



# TECHNICAL MANUAL - CONSTRUCTION AND INSTALLATION

Swinging-sliding door with connecting rod on frame JAMB THICKNESS 1 3/16"/1 9/16"

Milcasa Store - 6729 Finamore Cir. - Lake Worth, FL 33467 - T +(888) MILCASA (645-2272) www.milcasastore.com - support@milcasastore.com



# **INDEX**

| 1.   | INTRODUCTION   | . 3 |
|------|--|-----|
| 2.   | DESCRIPTION  | . 4 |
| 2.1  | Exploded hardware diagram                                | 4   |
| 2.2  | Single door horizontal dimensional drawing               | 5   |
| 2.3  | Double door horizontal dimensional drawing               | 6   |
| 2.4  | Double door horizontal dimensional drawing               | 7   |
| 2.5  | Vertical dimension drawing                               | 8   |
| 2.6  | Management of wall thicknesses                           | 9   |
| 2.7  | Specific door processing                                 | 10  |
| 2.8  | Exploded frame diagram (centred door)                    | 11  |
| 2.9  | Construction details of the vertical frame arms side     | 12  |
| 2.10 | Construction details of the vertical frame lock side     | 13  |
| 2.11 | Construction details of the upper crosspiece             | 14  |
| 2.12 | Track adjustment to the width of the door to be achieved | 15  |
| 2.13 | Shortenable connecting rod kit                           | 16  |
| 2.14 | Track union kit for double door with ERGON LIVING system | 17  |
| 2.15 | Magnetic striker plate for <b>Push&amp;Go EVO</b>        | 19  |
| 3.   | ASSEMBLY   | 20  |
| 3.1  | Installation of hardware on the door leaf                | 20  |
| 3.2  | Connecting rod assembly with upper and lower arm         | 21  |
| 3.3  | Assembly of hinge side jamb to the connecting rod        | 22  |
| 3.4  | Assembly of frame and track                              | 23  |
| 3.5  | Installation of complete jamb                            | 24  |
| 3.6  | Door leaf installation                                   | 25  |
| 3.7  | Door leaf and frame adjustment                           | 26  |
| 3.8  | "Soft Opening" damper installation (Optional)            | 27  |
| 3.9  | Mounting frames and track cover profiles                 | 29  |



### 1. INTRODUCTION

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

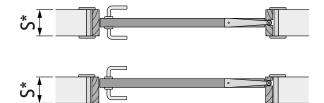
- Rotation rod within the frame;
- Door weight limit 154 lbs;
- Minimum door thickness 1 3/8";
- Possibility of applying the "Soft Opening" damper;
- Available in silver and black finishes;
- Two different arm sizes:
  - "BASE" particularly suitable for LFM (Wall opening width) from 31 1/2" to 39 3/8";
  - "SMALL" particularly suitable for LFM (Wall opening width) from 24 1/64" to 31 1/2"

#### Differences from the T.E. version:

- the connecting rod does not require the aluminium upright, but is simply held in the guide by a small plastic component;
- the **T.E. SLIM** version allows the use of a flat frame of the thickness 1 3/16" to 1 9/16";
- the use of doors in standard sizes with a false frame of standard size (e.g.: door  $L = 32\ 1/16$ " with wall opening width  $L = 35\ 7/16$ ") using a 1 3/16" thickness frame;
- we recommend the use of a magnetic lock.

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

 "centred door" where the door is positioned at the centre of the wall

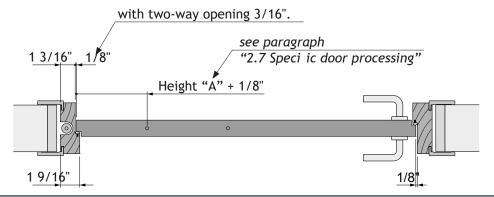


**<sup>2. &</sup>quot;oriented door"** where the door is positioned close to one of the two edges of the wall

The **Ergon Living T.E. SLIM** system is offered in various sizes of standard widths and heights. It is also possible obtain intermediate measures in width by shortening the track and the track cover (see "2.12 Track adjustment to the width of the door to be achieved"), in height by purchasing the appropriate shortenable rod kit (see "2.13 Shortenable connecting rod kit"), or requesting the rod in a special measurement.

#### SWING DOORS WITH ONE DIRECTION OF OPENING

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



**Caution:** The door and frame hinges are mirrored.

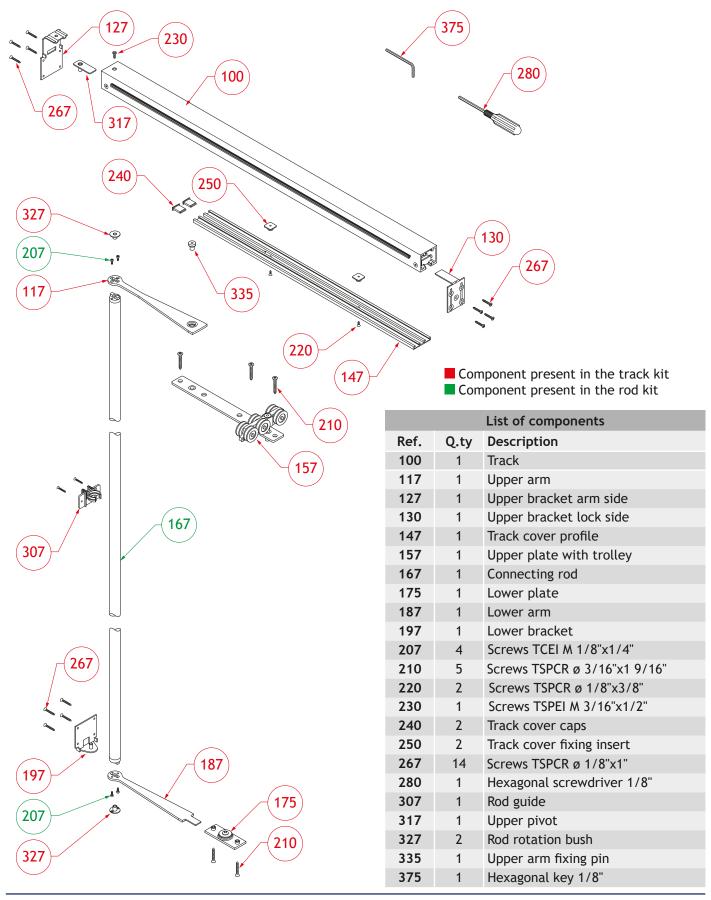
It is also possible to construct doors without the hinge.

<sup>\*</sup> See paragraph "2.6 Management of wall thicknesses".



### 2. DESCRIPTION

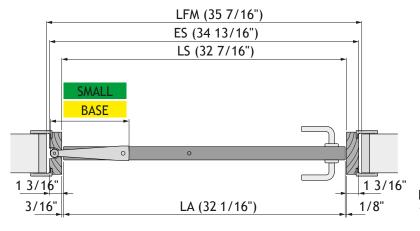
# 2.1 Exploded hardware diagram



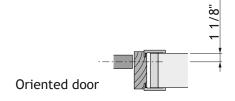


### 2.2 Single door horizontal dimensional drawing

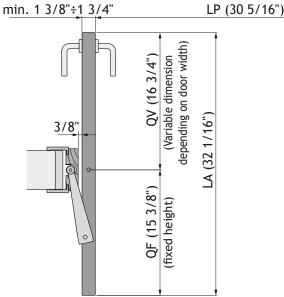
### Dimensional example



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



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



ATTENTION: On door with reduced widths the handle may collide with the jamb.

Pay attention to the dimension of the handle,

1 3/16" door leaf and wall thickness.

The values given in this table refer to a door with frame thickness 1 3/16" and door thickness 1 3/4"; in case of using a frame of thickness 1 9/16" the values of LP, LA, LS and QV decrease by 13/16".

| BASE | SMALL | WIDTH DIMENSIONS |          |                         |            |            |           |           |  |
|------|-------|------------------|----------|-------------------------|------------|------------|-----------|-----------|--|
| BA   | SW/   | LFM              | LP       | LA                      | Q          | <u>Į</u> F | Q         | V         |  |
|      | •     | 24 "             | 18 7/8"  | 20 11/16'               | 11 7       | 7/16"      | 9 1       | /4"       |  |
|      | •     | 25 9/16"         | 20 1/2"  | 22 1/4"                 | 11 7/16"   |            | 10 13/16" |           |  |
| •    | •     | 27 9/16"         | 22 7/16" | 24 3/16"                | 15 3/8"    | 11 7/16"   | 8 7/8"    | 12 13/16  |  |
| •    | •     | 29 1/2"          | 24 7/16  | 26 3/16"                | 15 3/8"    | 11 7/16"   | 10 13/16  | 14 3/4"   |  |
| •    | •     | 31 1/2"          | 26 3/8"  | 28 1/8"                 | 15 3/8"    | 11 7/16"   | 12 13/16" | 16 3/4"   |  |
| •    |       | 33 7/16"         | 28 3/8"  | 30 1/8"                 | 15 3       | 3/8"       | 14 3/4"   |           |  |
| •    |       | 35 7/16"         | 30 5/16" | 32 1/16"                | 15 3       | 3/8"       | 16 3      | 3/4"      |  |
| •    |       | 37 3/8"          | 32 5/16" | 34 1/16"                | 6" 15 3/8" |            | 18 11     | 18 11/16" |  |
| •    |       | 39 3/8"          | 34 1/4"  | 36 1/32" 15 3/8" 20 11/ |            | 1/16"      |           |           |  |

Minimum size for "Soft Opening" arm SMALL

Minimum size for "Soft Opening" arm BASE

LFM = Wall opening width

LP = Passage dimension (LFM - 5 1/8")

LA = Door width (LFM - 3 3/8")

LS = Jamb opening (LFM - 3") ES = Exterior jambs (LFM - 5/8")

QF = Fixed dimension arms side

**QV** = Variable dimension handle side

• = Standard Available sizes

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

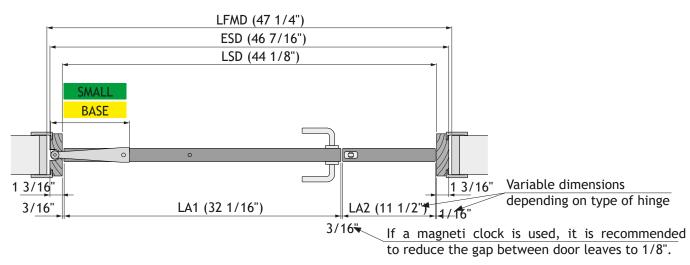
For other special measurements ask Celegon s.r.l. for feasibility

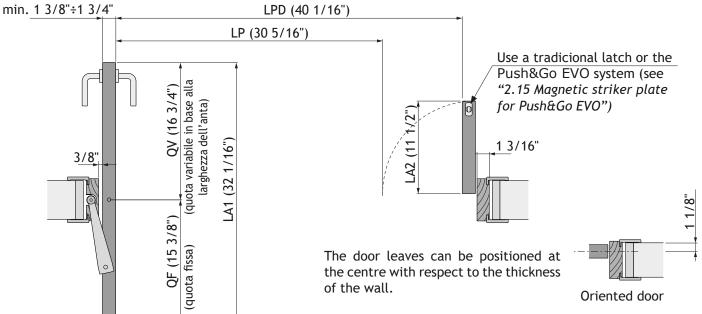


### 2.3 Double door horizontal dimensional drawing

### ERGON door leaf and rabbet door

#### Dimensional example





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

The values given in this table refer to a door with frame thickness 1 3/16" 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 provi-ded. A custom track kit be supplied based on the dimensions provided.

LFMD = Wall opening width

**LPD** = Passage dimension (LFMD - 7 3/16")

LA1 = Door width (see table in paragraph "2.2 Single door horizontal dimensional drawing")

LA2 = Door leaf width (LFMD - LA1 - 3 11/16" variable depending on door LA1 dimensions and type of hinge used)

LSD = Jamb opening (LFMD - 3 1/8")

**ESD** = Exterior jambs (LFMD - 13/16")

QF = Fixed dimension arms side

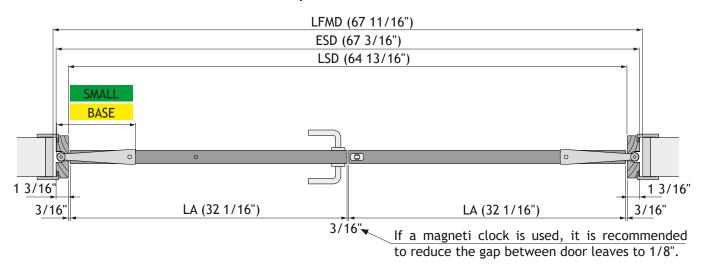
QV = Variable dimension handle side

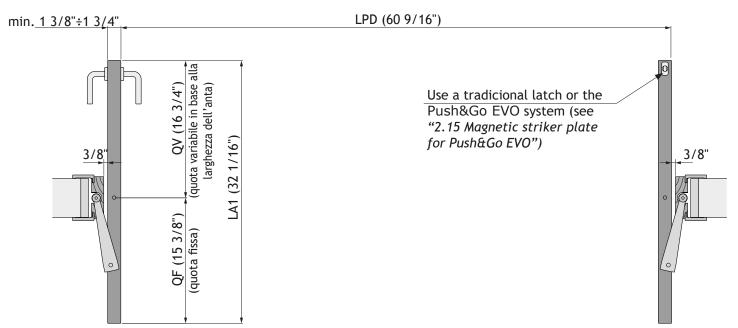


### 2.4 Double door horizontal dimensional drawing

### **Double ERGON door leaves**

### Dimensional example





The values given in this table refer to a door with frame thickness 1 3/16" 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 2.14. and 2.15

**LFMD** = Wall opening width

**LPD** = Passage dimension (LFMD - 7 3/16")

LA1 = Door width ( $\underline{LFMD} - 39/16$ ")

2

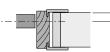
LSD = Jamb opening (LFMD - 2 15/16")

**ESD** = Exterior jambs (LFMD - 9/16")

**QF** = Fixed dimension arms side

**QV** = Variable dimension handle side

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

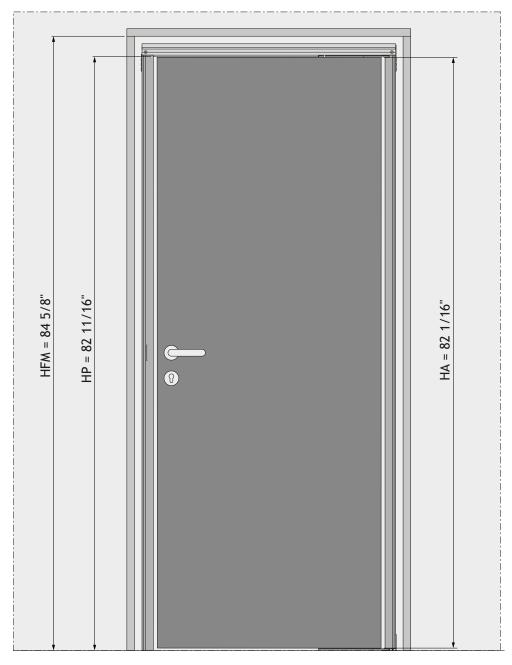


Oriented door

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



# 2.5 Vertical dimension drawing



|   | VERTICAL DIMENSIONS |                |                  |                       |  |  |  |
|---|---------------------|----------------|------------------|-----------------------|--|--|--|
|   | HFM                 | HP             | HA               |                       |  |  |  |
| W | all opening height  | passage height | 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") |  |  |  |
| * | 82 11/16"           | 80 11/16"      | 80 1/16"         | HA = (HFM - 2 5/8")   |  |  |  |
| * | 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> Standard Available sizes

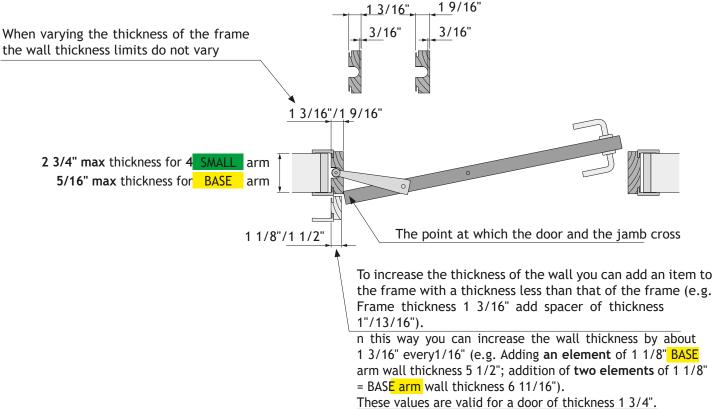
Other measurements may be obtained by adjusting the connecting rod (see paragraph "2.13 Shortenable connecting rod kit") of prepared oversized kits. For bespoke rods, ask Celegon s.r.l. for feasibility.



### 2.6 Management of wall thicknesses

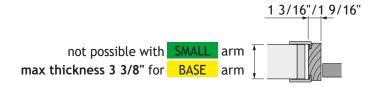
During opening, the **Ergon** system forces the door to recede from the arms side. In this way, when there are wall thicknesses of certain dimensions, the door approaches the jamb to the point in which they cross (see design below), which prevents the door from opening completely. On this page are some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

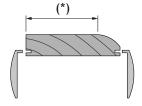
# Centred door



#### Oriented door

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

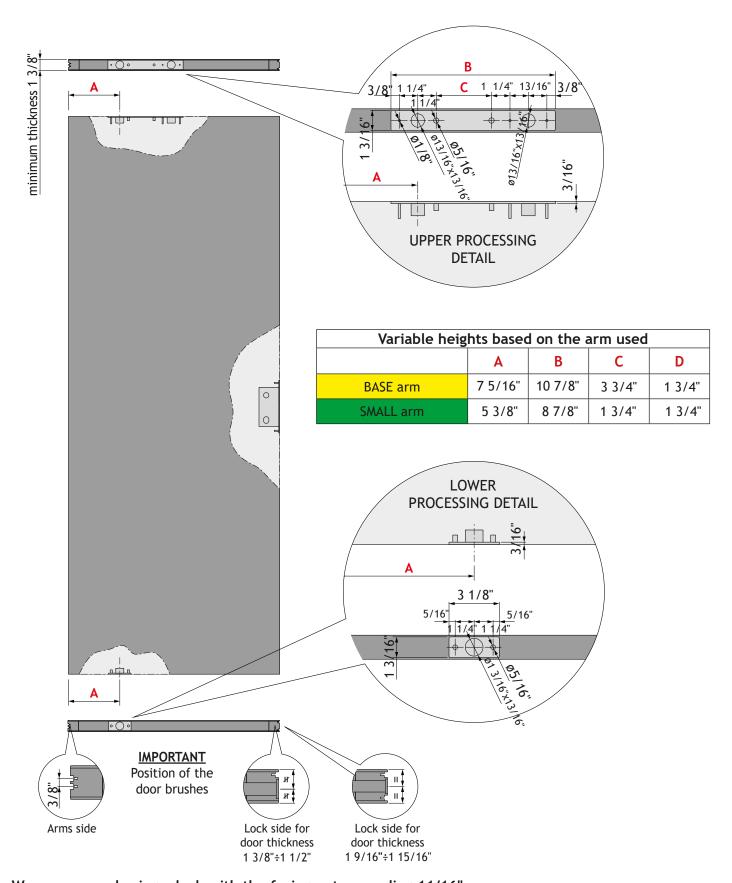




(\*) When using rounded jambs, the limit value is to be considered only on the flat surface of the jamb and not on the rounded part.



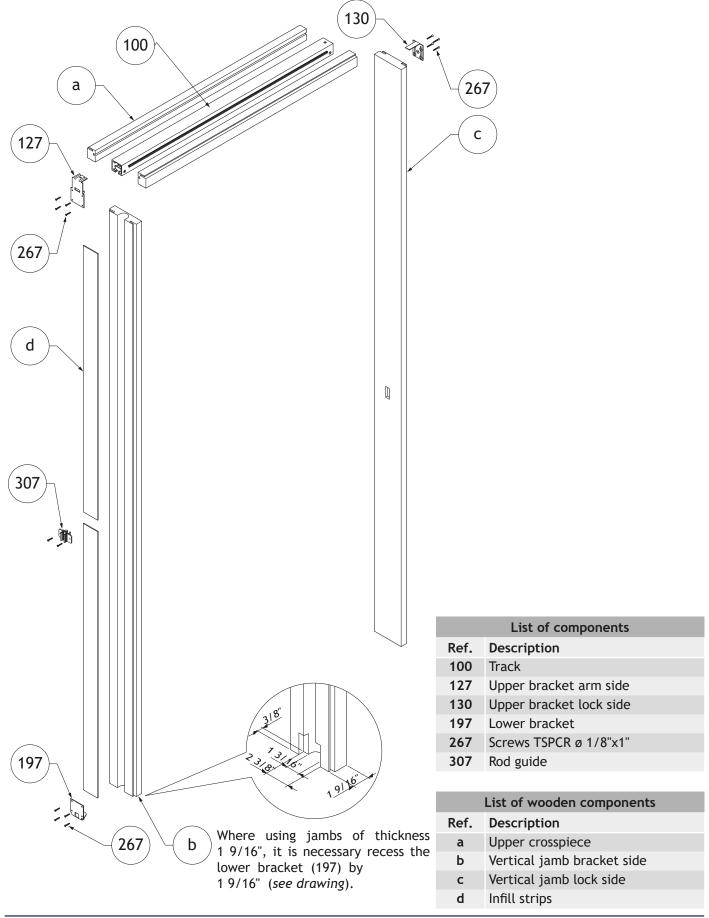
# 2.7 Specific door processing



We recommend using a lock with the facing not exceeding 11/16".



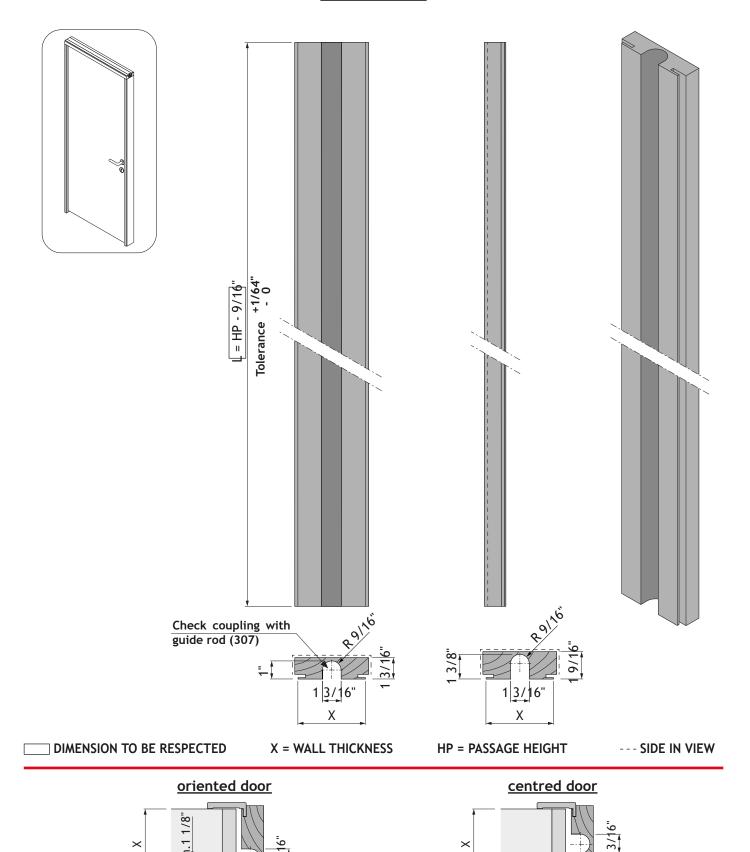
# 2.8 Exploded frame diagram (centred door)





# 2.9 Construction details of the vertical frame arms side

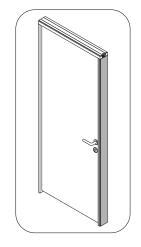
# Jamb arms side

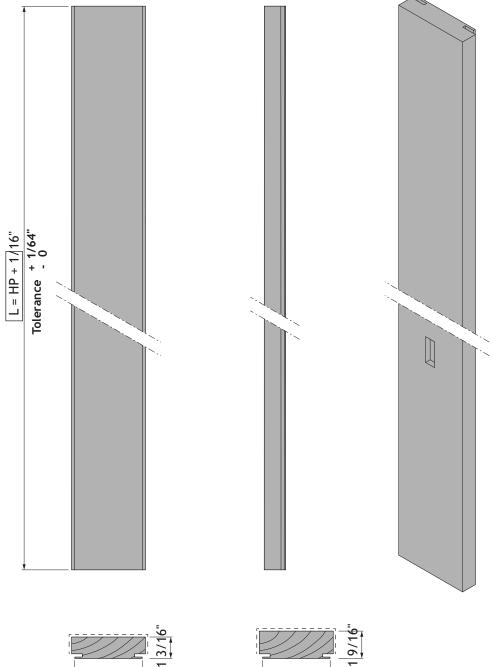


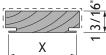


# 2.10 Construction details of the vertical frame lock side

# Jamb lock side









DIMENSION TO BE RESPECTED

X = WALL THICKNESS

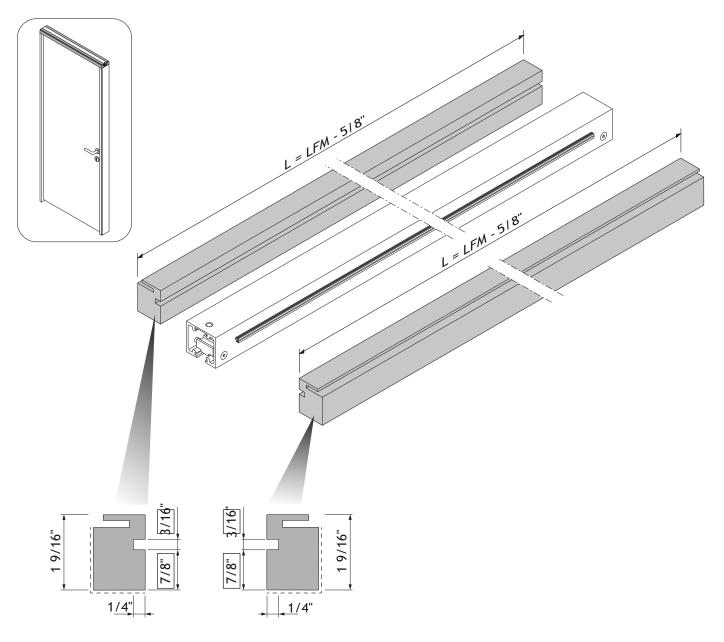
HP = PASSAGE HEIGHT

--- SIDE IN VIEW



# 2.11 Construction details of the upper crosspiece

### Valid for frame thickness 1 3/16" and 1 9/16"

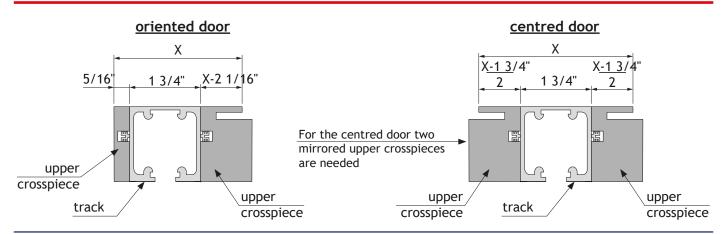


DIMENSION TO BE RESPECTED

X = WALL THICKNESS

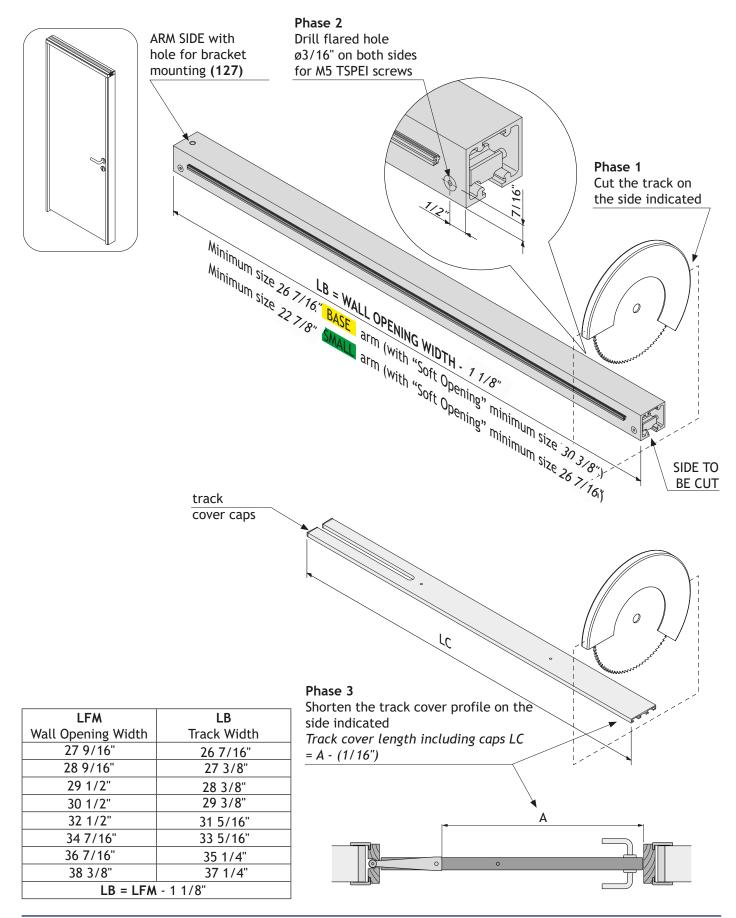
LFM = WALL OPENING WIDTH

--- SIDE IN VIEW





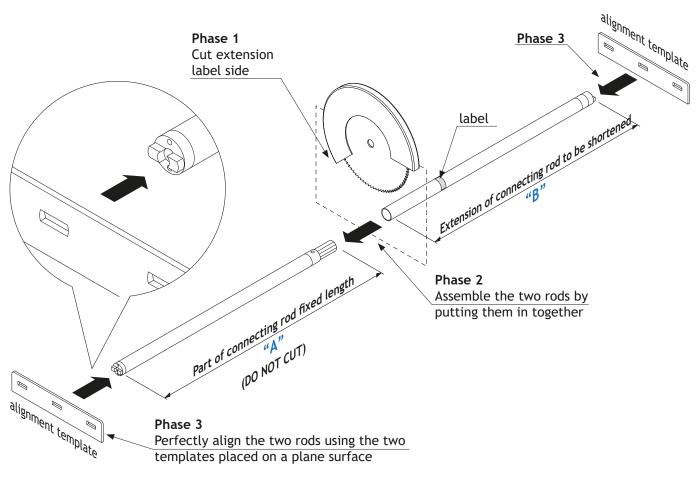
### 2.12 Track adjustment to the width of the door to be achieved

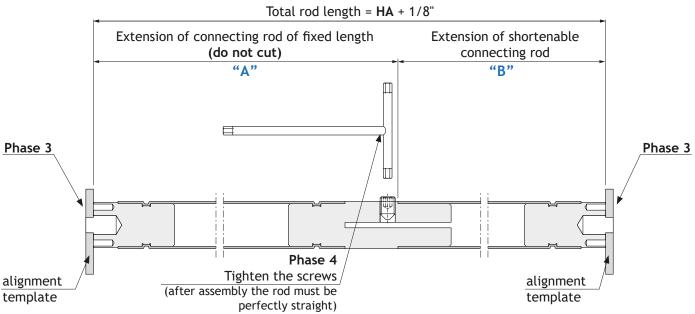




### 2.13 Shortenable connecting rod kit

### Connecting rod adjustment for non-standard heights

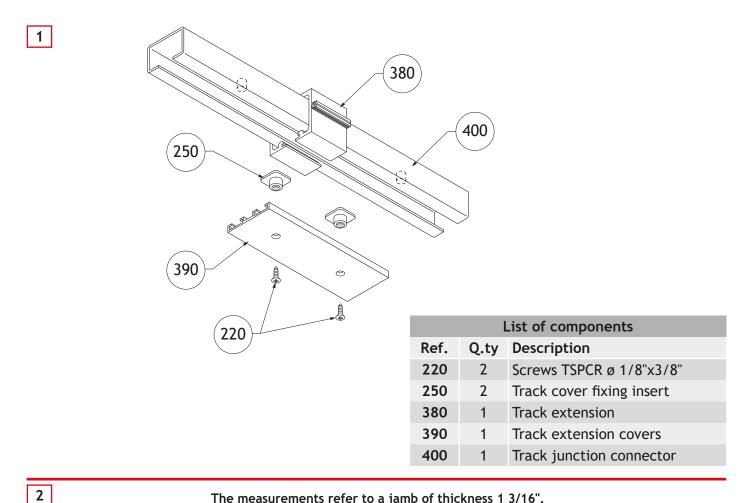




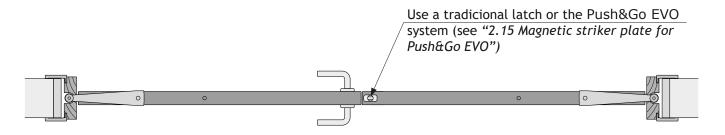
| ltem nr. | HP max   | Dimension "A" | Dimension "B"   |                      |
|----------|----------|---------------|-----------------|----------------------|
|          |          | fixed lenght  | to be shortened |                      |
| 730250CP | 98 7/16" | 49 1/2"       | HA - 49 7/16"   | Available on stock   |
| 730300CP | 118 1/8" | 59 3/8"       | HA - 59 1/4"    | Available on request |
|          |          |               |                 |                      |



### 2.14 Track union kit for double door with ERGON LIVING system



The measurements refer to a jamb of thickness 1 3/16".



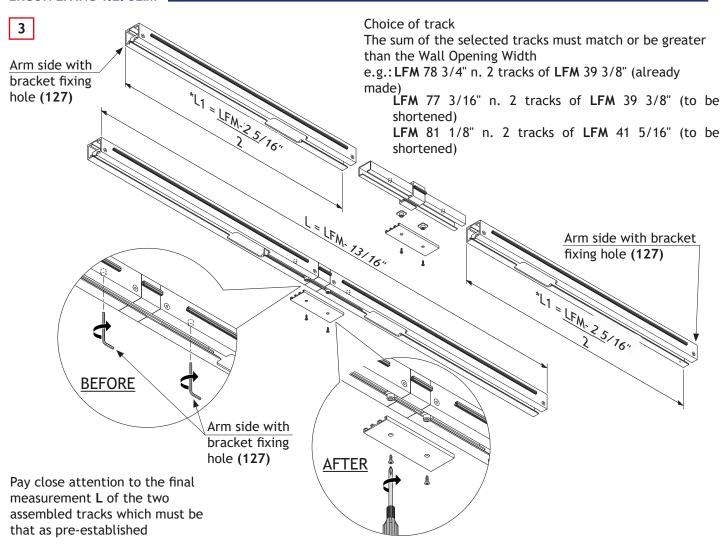
\* N.B. For wall thickness limits see paragraph "2.6 Management of wall thicknesses" in this manual.

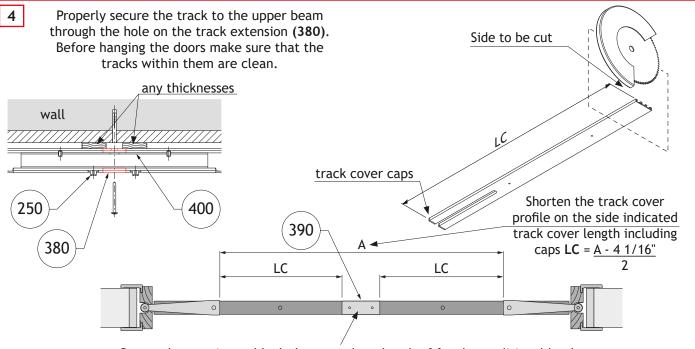
**LFM** minimum 63" with BASE arm with "Soft Opening" LFM minimum 66 15/16".

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

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







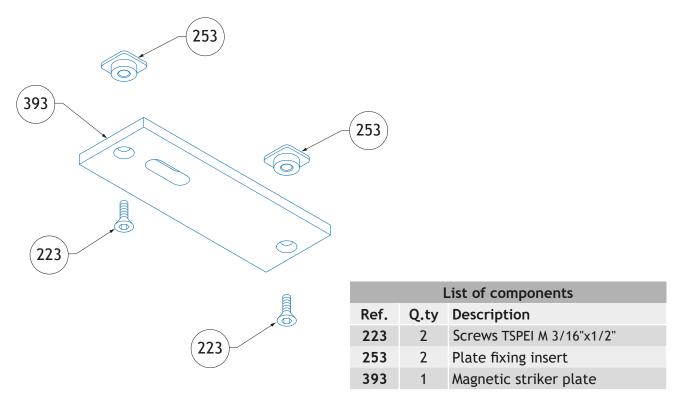
Create the opening to block the secondary door leaf for the traditional latch  $$\operatorname{\textsc{OR}}$$ 

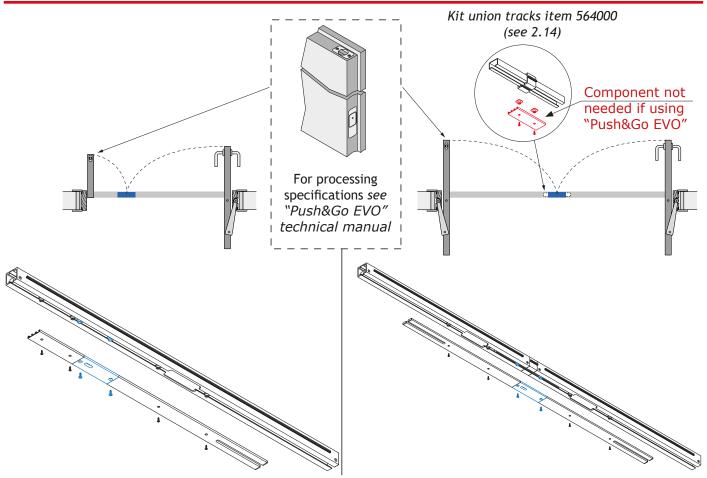
For the Push&Go EVO system use the dedicated kit (see "2.15 Magnetic striker plate for Push&Go EVO")



# 2.15 Magnetic striker plate for Push&Go EVO

### For use with double door leaves with ERGON LIVING system







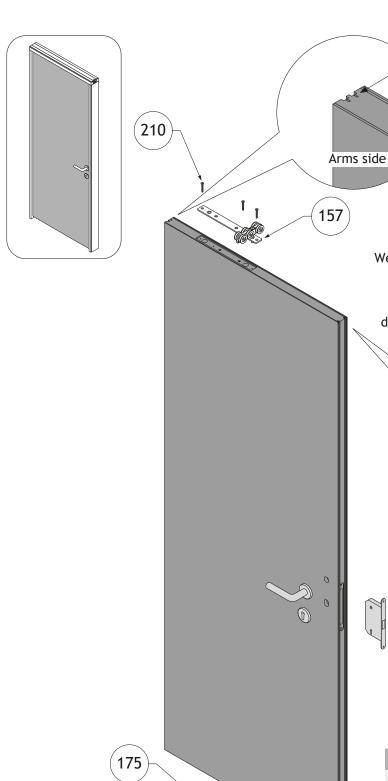
### 3. ASSEMBLY

### 3.1 Installation of hardware on the door leaf

### **LOCATIONS FOR BRUSH (or seal)**

We recommend using a brush with density 3P without fin and projection from the door of 1/4".

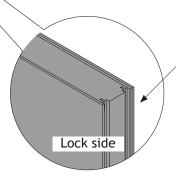
To position these locations see paragraph "2.7 Specific door processing"



We recommend using a brush with density 3P without fin and projection from the door of 3/16".

With doors of less than 1 9/16" thickness, the brush should be placed only on one side, the lock will be decentralized with respect to the thickness of the door.

To position these locations see paragraph "2.7 Speci ic door processing"



MAGNETIC LOCKING

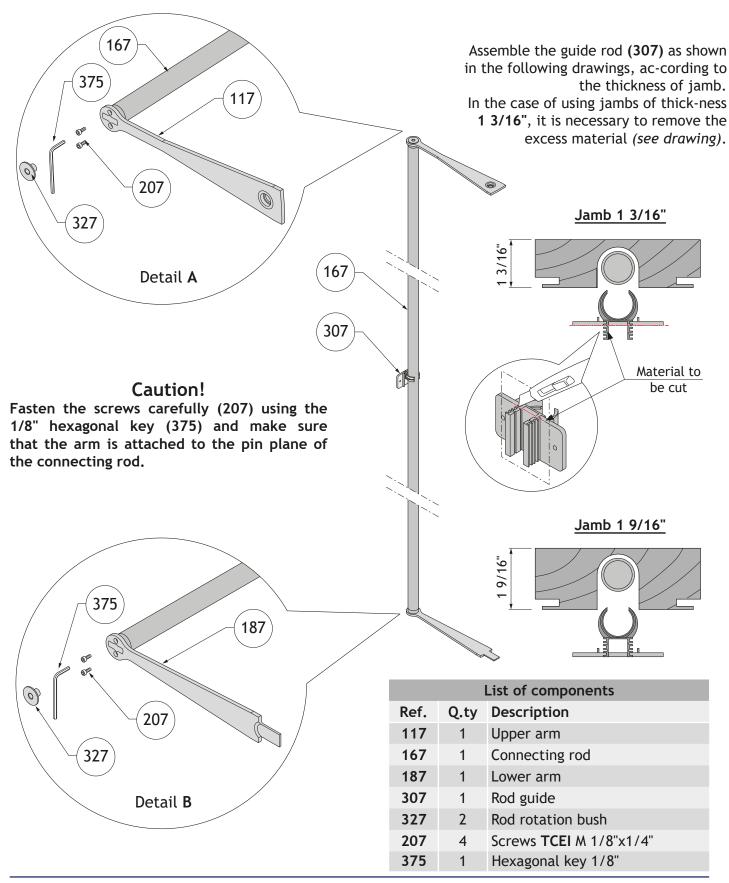
| List of components |      |                              |  |  |
|--------------------|------|------------------------------|--|--|
| Ref.               | Q.ty | Description                  |  |  |
| 157                | 1    | Upper plate with trolley     |  |  |
| 175                | 1    | Lower plate                  |  |  |
| 210                | 5    | Screws TSPCR ø 3/16"x1 9/16" |  |  |

210



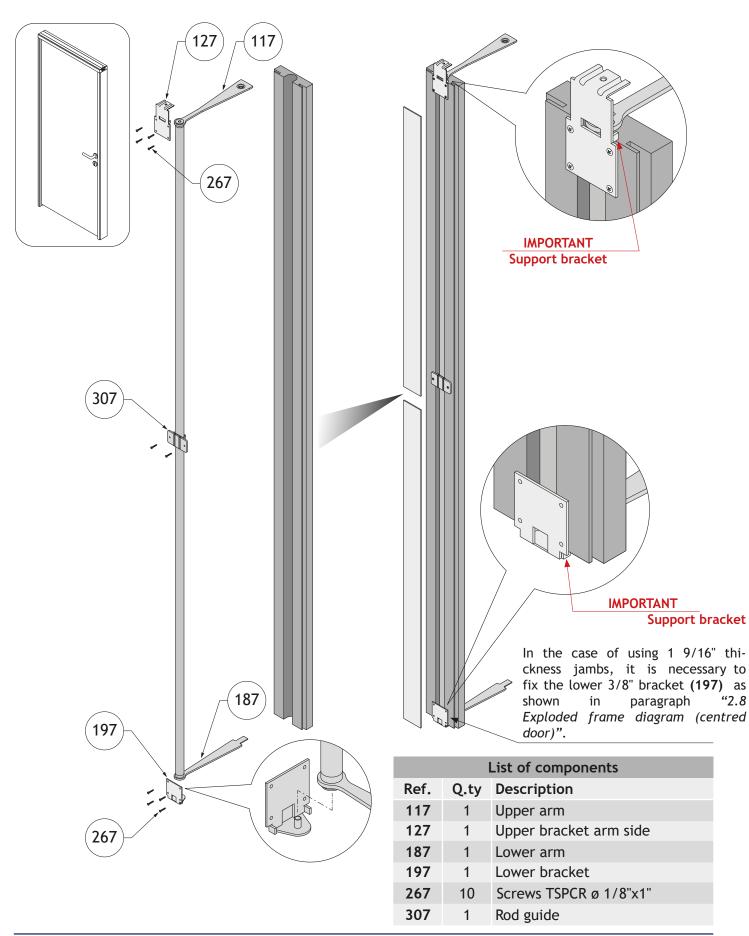
# 3.2 Connecting rod assembly with upper and lower arm

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



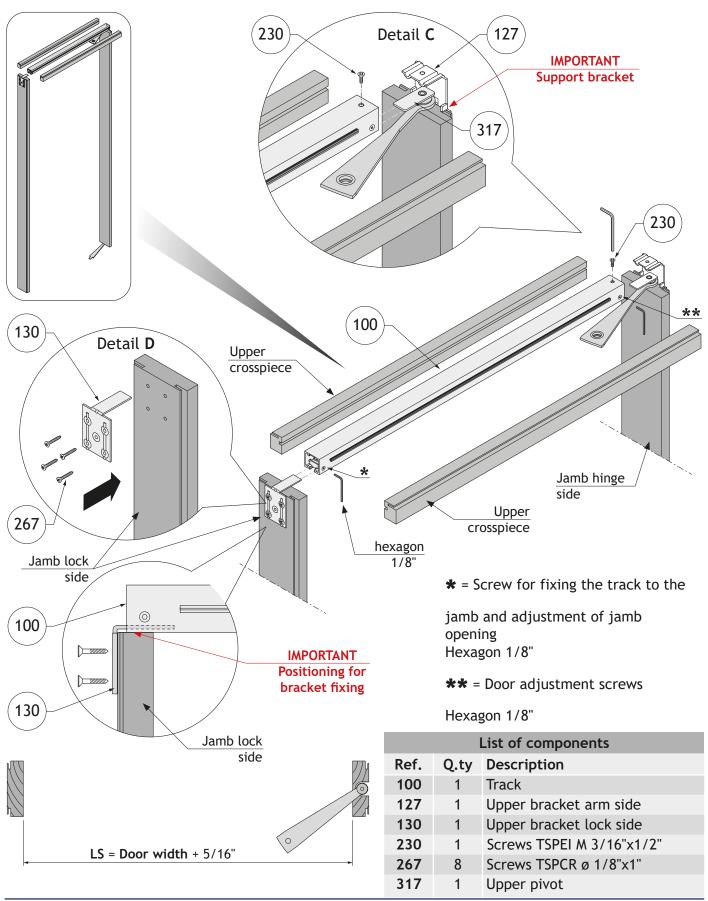


# 3.3 Assembly of hinge side jamb to the connecting rod





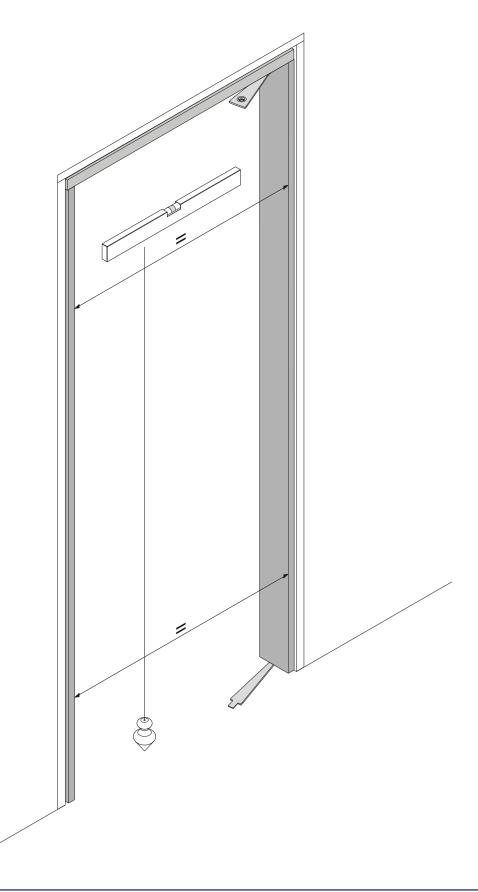
### 3.4 Assembly of frame and track





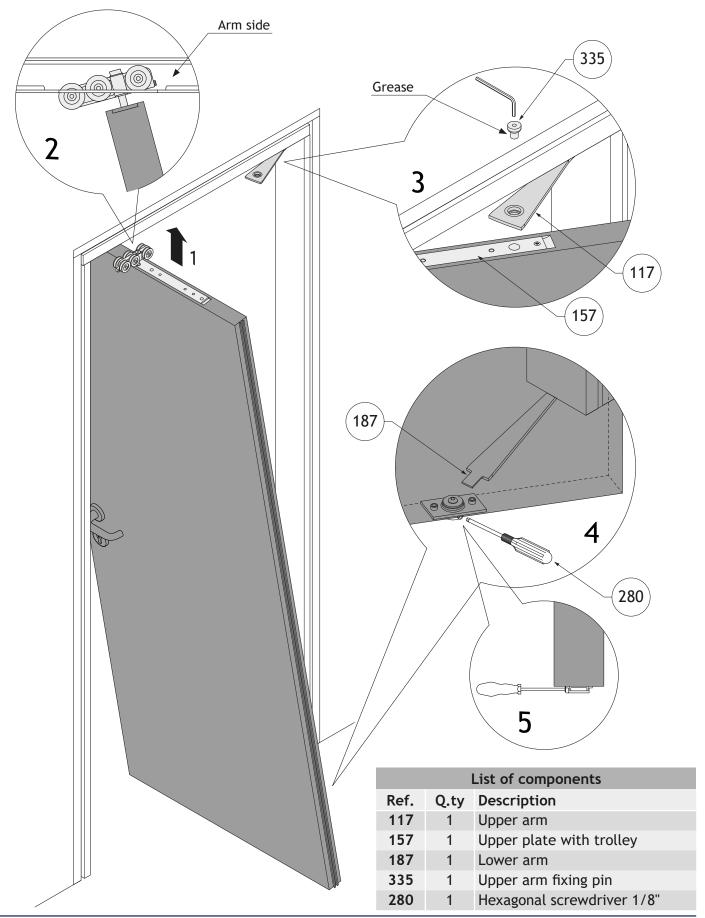
# 3.5 <u>Installation of complete jamb</u>

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



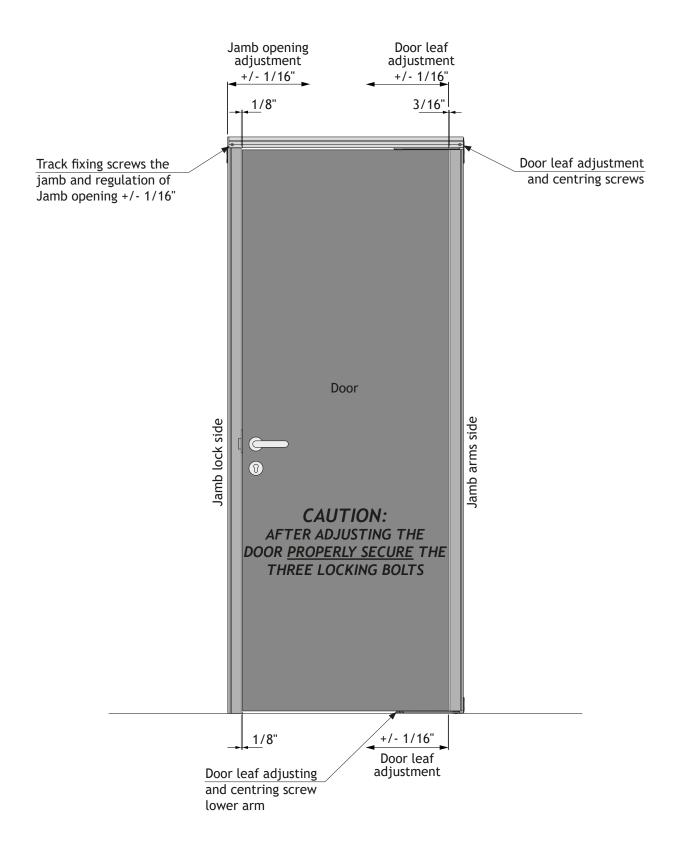


# 3.6 Door leaf installation



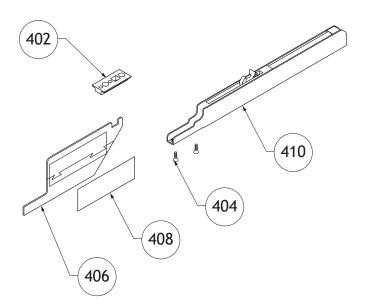


# 3.7 Door leaf and frame adjustment





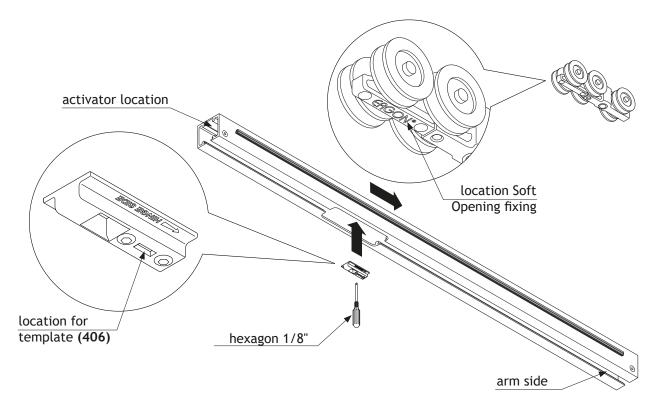
# 3.8 "Soft Opening" damper installation (Optional)



| List of components |      |                                |  |  |
|--------------------|------|--------------------------------|--|--|
| Ref.               | Q.ty | Description                    |  |  |
| 402                | 1    | Activator                      |  |  |
| 404                | 2    | Screws TSP+ M1/8"x5/16"        |  |  |
| 406                | 1    | Activator positioning template |  |  |
| 408                | 1    | Sticker                        |  |  |
| 410                | 1    | Soft Opening                   |  |  |

### Phases of installation

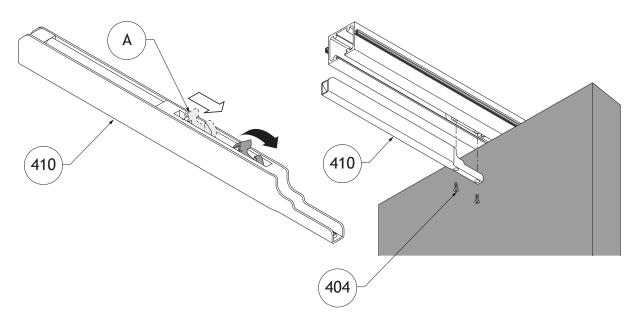
- 1. Assemble and secure the jambs and track to the wall.
- 2. Check that the trolley provided has support for the attachment of the Soft Opening.



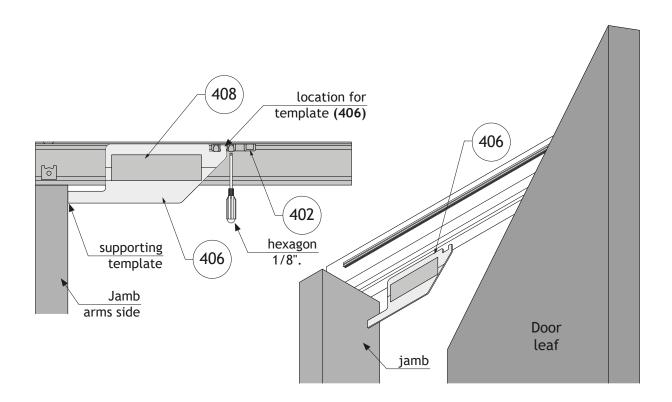
- 3. Slide the activator (402) into its location in the track paying attention to the instructions. The activator must be brought temporarily to the stop on the hinge part of the arm.
- **4.** Attach the door leaf and secure the hinge arms. Follow the standard settings of the door and open the door leaf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

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





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

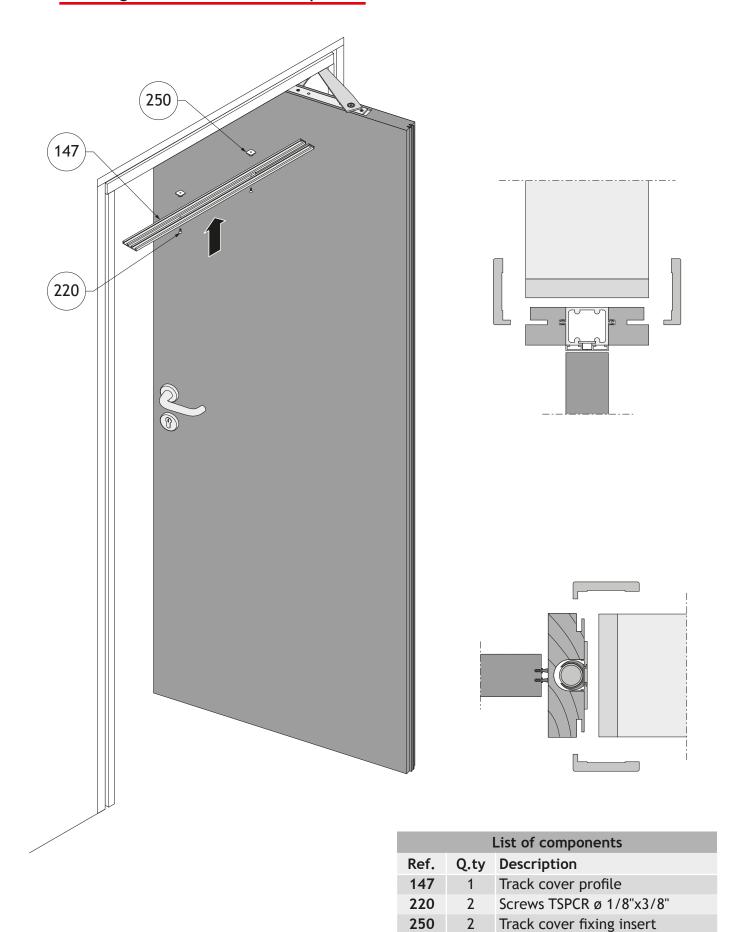


- 6. Join the two parts of the template (406) using the sticker (408).

  Take the door leaf to 45° and place the template (406) to the jamb dragging the activator (402) into the correct position, firmly attach the locking screws.
- **7.** Check the correct operation of the Soft Opening. Complete the installation of the door.



# 3.9 Mounting frames and track cover profiles





| ERGON LIVING T.E. SLIM | <u> </u>      | 5 1         | ORE   |
|------------------------|---------------|-------------|-------|
| NOTE                   |               |             |       |
|                        |               |             |       |
|                        | •••••         | •••••       | ••••• |
|                        |               |             |       |
|                        | •••••         | •••••       | ••••• |
|                        |               |             |       |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | •••••         | •••••       | ••••• |
|                        | • • • • • • • | • • • • • • | ••••• |



| NOTE |
|------|
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |



### Milcasa Store

6729 Finamore Cir. - Lake Worth, FL 33467 T +(888) MILCASA (645-2272) www.milcasastore.com | support@milcasastore.com