



# TECHNICAL MANUAL - CONSTRUCTION AND INSTALLATION

swinging sliding door with connecting rod on frame

JAMB THICKNESS 1 15/16"

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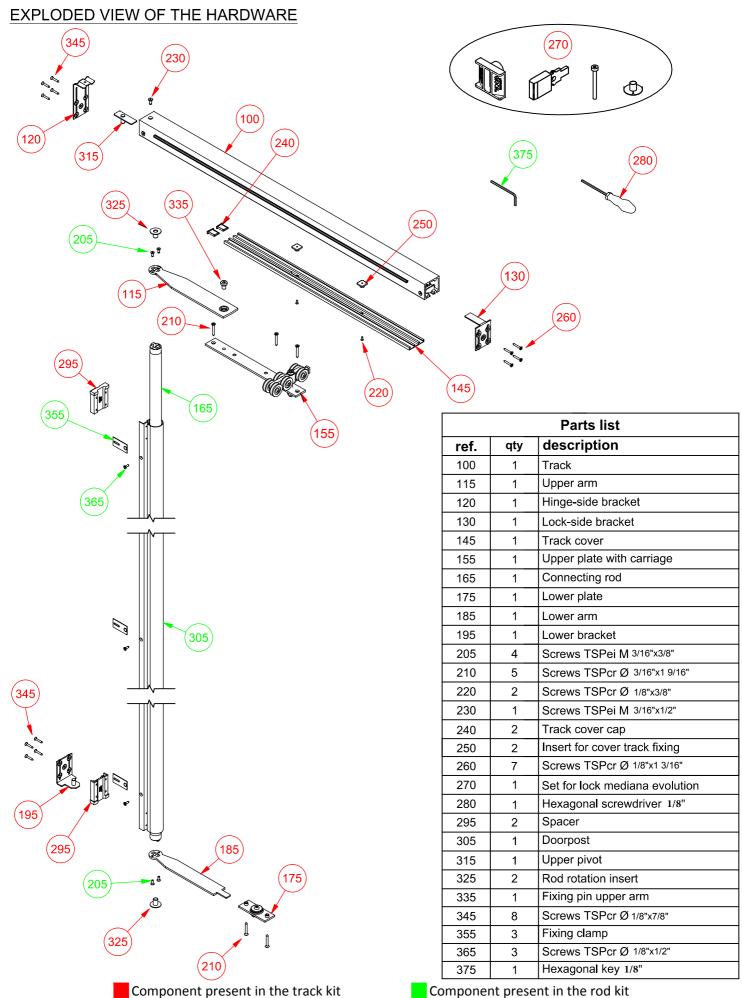




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#### INTRODUCTION

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 1 3/8" and a maximum weight of 154 lbs.

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:

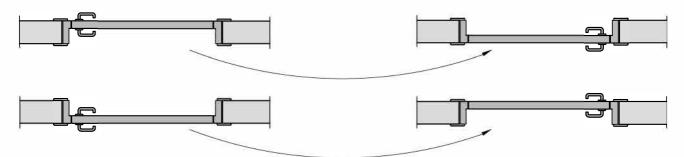
- . "BASE": especially suitable for LFM (wall hole opening) from 31 1/2" to 43 5/16";
- . "SMALL": especially suitable for LFM (wall hole opening) from 24 1/32" to 31 1/2";
- . "LARGE": especially suitable for LFM (wall hole opening) from 43 5/16" to 57 1/16";

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 <u>wall hole width</u>, the T.E. series is available in different standard dimensions for each kind of arm (BASE, 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 16). 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 17) and the connecting rod (page 18).



#### FRAME SPECIFICATION

#### 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.

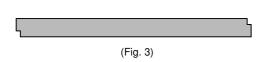
#### RABBET DOOR WITH ONE-WAY OPENING

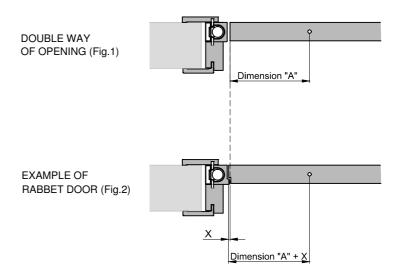
In some home's rooms can be more suitable using rabbet doors with **ERGON**, this is possible by putting some rabbets on the vertical door sides. In this way there's not more the double-way opening, but there is a better acustic isolation inside the room by using a gasket for the tightness.

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.

In the drawings on the right side there is examples (fig. 2) of **ERGON** rabbet door. In order to prepare the rabbets on the panel and the jamb (fig. 2), it's necessary that both of them are specular (fig. 3), it's important to pay attention to the dimension "X" which has to be added to the "Dimension A", mentioned at page 11 of the present manual instruction.



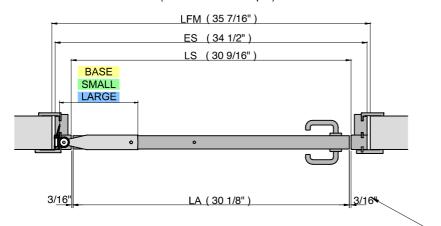




min. 1 3/8"

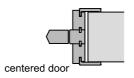
#### SINGLE DOOR HORIZONTAL DIMENSIONAL DRAWING

#### (dimensional example)



LP (29 1/8")

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

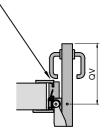


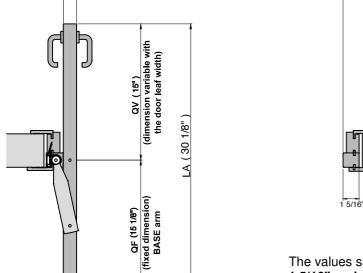
See page 10 for information on managing wall thickness

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

#### CAUTION:

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





The values shown in this table refer to a door with frame thickness 1 5/16" and door thickness 1 3/4".

	Ë	ш	$\exists$			WITH DIMENSION				
	LARGE		SMALL	LFM WALL HOLE WIDTH	LP PASSAGE DIMENSION	<b>LA</b> DOOR LEAF WIDTH	FIXED DI	-	1	<b>V</b>
			•	24 1/32"	17 11/16"	18 11/16"	11 1	/4"	7 1/	/2"
			٠	25 9/16"	19 5/16"	20 1/4"	11 1	/4"	9 1	/16"
Minimum dimension for "Soft Opening" SMALL arm		•	•	27 9/16"	21 1/4"	22 1/4"	15 1/8"	11 1/4"	7 1/8"	11 1/32"
		•		29 1/2"	23 1/4"	24 3/16"	15 1/8"	11 1/4"	9 1/8"	13"
Minimum dimension for "Soft Opening" BASE arm		•	•	31 1/2"	25 3/16"	26 3/16"	15 1/8"	11 1/4"	11 1/16"	14 15/16"
		•		33 7/16"	27 3/16"	28 1/8"	15 1/	8"	13 ′	1/16"
		•		35 7/16"	29 1/8"	30 1/8"	15 1/	8"	1:	5"
		•		37 3/8"	31 1/8"	32 1/16"	15 1/	B"	16 1	5/16"
		•		39 3/8"	33 1/16"	34 1/16"	15 1	8"	18 1	15/16"
		•		41 5/16"	35 1/16"	36 1/32"	15 1		20	
Minimum dimension for "Soft Opening" LARGE arm		•		43 5/16"	37 1/64"	38"	24 1/32"	15 1/8"	13 31/32"	22 7/8"
				45 1/4"	38 31/32"	39 15/16"	24 1/	32"	15 15	5/16"
	•			47 1/4"	40 15/16"	41 15/16"	24 1	/32"	17 15	5/16"
LEGEND	•			49 3/16"	42 15/16	43 7/8"	24 1	/32"	19 7	7/8"
I FM - WALL HOLE WIDTH	•			51 3/16"	44 7/8"	45 7/8"	24 1	/32"	21 7	7/8"
<b>LFM</b> = WALL HOLE WIDTH				53 1/8"	46 7/8"	47 13/16"	24 1	/32"	23 1	3/16"
<b>LP</b> = PASSAGE DIMENSION (LFM - 6 5/16")	*			55 1/8"	48 13/16"	49 13/16"	24 1	/32"	25 1	13/16"
<b>LA</b> = DOOR LEAF WIDTH ( LFM - 5 5/16" )	•			57 1/6"	50 13/16"	51 3/4"	24 1	/32"	27 3	3/4"

- = Available standard dimensions
- = Several examples of dimensions that can be obtained by shortening the track. Intermediate dimensions are also possible.

For other custom dimensions, contact Celegon in regards to feasibility

= OUTER JAMB ( LFM - 4 7/8")

= DOOR JAMB OPENING (LFM - 124)

= FIXED DIMENSION ENCUMBRANCE ARM-SIDE = VARIABLE DI MENSION ENCUMBRANCE HANDLE-SIDE

LP LA LS

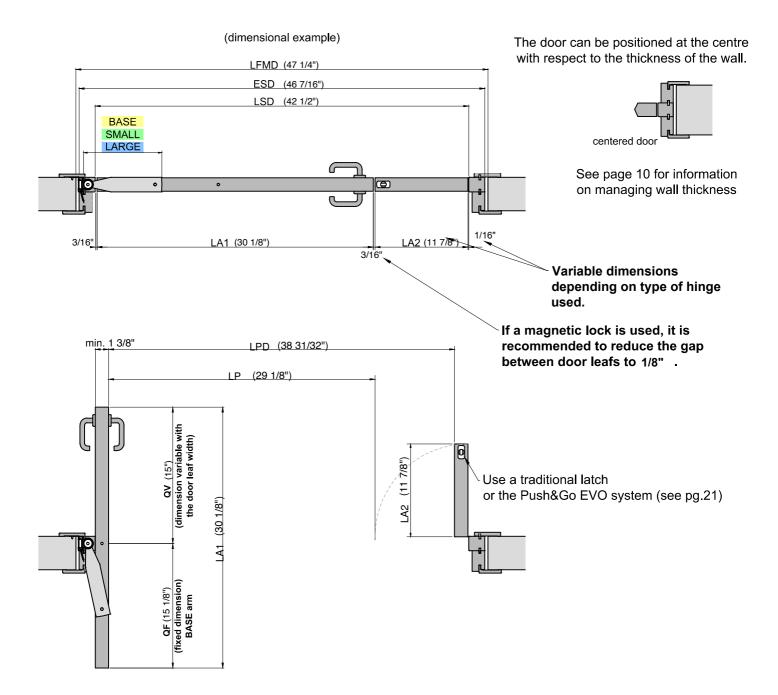
ES

QF

ΩV



#### DOUBLE DOOR HORIZONTAL DIMENSIONAL DRAWING (ERGON DOOR LEAF AND RABBET DOOR)



The values shown in the above diagram refer to a door with frame thickness 1 15/16" and door thickness 1 3/4".

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 will be supplied based on the dimensions provided.

#### LEGEND

**LFMD** = WALL HOLE WIDTH

LPD = PASSAGE DIMENSION (LFMD - 8 1/4")
LA1 = DOOR LEAF WIDTH (see table on page 5)

**LA2** = DOOR LEAF WIDTH ( LFMD - LA1 - 5 1/4"variable depending on door LA1 dimensions and type of hinge used )

**LSD** = DOOR JAMB OPENING (LFMD - 4 3/4")

**ESD** = OUTER JAMB (LFMD - 13/16")

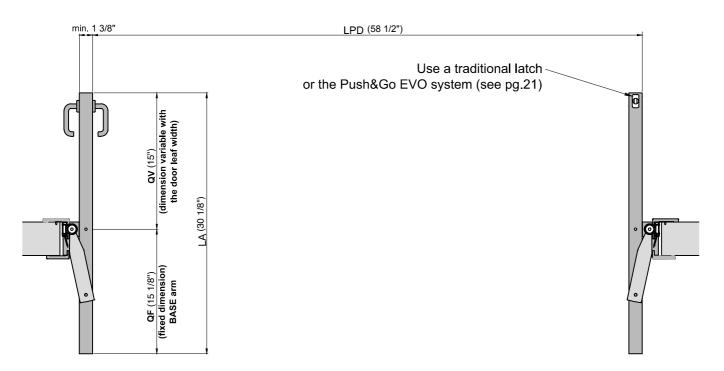
**QF** = FIXED DIMENSION ENCUMBRANCE ARM-SIDE ( see table on page 5 based on type of arm used )

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



#### DOUBLE DOOR HORIZONTAL DIMENSIONAL DRAWING (DOUBLE ERGON DOOR LEAVES)

# (dimensional example) LFMD (66 9/16") ESD (66") LSD (62 1/16") BASE SMALL LARGE If a magnetic lock is used, it is recommended to reduce the gap between door leafs to 1/8".



The values shown in the above diagram refer to a door with frame thickness 1 15/16" and door thickness 1 3/4"

In this case, it is possible to use track kits for single doors in combination with the dedicated union kit. For specifications, see pages 19-20-21.

#### LEGEND

**LFMD** = WALL HOLE WIDTH

LPD = PASSAGE DIMENSION ( LFMD - 8 1/16")

LA = DOOR LEAF WIDTH ( LFMD - 6 5/16")

**LSD** = DOOR JAMB OPENING ( LFMD - 4 1/2")

**ESD** = OUTER JAMB (LFMD - 9/16")

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

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

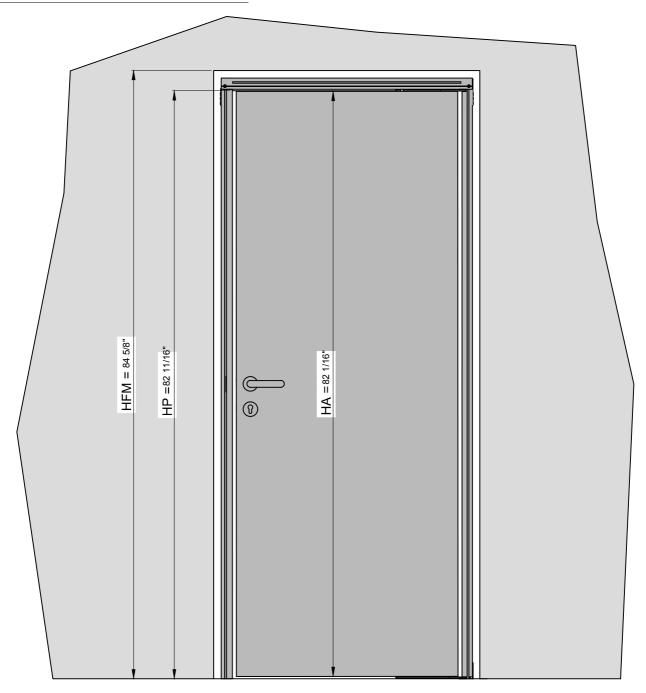


centered door

See page 10 for information on managing wall thickness



# DIMENSIONAL VERTICAL DRAWING



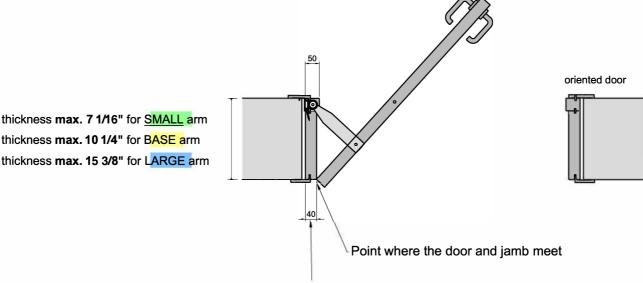
	VERTICAL DIMENSION						
HFM wall hole height		HP passage dimension	HA door leaf height				
*	76 3/4"	74 13/16"	74 3/16"				
*	78 3/4"	76 3/4"	76 1/8"				
*	80 11/16"	78 3/4"	78 1/8"	HP = (HFM -1 15/16" HA = (HFM -2 5/8")			
*	82 11/16"	80 11/16"	80 1/16"	] HA = (HFIVI = 2 3/4 )			
*	84 5/8"	82 11/16"	82 1/16"				
*	86 5/8"	84 5/8"	84"				
*	88 9/16"	86 5/8"	86"				

<sup>\*</sup> Available standard dimensions; it is possible to have other dimensions, even intermediate dimensions, by adjusting the doorpost (see page 17) and the connecting rod (see page 18). For getting rods in special sizes, kindly contact Celegon s.r.l..



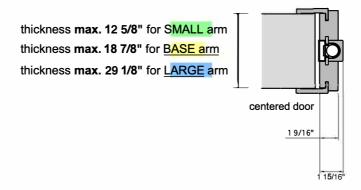
#### MANAGING WALL THICKNESS

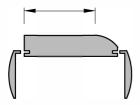
The particular translation movement causes the door to retreat during opening, meaning wall thickness requires special attention to prevent the door from colliding with the surface of the jamb (see drawing below).



To increase the wall thickness, the jamb thickness can be reduced <1 9/16". By reducing the jamb to less than 1 9/16", the wall thickness can be increased by approximately 1 3/16" for every 1/16" (e.g. jamb thickness 1 1/2" = BASE arm wall thickness 11 7/16").

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

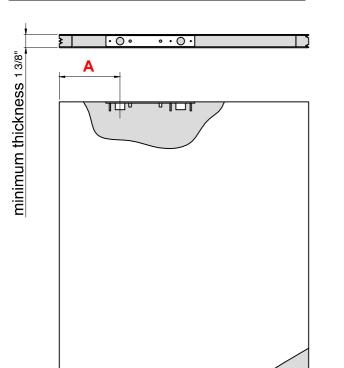


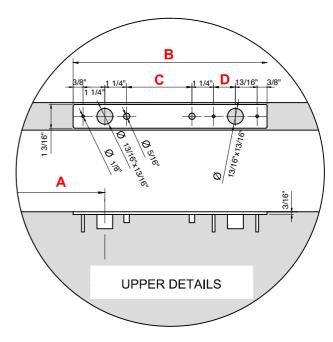


If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.

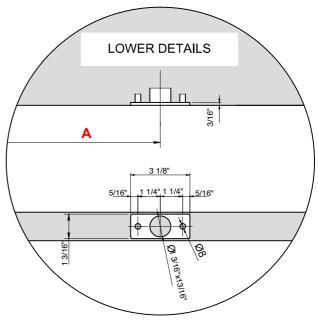


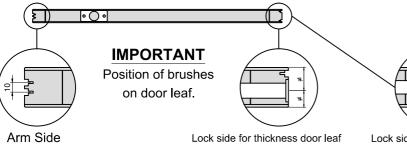
#### WORKING DOOR LEAF SPECIFICATION





Variable measures according to arm used				
	A	В	С	D
BASE arm	7 1/8"	10 7/8"	3 3/4"	1 3/4"
SMALL arm	5 3/16"	8 7/8"	1 3/4"	1 3/4"
LARGE arm	11 1/2"	15 5/16"	8 13/16"	1 1/8"





1 3/8" ÷ 1 1/2"

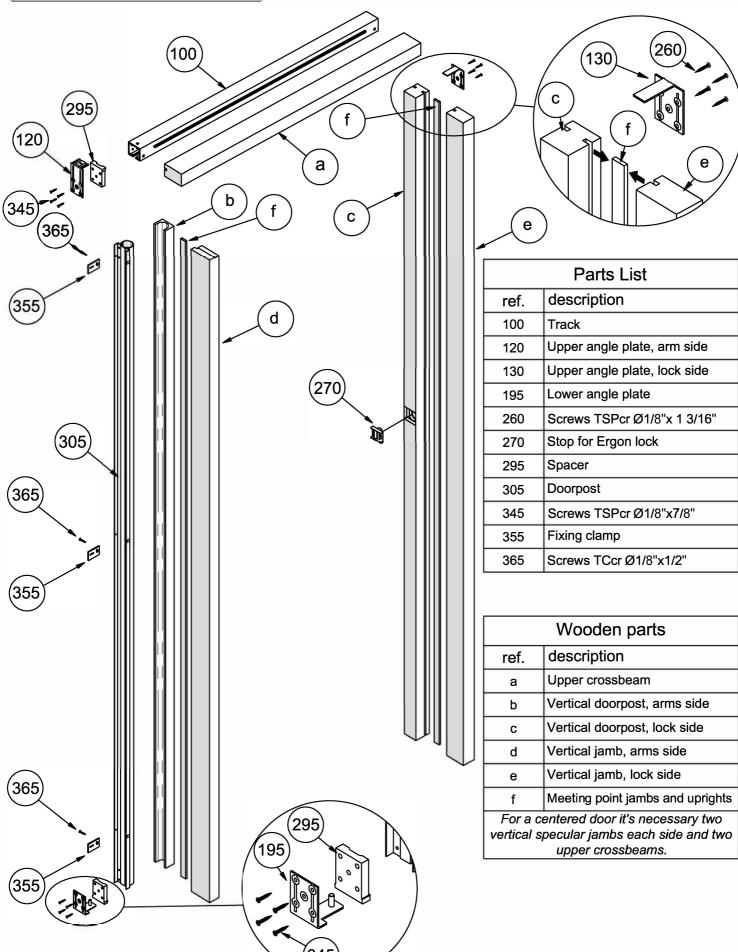
О

Lock side for thikness door leaf 1 9/16"÷1 15/16" Lock side for thickness door leaf

It is recommended to use a lock with facing no larger than 11/16"



#### EXPLODED VIEW OF THE FRAME



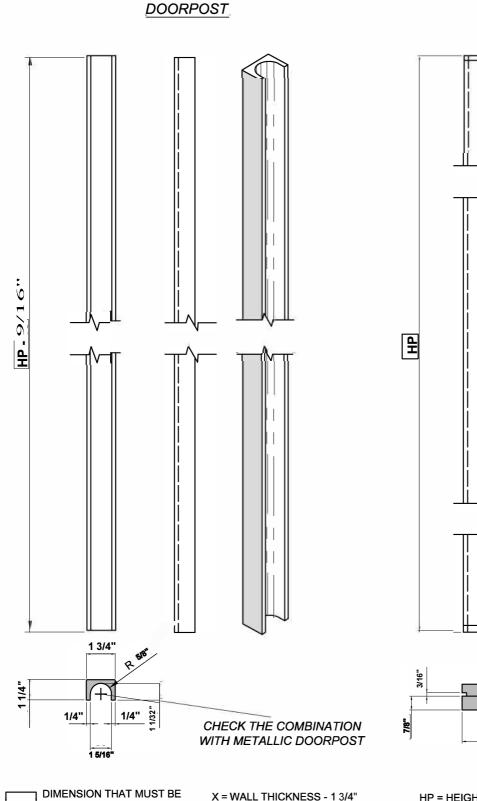
HP 9/16"

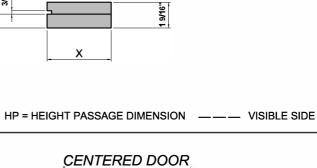
<u>JAMB</u>

7/8"

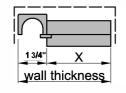


#### DETAILS FOR VERTICAL FRAME ARM SIDE



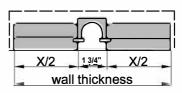


#### ORIENTED DOOR



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

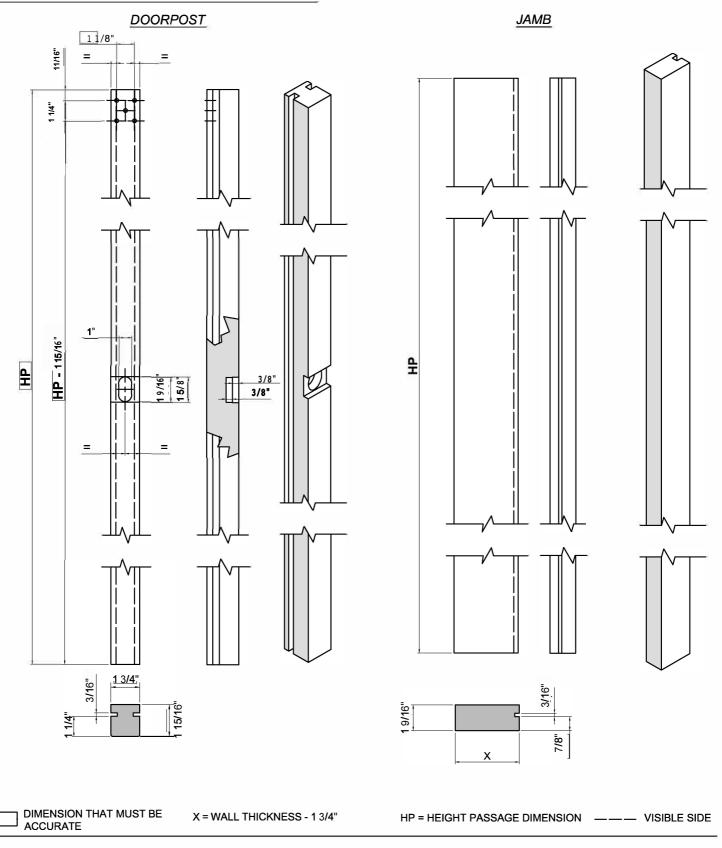
X = WALL THICKNESS - 1 3/4"



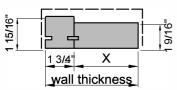
**ACCURATE** 



# DETAILS FOR VERTICAL FRAME LOCK SIDE

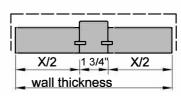


#### **ORIENTED DOOR**



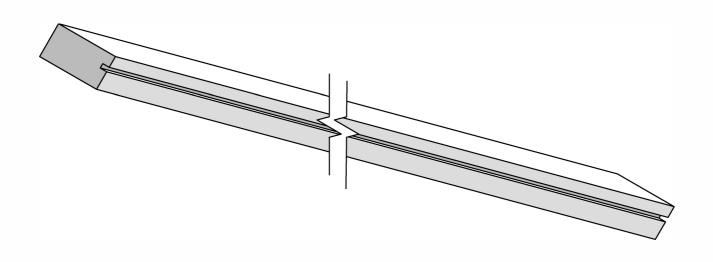
 $\frac{1}{50}$  When the door is in the middle of the  $\frac{1}{50}$  wall, you must have two specular jambs

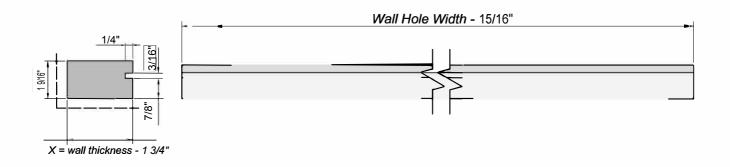
### CENTERED DOOR





#### DETAILS FOR THE UPPER CROSSBEAM

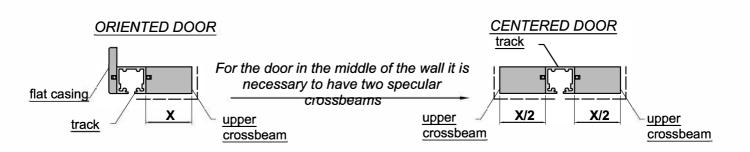




DIMENSION THAT MUST BE ACCURATE

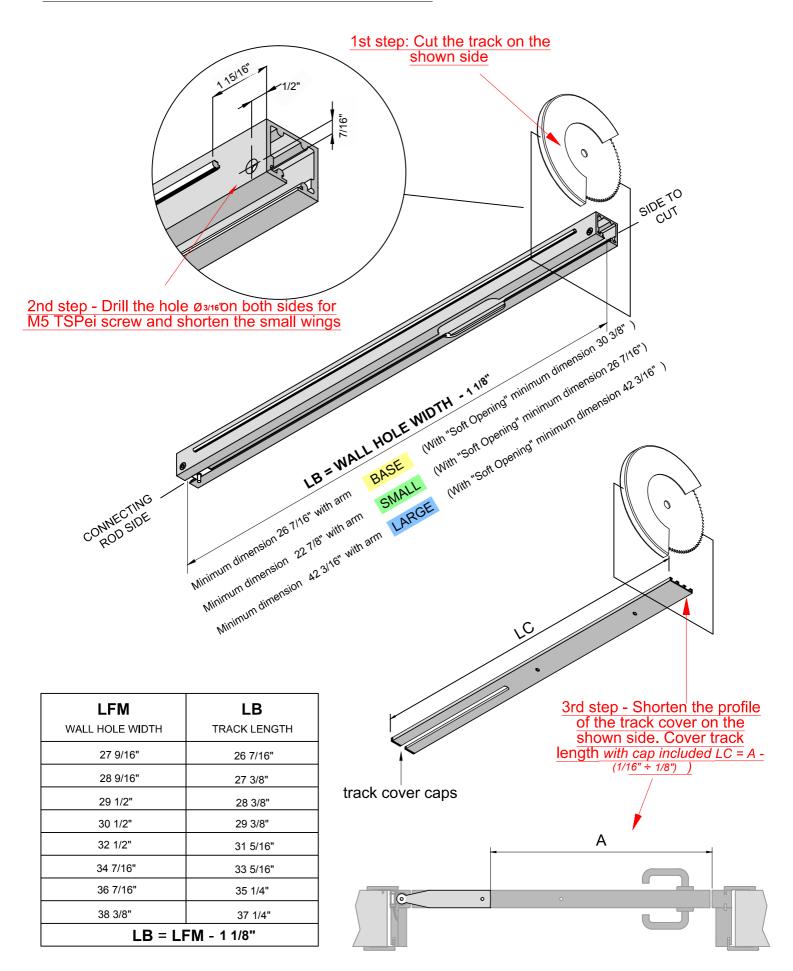
X = WALL THICKNESS - 1 3/4"

--- VISIBLE SIDE





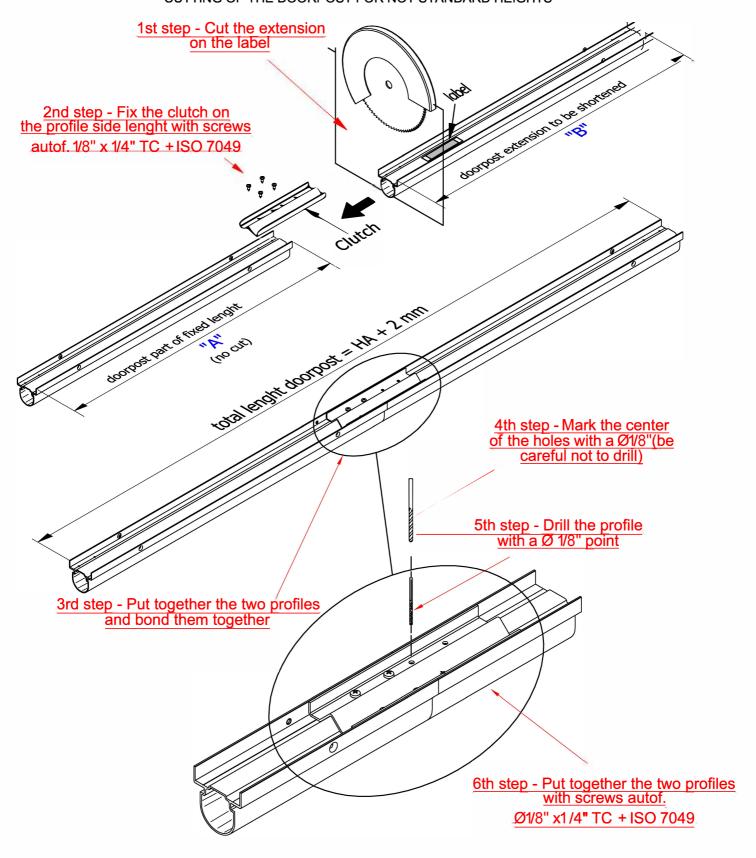
#### TRACK ADJUSTMENTTO THE WIDTH OF THE DOOR





#### **ROD KIT SHORTNABLE**

#### CUTTING OF THE DOORPOST FOR NOT STANDARD HEIGHTS

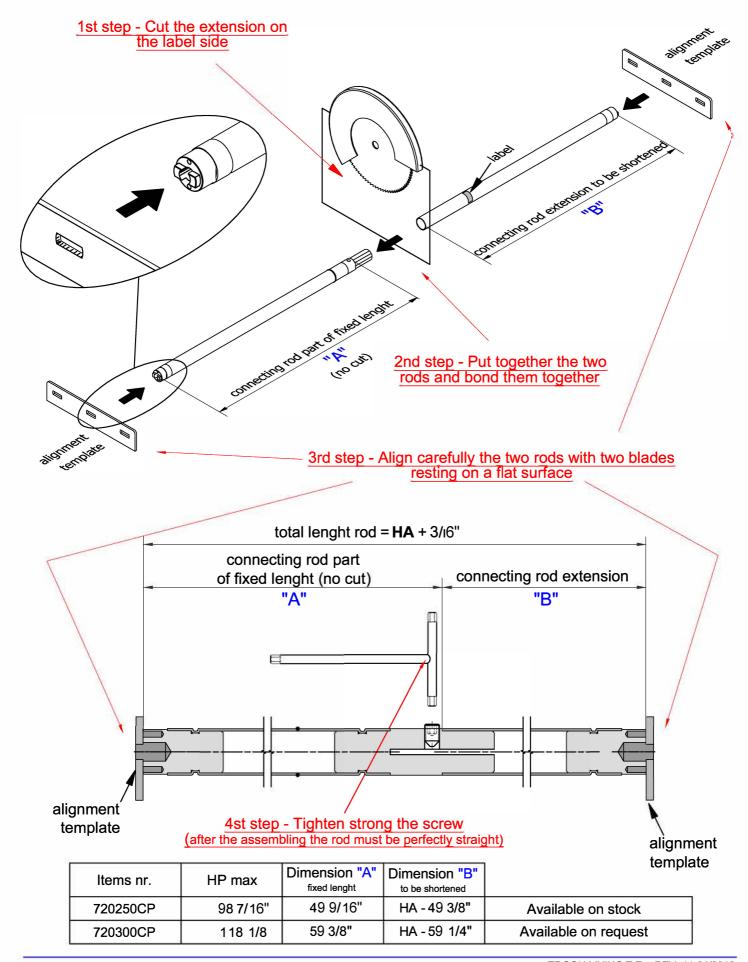


Item nr.	HP max	Dimension "A"	Dimension "B" to be shortnable	
720250CP	98 7/16"	48 15/16"	HA - 48 7/8"	Available on stock
720300CP	118 1/8"	58 3/4"	HA - 58 11/16"	Available on request



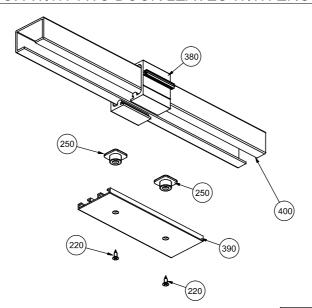
#### ROD KIT SHORTNABLE

#### CUTTING OF THE CONNECTING ROD FOR NOT STANDARD HEIGHTS





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

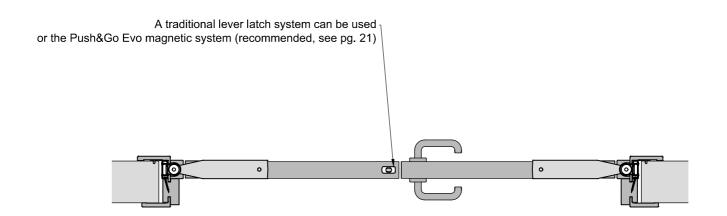


Item number 564000

	Part list					
rif.	q.ty	DESCRIPTION				
220	1	Screw TSPcr Ø 1/8" x 3/8"				
250	2	Track cover installation insert				
380	1	Track extension				
390	1	Track cover extension				
400	1	Track graft junction				

T

1



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

LFM minimum 63" with BASE arm, with "Soft Opening" LFM minimum 66 15/16"

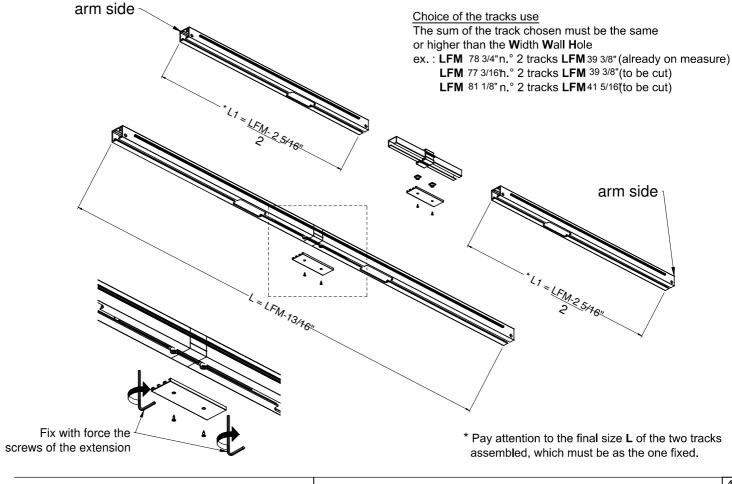
LFM minimum 55 1/8" with SMALL arm, with "Soft Opening" LFM minimum 59 1/16"

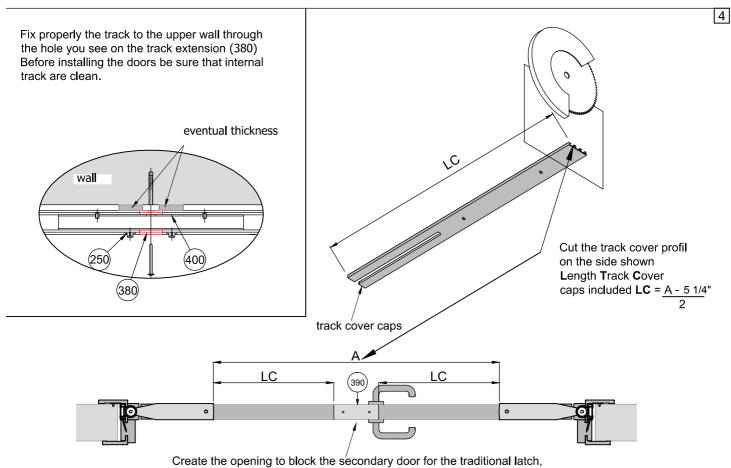
LFM minimum 90 9/16" with LARGE arm, with "Soft Opening" LFM minimum 90 9/16"

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



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





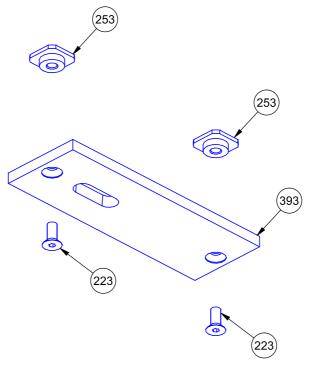
ERGON LIVING T.E. - REV. 11-04/2018

OR



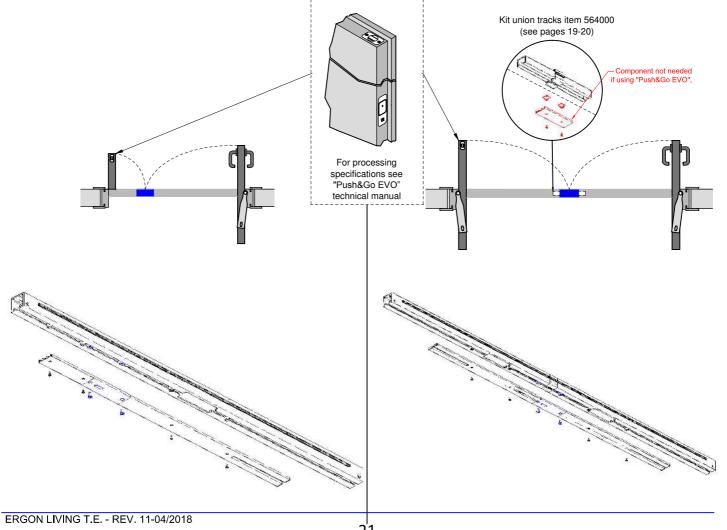
# MAGNETIC STRIKER PLATE FOR "Push&Go EVO"

For use with double door leaves with Ergon Living system.



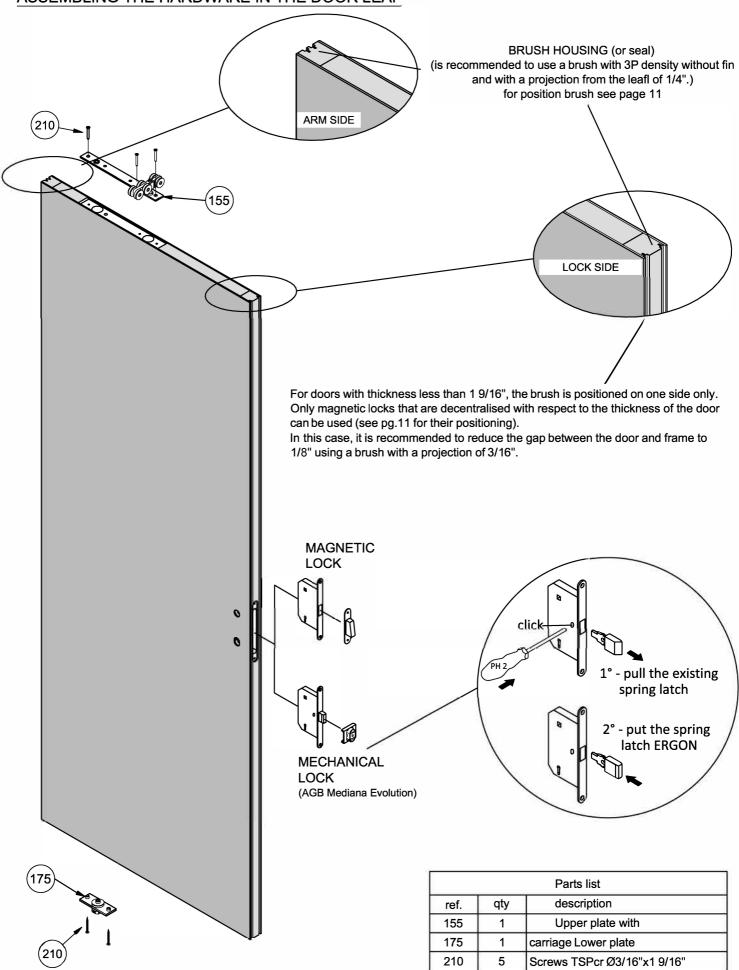
Silver item number 4150IA Black item number 4150IN

ref.	qty	Parts list
223	1	Screw TSPEI M 3/16" x 1/2"
253	1	Plate fixing insert
393	1	Magnetic striker plate





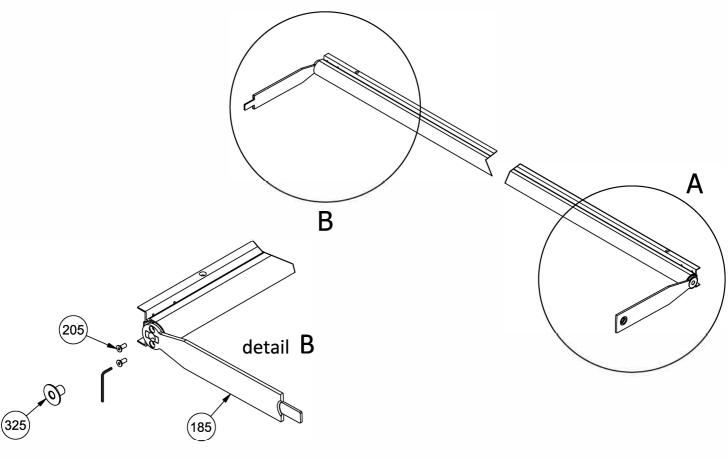
#### ASSEMBLING THE HARDWARE IN THE DOOR LEAF





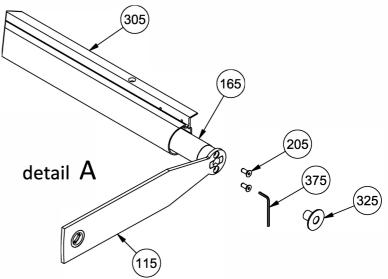
# ASSEMBLING CONNECTING ROD WITH UPPER AND LOWER ARM

Install the upper and lower arms into the rod which is already inside the aluminium profile and mind the alignment, when you insert the brasses be careful to the kingpins on the bearing brasses: they must be inserted in the screws' hexagons.



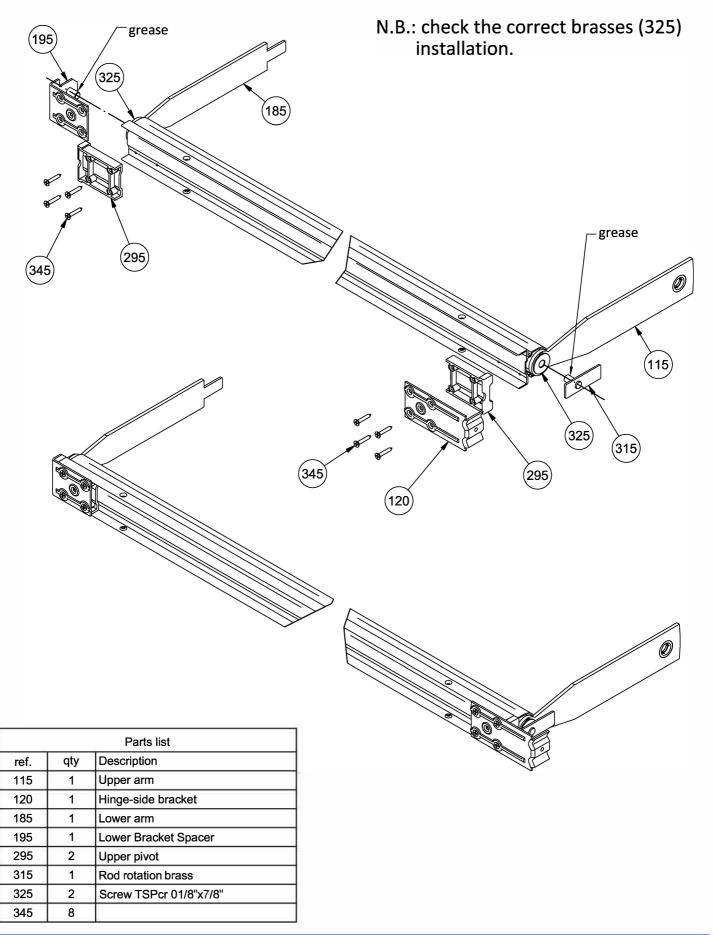
Attention!
Tighten firmly the screws (205) with a hexagonal spanner 1/8".
Make sure that the arm adheres to the pin plate of the connecting rod.

2)	Parts list				
_	-4.				
ref.	qty	Description			
115	1	Upper arm			
165	1	Connecting rod			
185	1	Lower arm			
205	4	Screw TSPei M3/16"x 3/8" - ISO			
305	1	10642 Doorpost			
325	2	Rod rotation brass			
375	1	Hexagonal key 1/8"			



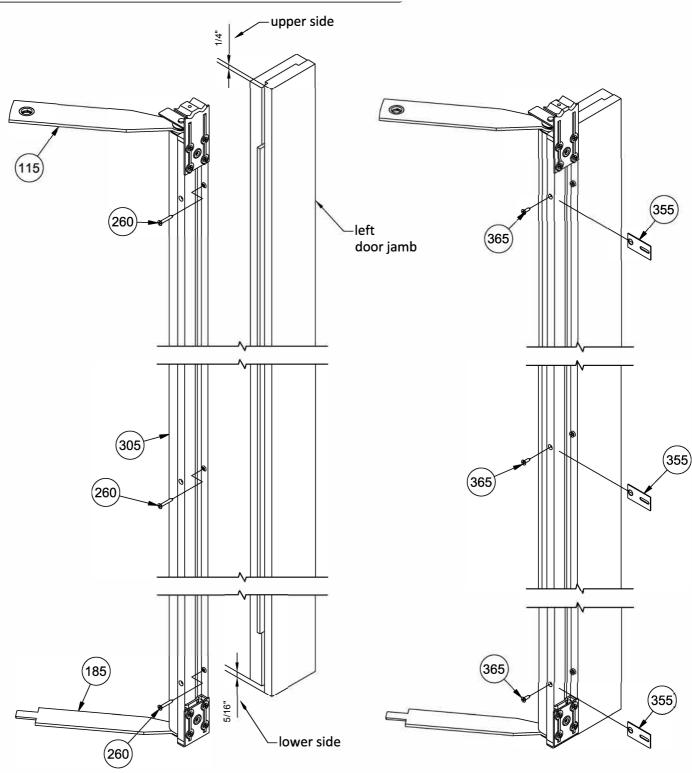


# ASSEMBLY OF CONNECTING ROD WITH HINGE-SIDE BRACKET





# ASSEMBLY THE DOORPOST TO HINGE-SIDE DOOR JAMB



assembling door jamb

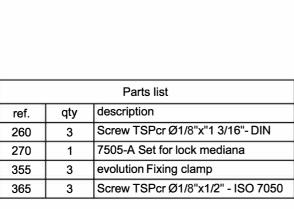
assembling fixing clamp

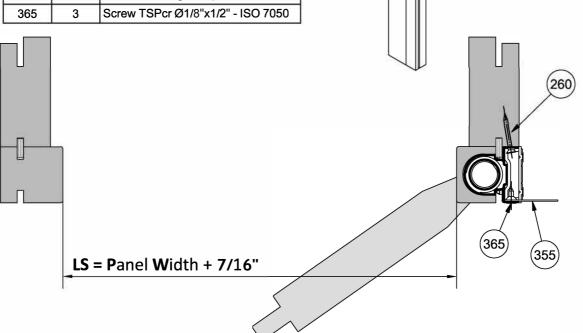
	Parts list				
ref.	qty	Description			
115	1	Upper arm			
185	1	Lower arm			
260	3	Screw TSPcr Ø1/8"x1 3/16" - DIN			
305	1	7505-A Doorpost			
355	3	Fixing clamp			
365	3	Screw TSPcr Ø1/8"x1/2" - ISO 7050			



# ASSEMBLY FRAME TO TRACK

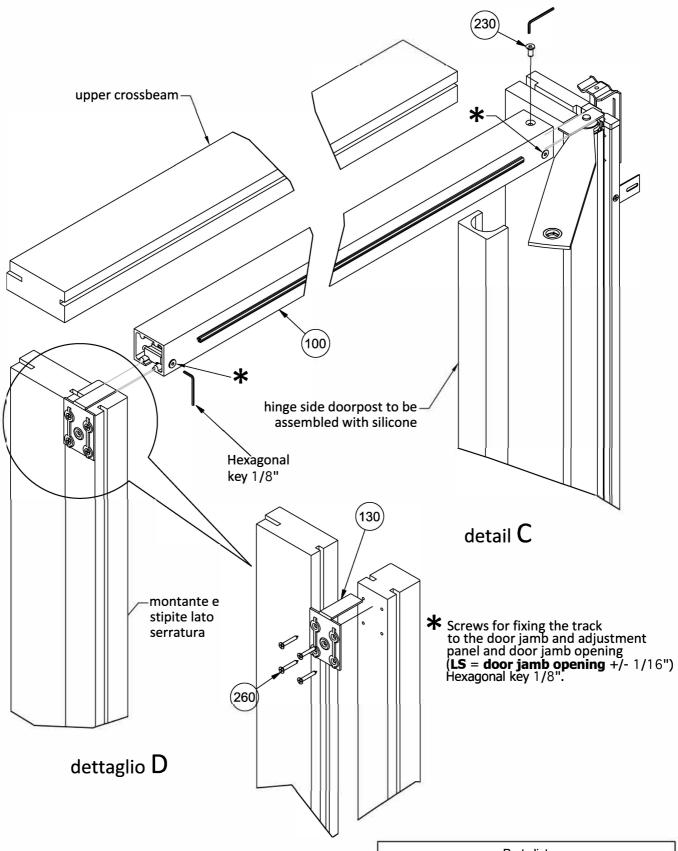
N.B. Details **C-D** see pages 27







#### ASSEMBLY FRAME TO TRACK



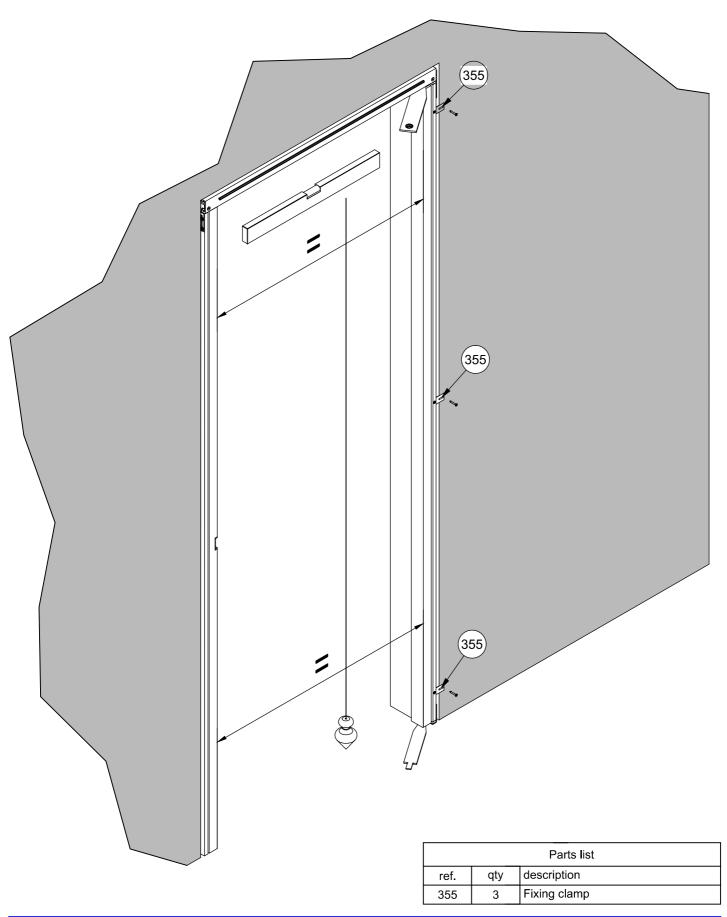
Parts list				
ref.	qty	description		
100	1	Track		
130	1	Lock-side bracket		
230	1	Screw TSPei M3/16"x1/2" - ISO		
260	4	10642 Screws TSPcr Ø3/16"x1 3/16"		

- DIN 7505-A

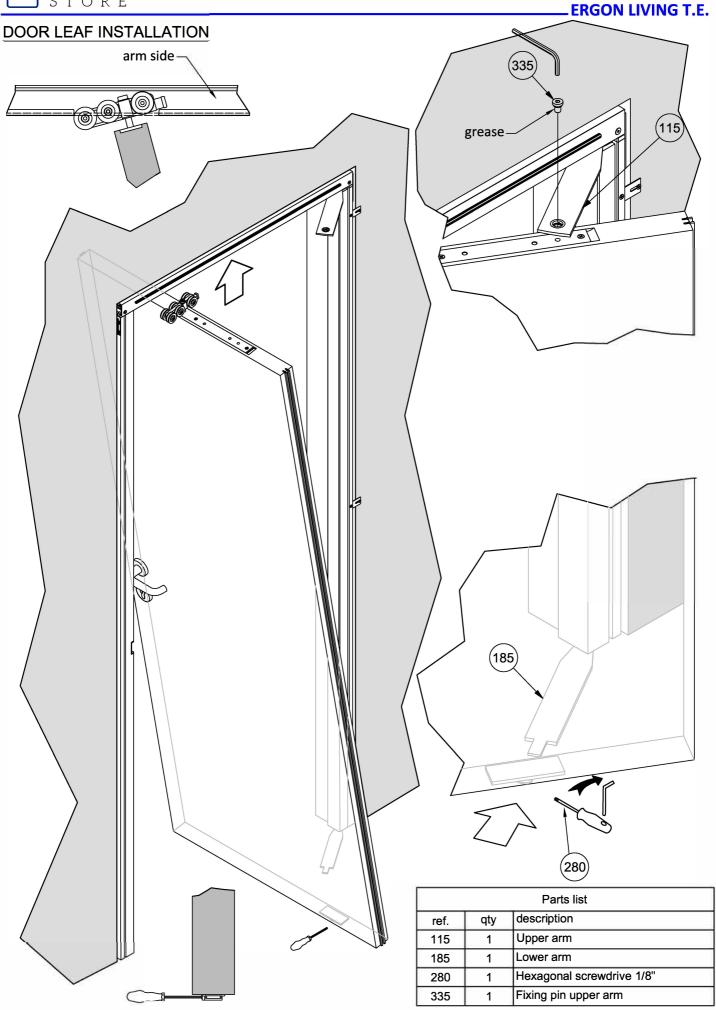


# COMPLETE DOOR JAMB INSTALLATION

N.B. The levelling of the track and the plumb of the door jambs must be precise.

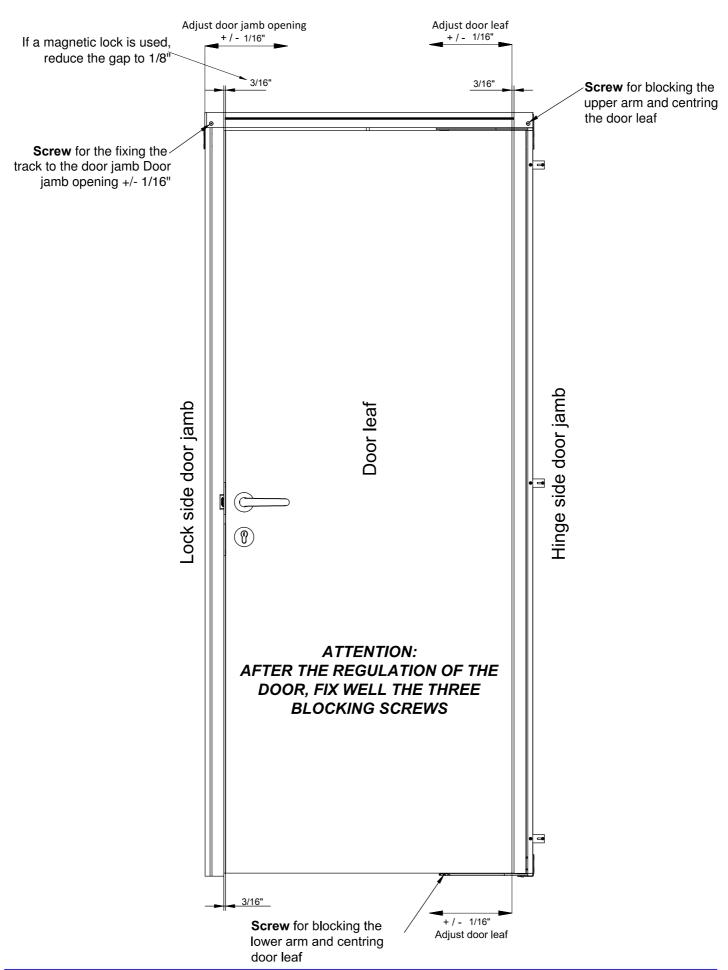






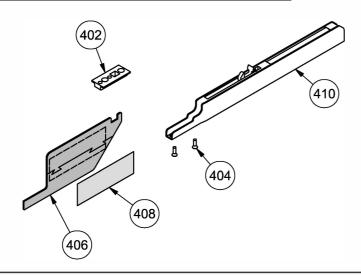


# ADJUSTING DOOR LEAF AND DOOR JAMB





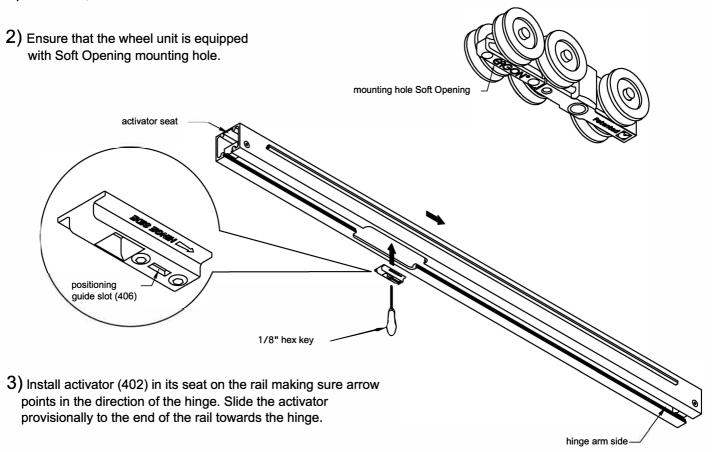
# "SOFT OPENING" INSTALLATION (OPTIONAL)



	Parts list				
ref.	qty	description			
402	1	Activator			
404	2	Screw TSP+ M1/8"x5/16 - ISO			
406	1	7046 Activator positioning			
408	1	template Sticker			
410	1	Soft Opening			

#### Installation

1) Assemble jambs and trackand fix to wall.

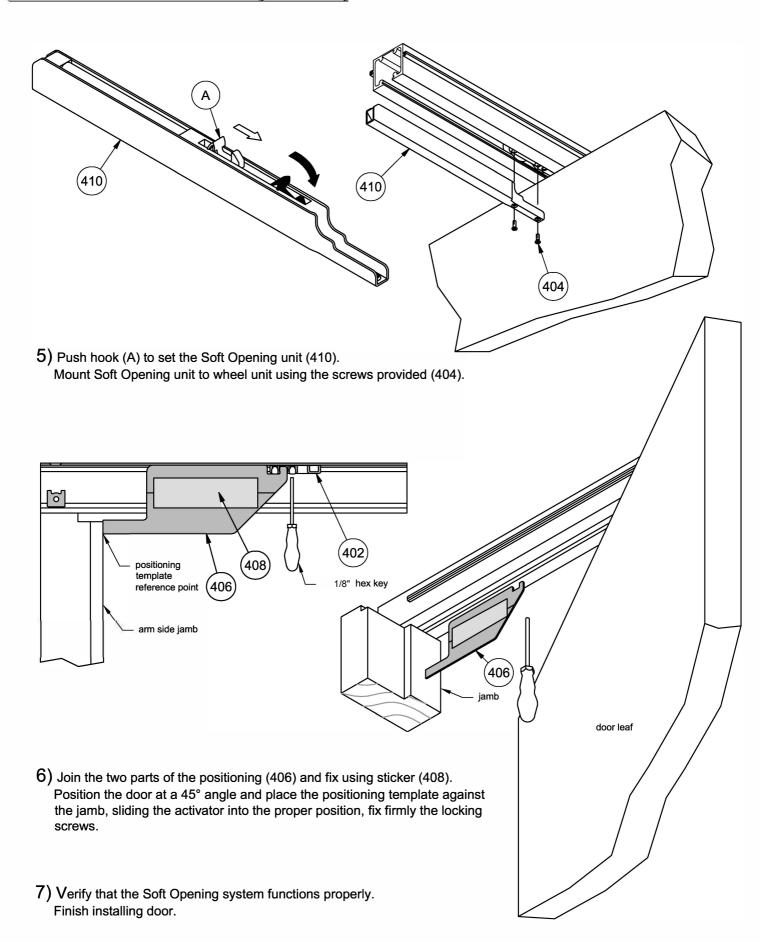


4) Hang the door and mount the hinge arm. Adjust the door normally and open it all the way.

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

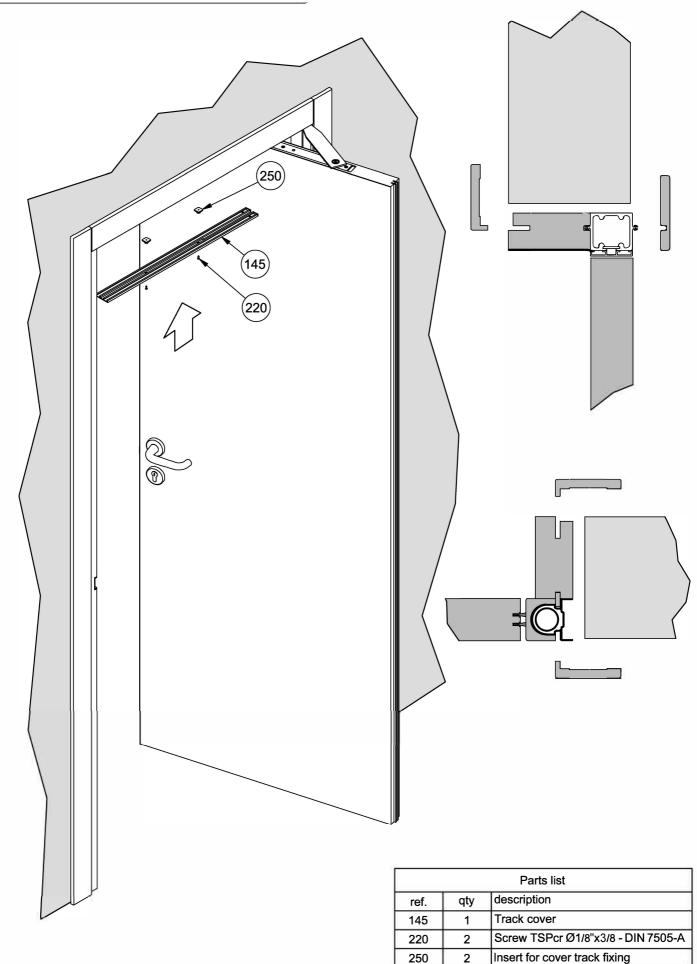


# "SOFT OPENING" INSTALLATION (OPTIONAL)





# FRAME AND TRACK COVER INSTALLATION





#### **Milcasa Store**

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