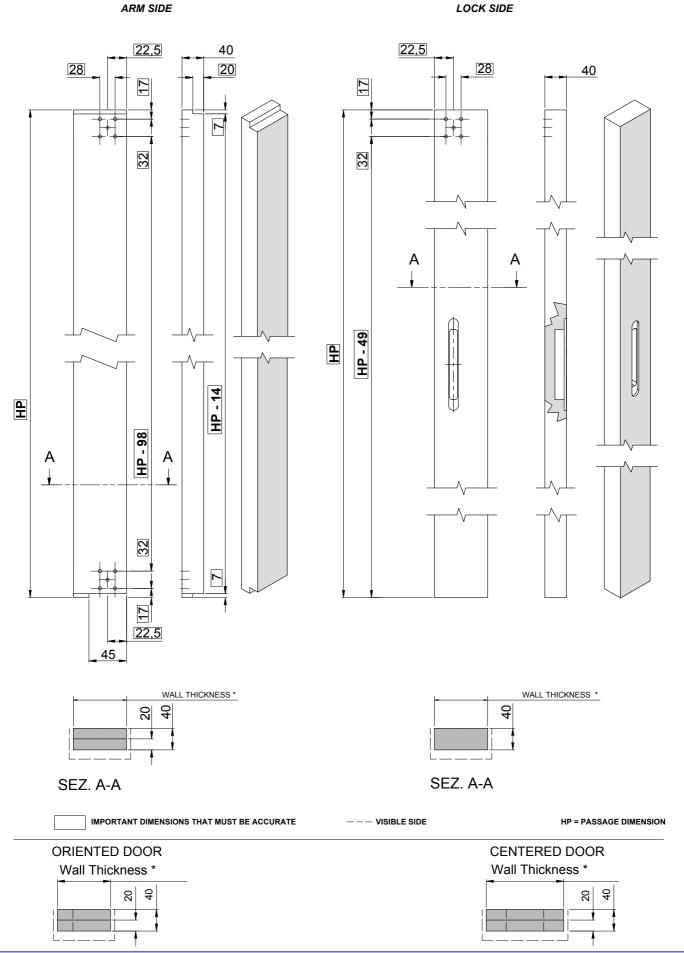


EXPLODED VIEW OF THE FRAME (STRAIGHT JAMB)





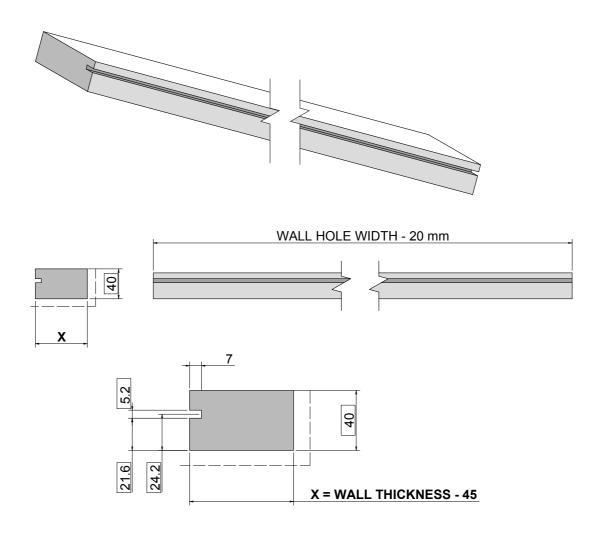
DETAILS FOR VERTICAL FRAME (STRAIGHT JAMB)

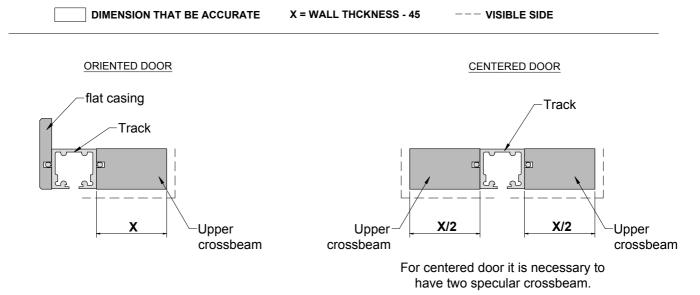




DETAILS FOR UPPER CROSSBEAM

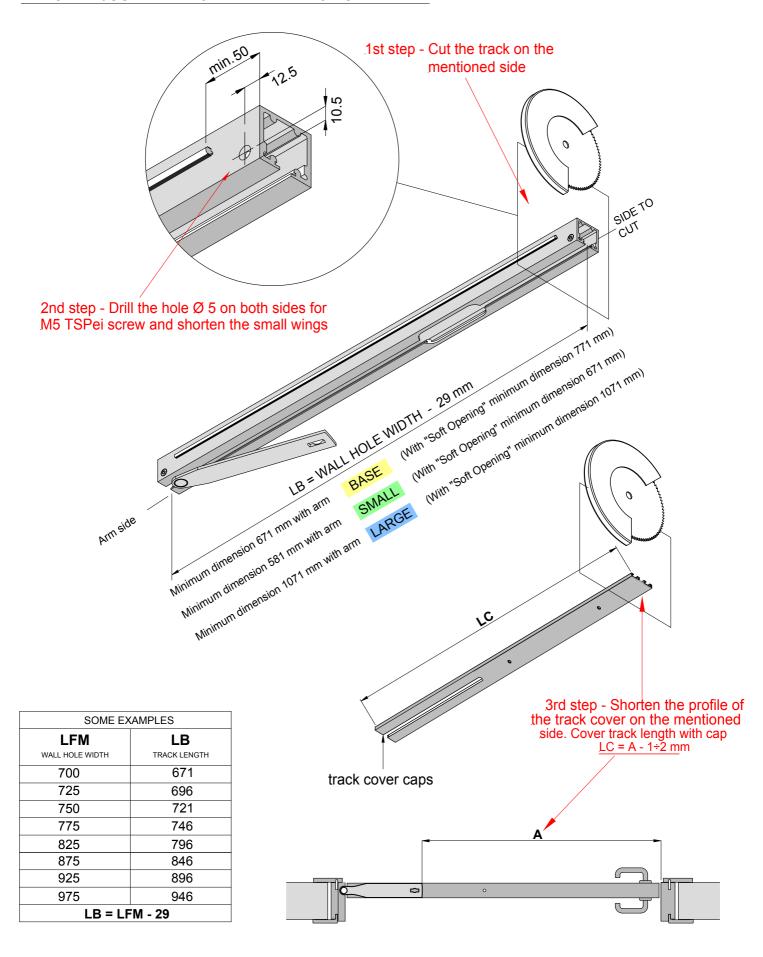
VALID FOR FRAME WITH DOORPOST AND FLAT FRAME







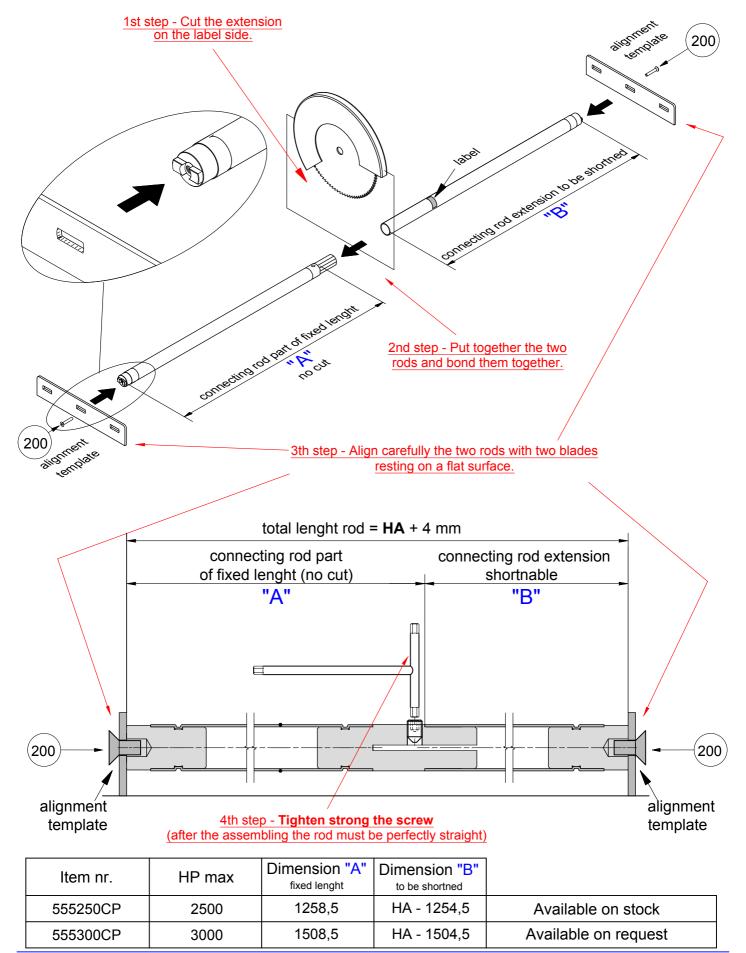
TRACK ADJUSTMENT TO THE WIDTH NOT STANDARD





ROD KIT SHORTNABLE

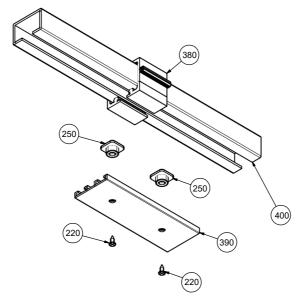
ADJUSTMENT OF THE CONNECTING ROD FOR NOT STANDARD HEIGHTS



1



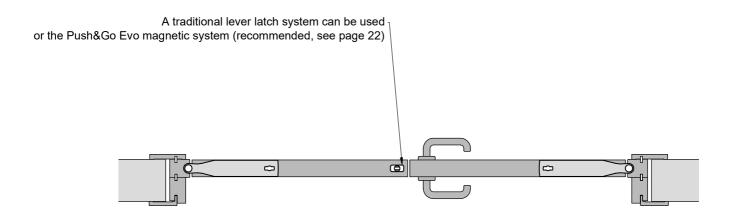
KIT UNION TRACKS FOR DOOR WITH TWO DOOR LEAVES ERGON LIVING SYSTEM



Item number 564000

	Part list						
ref.	ef. qty Description						
220	2	Screw TSPcr Ø3X10					
250	2	Track cover installation insert					
380	1	Track extension					
390	1	Track cover extension					
400	1	Track graft junction					

12



N.B.: for the limits of the wall thickness see page 10 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.

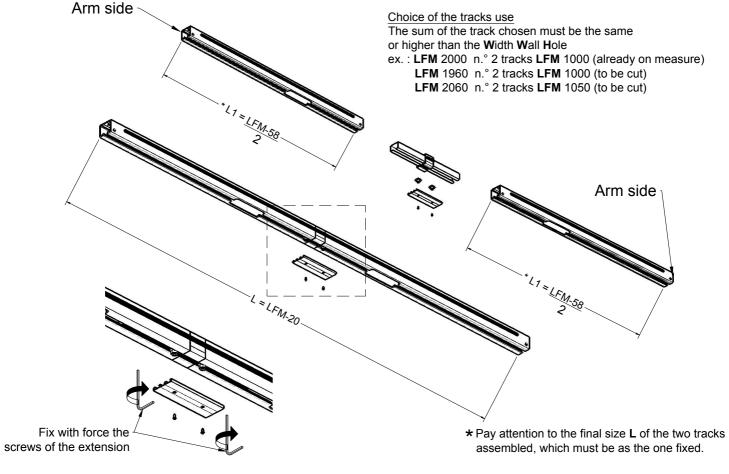
LFM minimum 2300 mm. with **LARGE** arm, with "Soft Opening" **LFM** minimum 2300 mm.

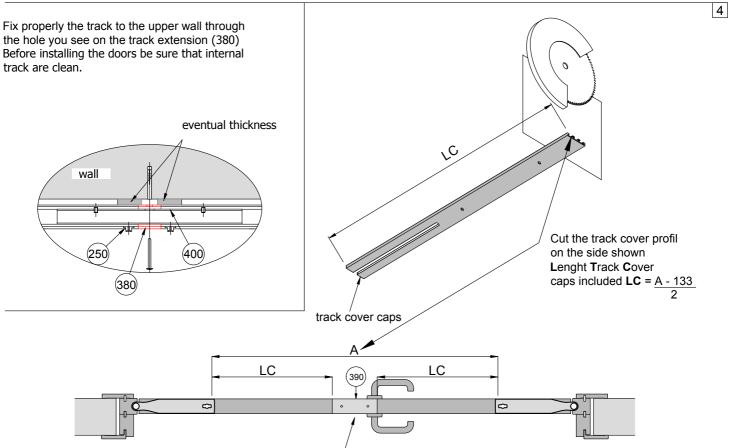
For dimensions smaller than those indicated, contact Celegon S.r.l.

3



KIT UNION TRACKS FOR DOOR WITH TWO DOOR LEAVES ERGON LIVING SYSTEM





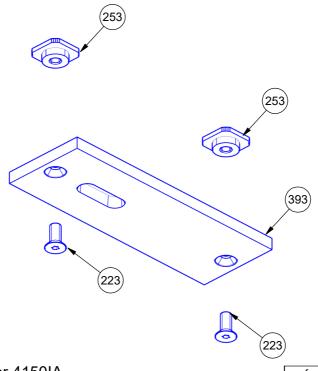
OR
For the Push&Go EVO system use the dedicated kit, see next page.

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



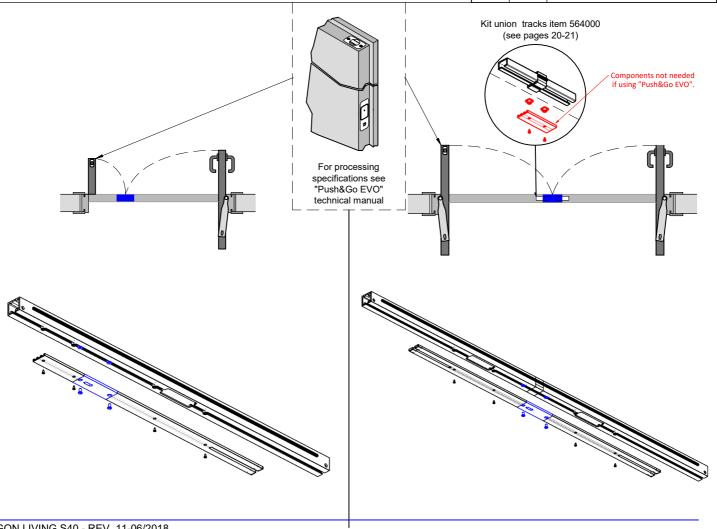
MAGNETIC STRIKER PLATE FOR "Push&Go EVO"

For use with double door leaves with Ergon Living system.



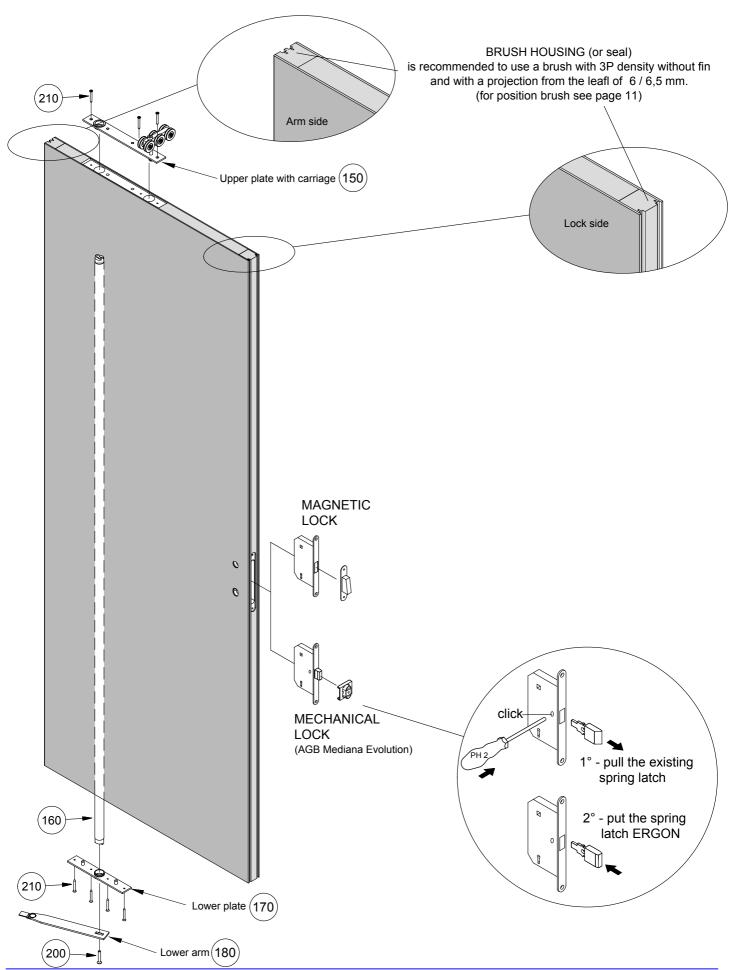
Silver item number 4150IA Black item number 4150IN

ref.	qty	Parts list
223	2	Screw TSPEI M5x12
253	2	Plate fixing insert
393	1	Magnetic striker plate



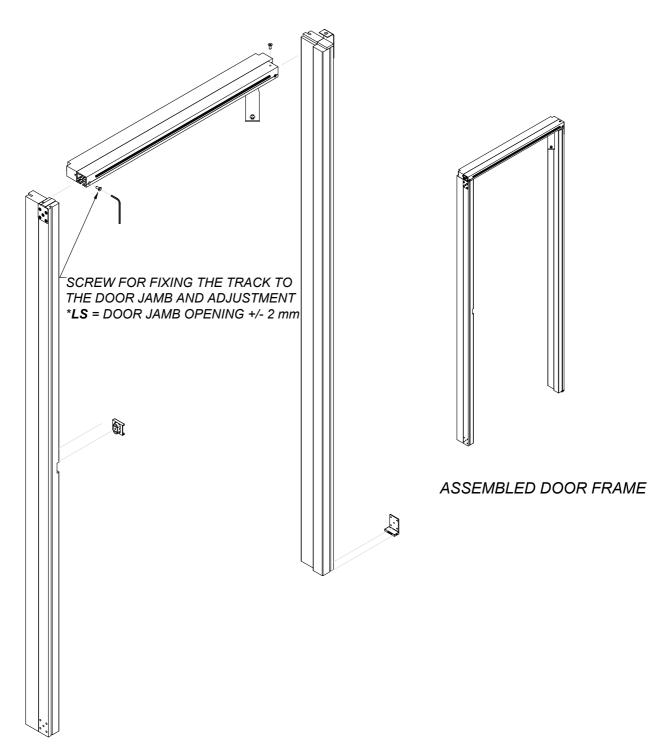


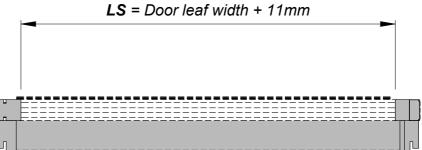
ASSEMBLING THE HARDWARE IN THE DOOR LEAF





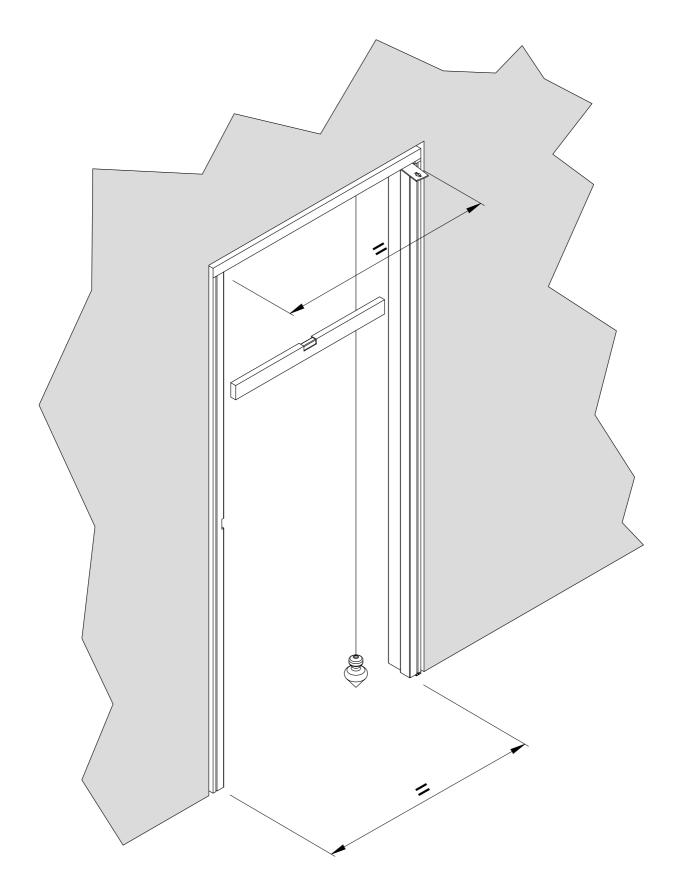
ASSEMBLY FRAME AND TRACK





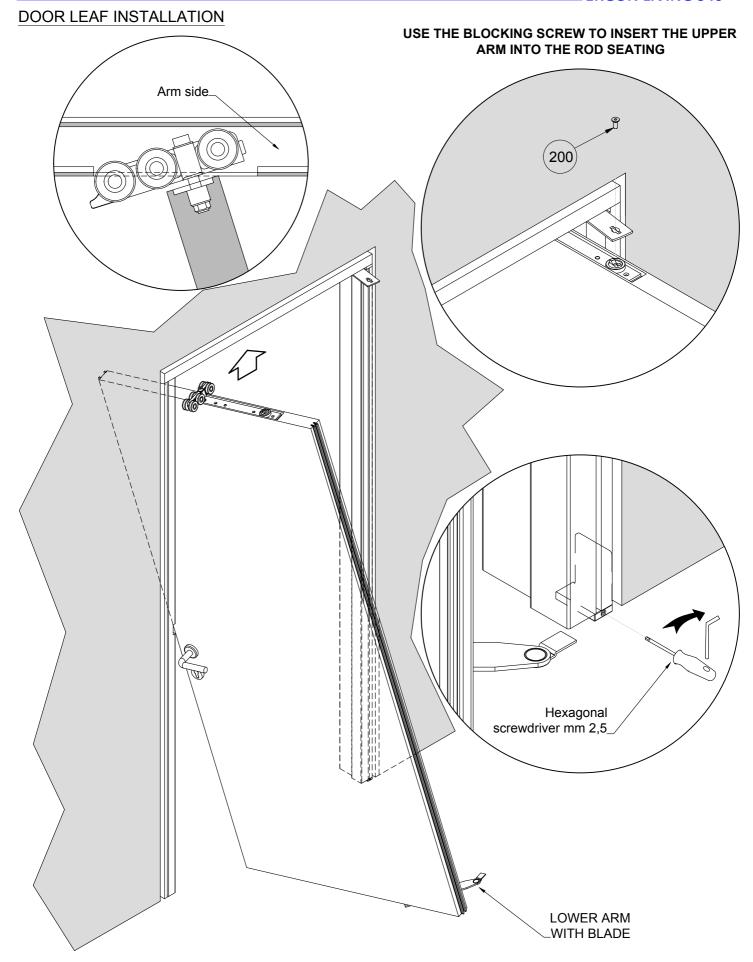


COMPLETE FRAME INSTALLATION



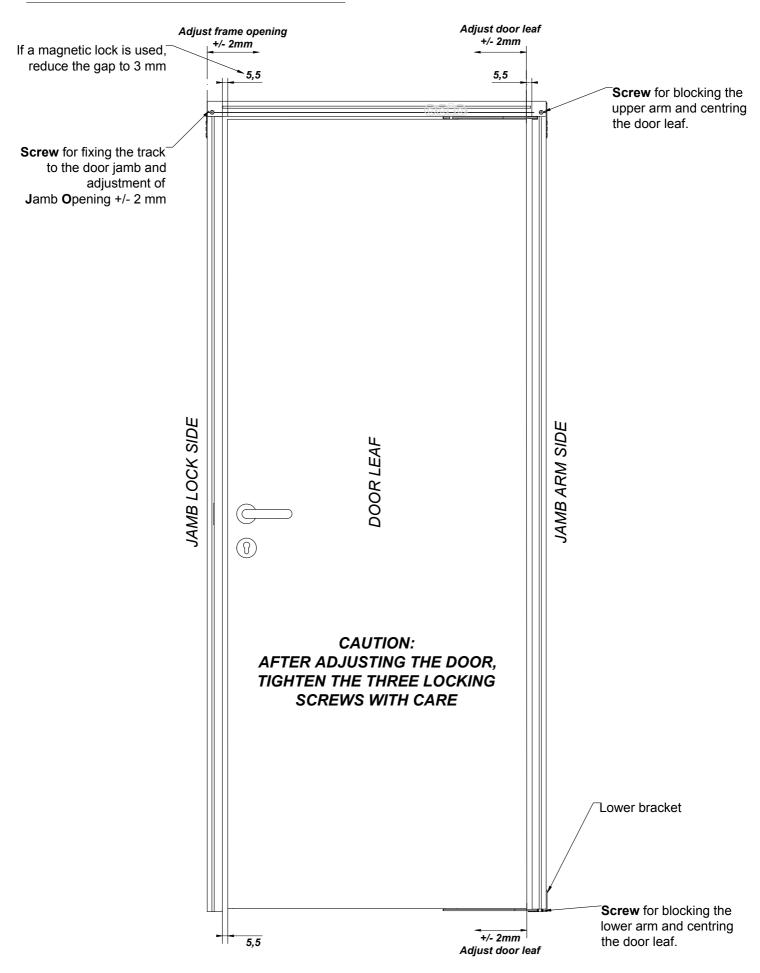
NOTE: THE LEVELLING OF THE TRACK AND THE PLUMB OF THE DOOR JAMBS MUST BE PRECISE





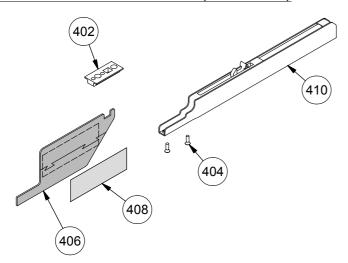


ADJUSTING DOOR LEAF AND DOOR JAMB



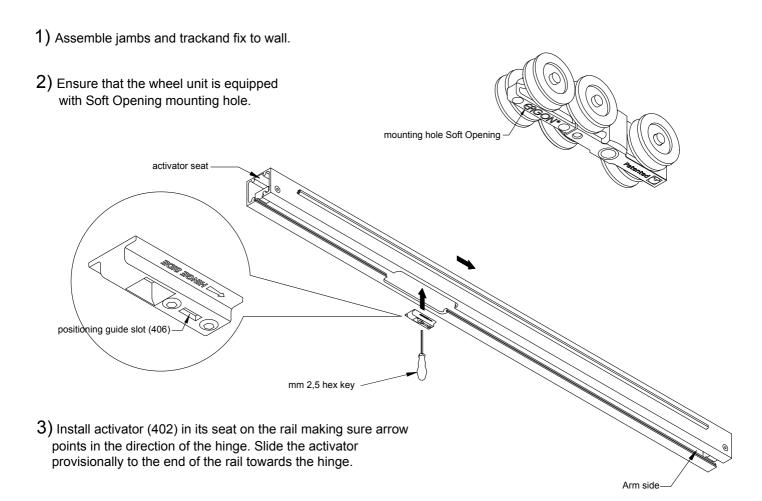


"SOFT OPENING" INSTALLATION (OPTIONAL)



	Parts list						
ref.	qty	Description					
402	1	Activator					
404	2	Screw TSP+ M3x8 - ISO 7046					
406	1	Activator positioning template					
408	1	Sticker					
410	1	Soft Opening					

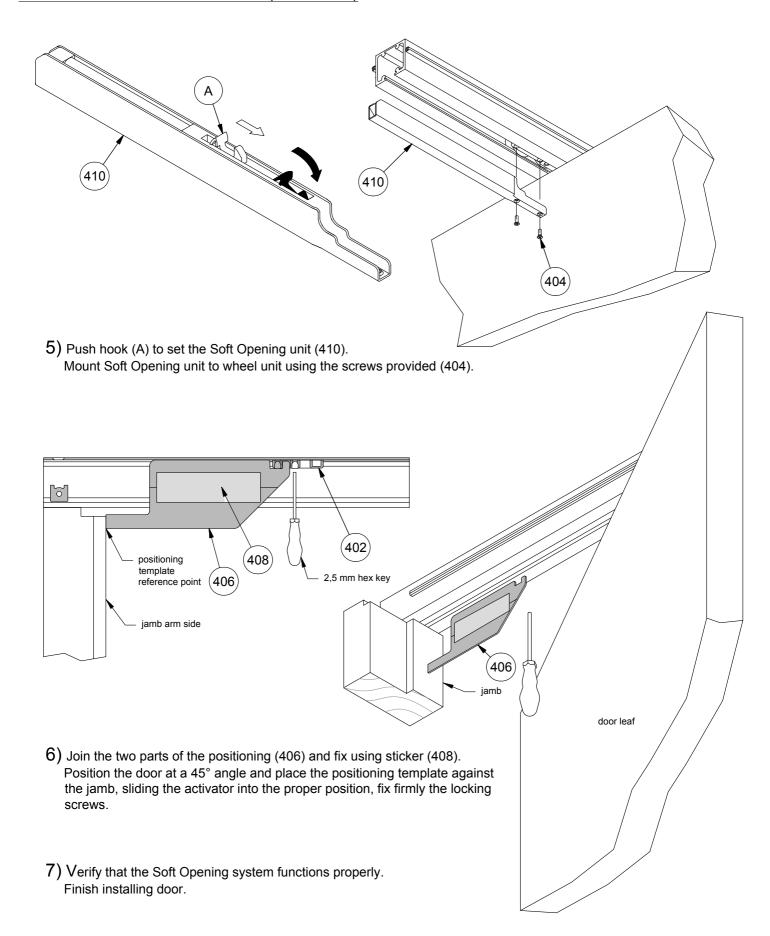
Installation



- 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.



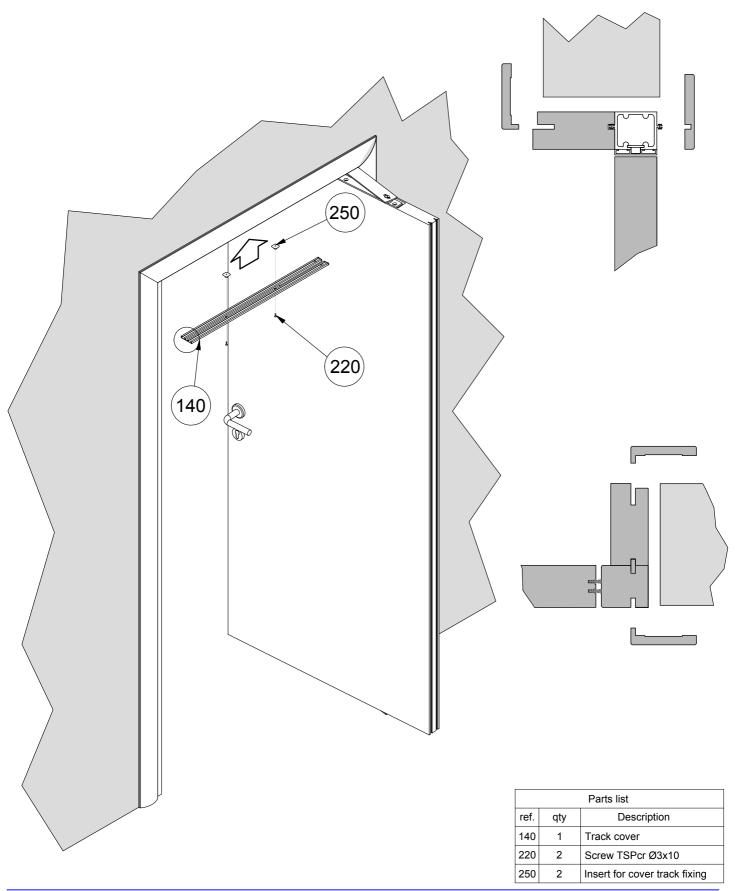
"SOFT OPENING" INSTALLATION (OPTIONAL)





FRAMES AND TRACK COVER INSTALLATION

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.







NOTE			
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The company reserved the right to make, at any time, without prior notice, all technical changes it considers appropriate to improve the quality and the correct functionality of the products.

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