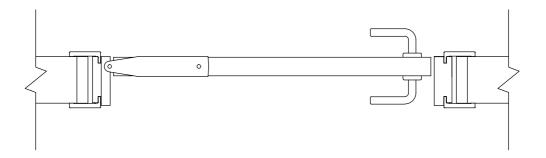




HOME

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



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DATE 01/01/2014



INTRODUCTION

ERGON LIVING **S/40** 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 <u>70 kg</u>.

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

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

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

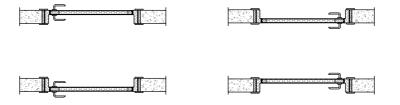
- "Base" particularly suitable for LFM (wall hole opening) from 800 to 1100 mm;
- "Small" particularly suitable for LFM (wall hole opening) from 610 to 800 mm;
- "Large" particularly suitable for LFM (wall hole opening) from 1100 to 1450mm.

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

1) "centered door" when the panel is positioned in the centre of the wall; this solution offers the advantage that the construction of the door is 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 S40 version is offered in various standard sizes for each type (*Base, Small, Large*). However, if a suitable type is used, intermediate sizes can also be obtained by shortening the track and the track cover (page 17).

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

REV. 7



FRAME WITH STRAIGHT JAMB

With this type of casing, we advise using the magnetic lock (AGB or BONAITI).

ADVANTAGES

- **Simple construction**: it's possible to use a simple flat casing, normally used to cover the wall where installation of a door was not previously planned.

- Aesthetics: The door jamb near the lock is visually appealing in that no element of the lock or its release is visible.

LIMITS

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

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

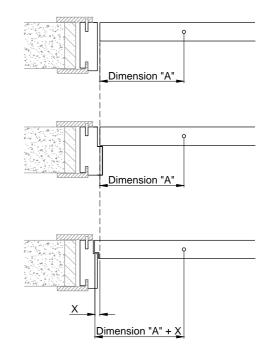
- Functional: The magnetic lock was created to be used on doors with traditional closures and only one single-swing door. In the **ERGON**[•] system with double swing doors, the magnet is convenient if the door is accompanied by hand to the closing point. Instead, if the door is pushed, even slightly, the magnet in the closing position does not have time to react and the door does not stop, but continues on its course.

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.

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

| <u>ل</u> | | - |
|----------|----------|---|
| | (Fig. 4) | |

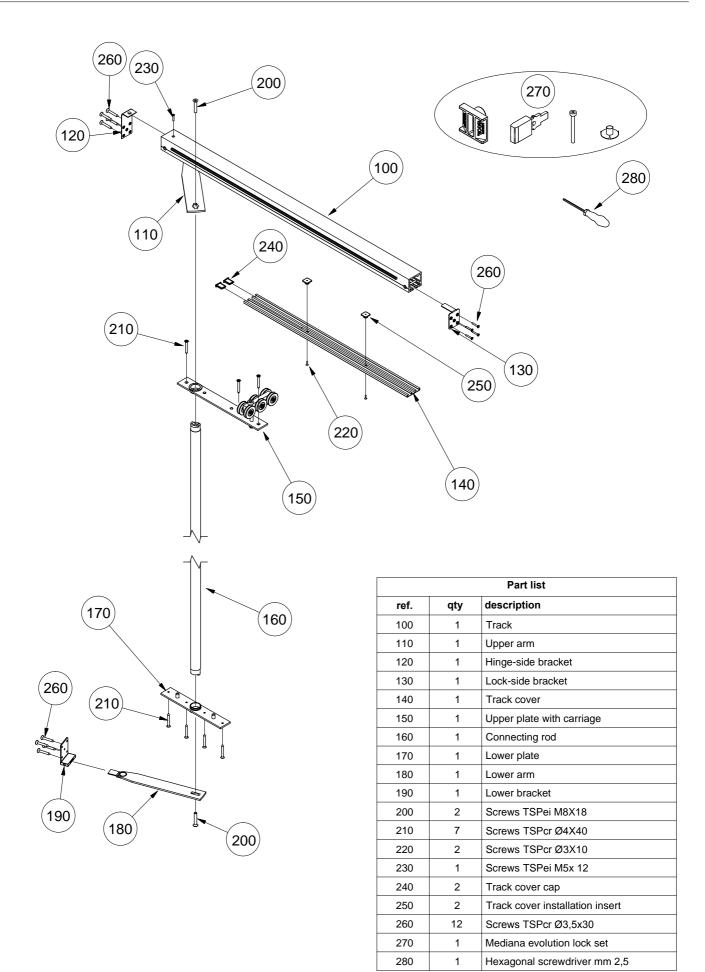




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| Dimensional diagram of the <u>centered door</u> with arm "BASE" | page | 6 |
| Dimensional diagram of the <u>oriented door</u> with arm "SMALL" | page | 7 |
| Dimensional diagram of the centered door with arm "SMALL" | page | 8 |
| Dimensional diagram of the <u>oriented door</u> with arm "LARGE" | page | 9 |
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| Working door leaf specification | page | 13 |
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| Details for the upper crossbeam | page | 16 |
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| Door leaf installation | page | 25 |
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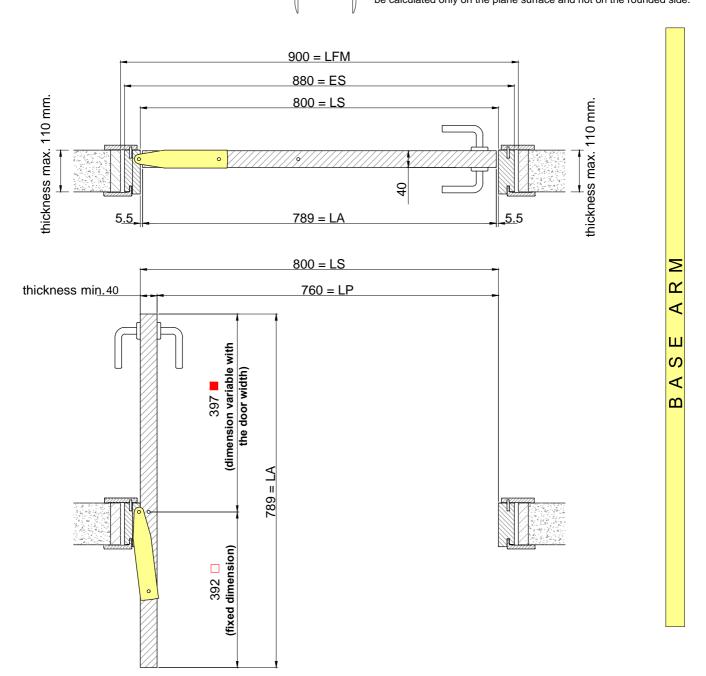
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DIMENSIONAL DIAGRAM OF THE ORIENTED DOOR WITH ARM BASE (WE ADVISE USING THE MAGNETIC LOCK)

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

Wall thickness up to 110 mm



| | | ENCUMBRANCE DOOR | | |
|--|------------------------|-------------------------|-----------------------|--------------------------------------|
| | LFM wall hole width | LP passage dimension | LA door leaf width | max. encumbrance of the open door |
| | 700 | 560 | 589 | 392 |
| LEGEND | 750 | 610 | 639 | 392 |
| LP = Passage dimension (LFM - 140) | * 800 | 660 | 689 | 392 🗌 |
| | * 850 | 710 | 739 | 392 🗌 |
| LA = Door Leaf width (LFM - 111) | * 900 | 760 | 789 | 397 🗖 🗌 |
| LS = Door jamb opening (LFM - 100) | * 950 | 810 | 839 | 447 |
| ES = Outer jamb (LFM - 20) = length of the upper crossbeam | * 1000 | 860 | 889 | 497 |
| LFM = Wall hole width | * 1050 | 910 | 939 | 547 |
| | * 1100 | 960 | 989 | 597 📕 |
| The dimensions on the technical drawing refer to the 900 wall hole width and it is the dimension in which the encumbrance of the open door is symmetric. * Available standard dimension, it is possible to have other even intermediate dimensions (see page 1 7) by adjustin | | | | |
| See in evide | ence the minimum mease | eure possible by usi | ng "Soft Opening" | kit pages 27-28 |
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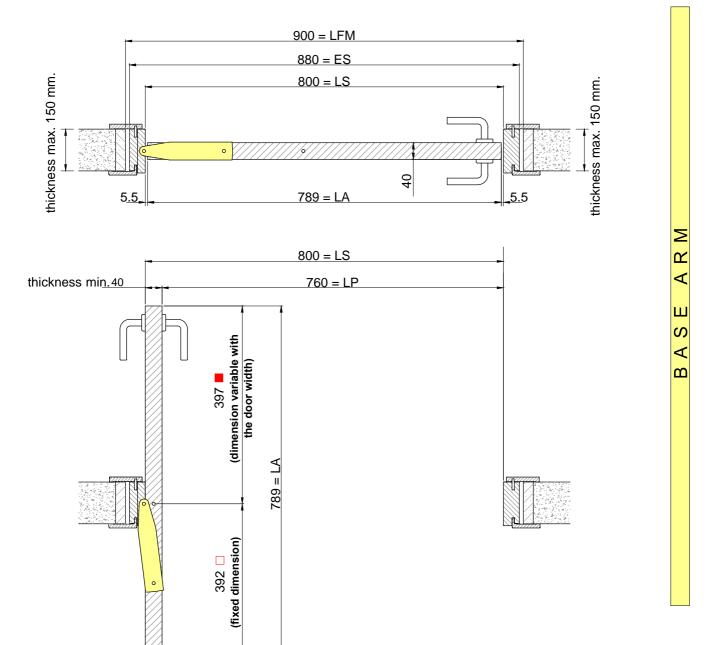


DIMENSIONAL DIAGRAM OF THE CENTERED DOOR WITH ARM BASE (WE ADVISE USING THE MAGNETIC LOCK)

Wall thickness up to 150 mm

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



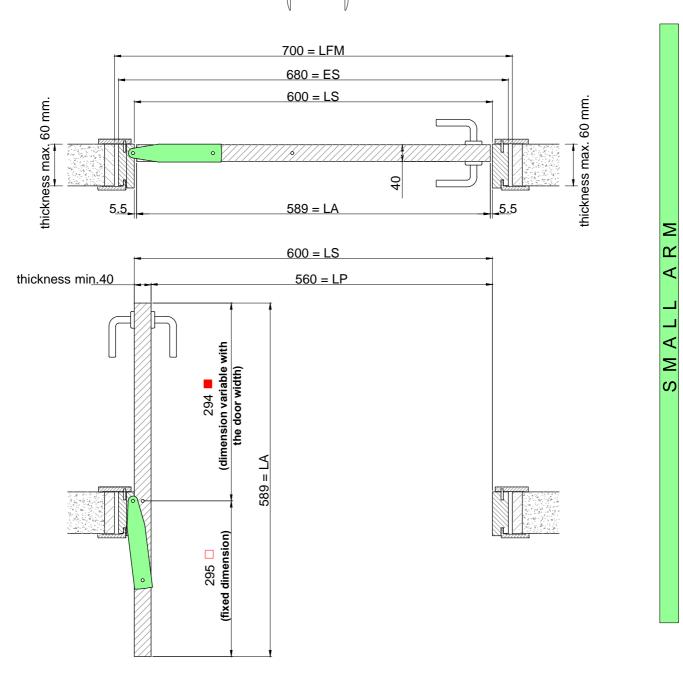
| | | ENCUMBRA | NCE DOOR | |
|--|------------------------|--|-----------------------|--------------------------------------|
| | LFM wall hole width | LP passage dimension | LA door leaf width | max. encumbrance of the open door |
| | 700 | 560 | 589 | 392 🗆 |
| LEGEND | 750 | 610 | 639 | 392 🗌 |
| LP = Passage dimension (LFM - 140) | * 800 | 660 | 689 | 392 🗌 |
| | * 850 | 710 | 739 | 392 |
| LA = Door Leaf width (LFM - 111) | * 900 | 760 | 789 | 397 🗖 🗌 |
| LS = Door jamb opening (LFM - 100) | * 950 | 810 | 839 | 447 |
| ES = Outer jamb (LFM - 20) = length of the upper crossbeam | * 1000 | 860 | 889 | 497 📕 |
| LFM = Wall hole width | * 1050 | 910 | 939 | 547 |
| | *1100 | 960 | 989 | 597 📕 |
| he dimensions on the technical drawing refer to the 900 wall hole width and it is the imension in which the encumbrance of the open door is symmetric. | | lard dimension, it is p ate dimensions (see | | , |
| See in evidence | ce the minimum mease | eure possible by usi | ng "Soft Opening" | kit pages 27-2 |
| .7 | | | | Page 6 of 2 |



DIMENSIONAL DIAGRAM OF THE ORIENTED DOOR WITH ARM **SMALL** (WE ADVISE USING THE MAGNETIC LOCK)

Wall thickness up to 60 mm

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



| LEGEND | | | ENCUMBRA | NCE DOOR | |
|--|----------------|------------------------|--|-----------------------|--------------------------------------|
| LP = Passage dimension (LFM - 140) | | LFM wall hole width | LP passage dimension | LA door leaf width | max. encumbrance of the open door |
| LA = Door Leaf width (LFM - 111) | | 610 | 470 | 499 | 295 🗌 |
| LS = Door jamb opening (LFM - 100) | | 650 | 510 | 539 | 295 🗌 |
| ES = Outer jamb (LFM - 20) = length of the upper crossbeam | | 700 | 560 | 589 | 295 📕 🗌 |
| LFM = Wall hole width | | 750 | 610 | 639 | 344 |
| | | *800 | 660 | 689 | 394 |
| The dimensions on the technical drawing refer to the 700 wall hole width and it is the dimension in which the encumbrance of the open door is symmetric. | | | lard dimension, it is p ate dimensions (see | | |
| S | ee in evidence | e the minimum meas | eure possible by usi | ng "Soft Opening" | kit pages 27-28 |
| EV. 7 | | | | | Page 7 of 29 |



DIMENSIONAL DIAGRAM OF THE CENTERED DOOR WITH ARM **SMALL** (WE ADVISE USING THE MAGNETIC LOCK)

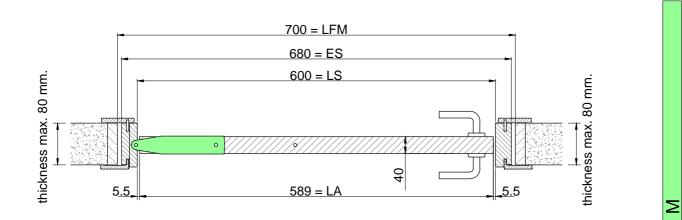
If rounded jambs are used, the above thickness wall dimension must be calculated only on the plane surface and not on the rounded side.

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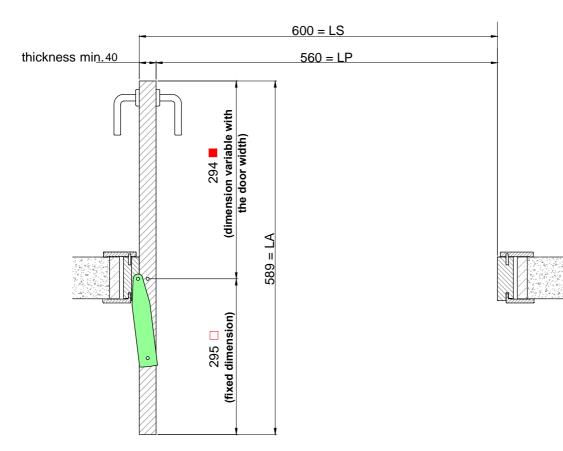
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Wall thickness up to 80 mm



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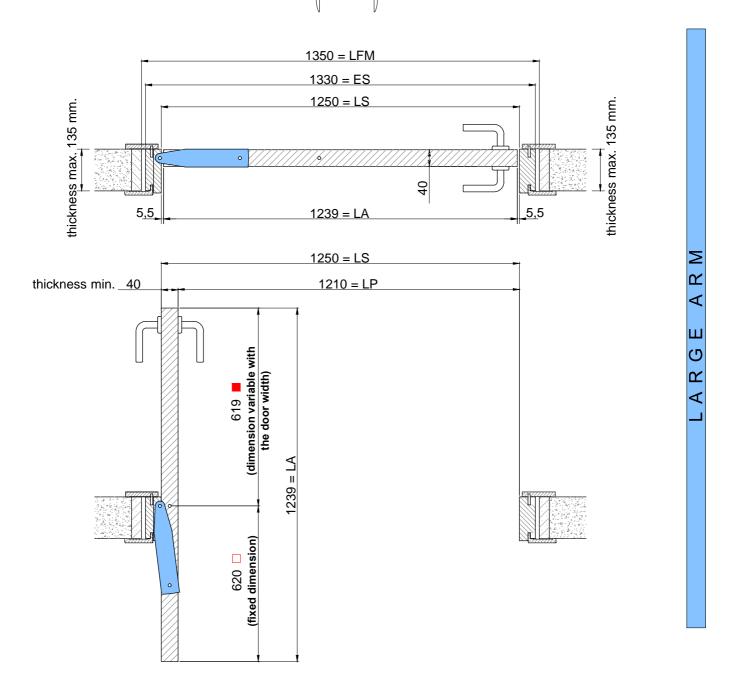


| LEGEND | | | | ENCUMBRA | NCE DOOR | |
|---------------------------|--|--|------------------------|---|-----------------------|--------------------------------------|
| P = Passage | dimension (LFM - 140) | | LFM wall hole width | LP passage dimension | LA door leaf width | max. encumbrance of the open door |
| A = Door Lea | f width(LFM-111) | | 610 | 470 | 499 | 295 🗆 |
| S = Door jam | o opening(LFM - 100) | | 650 | 510 | 539 | 295 🗆 |
| ES = Outer ian | = Outer jamb (LFM - 20) = length of the upper crossbeam | | 700 | 560 | 589 | 295 🗖 🗌 |
| FM = Wall hole | | | 750 | 610 | 639 | 344 |
| _FIVI = vvali nole | width | | *800 | 660 | 689 | 394 |
| | e technical drawing refer to the 700 wall hole width and it is the e encumbrance of the open door is symmetric. | | | ard dimension, it is p ate dimensions (see | | |

DIMENSIONAL DIAGRAM OF THE ORIENTED DOOR WITH ARM LARGE (WE ADVISE USING THE MAGNETIC LOCK)

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

Wall thickness up to 135 mm



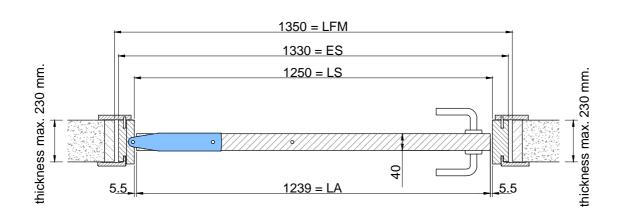
| | | ENCUMBRA | NCE DOOR | |
|---|------------------------|-------------------------|-----------------------|--------------------------------------|
| | LFM wall hole width | LP passage dimension | LA door leaf width | max. encumbrance of the open door |
| LEGEND | 1100 | 960 | 989 | 620 🗌 |
| LP = Passage dimension (LFM - 140) | 1150 | 1010 | 1039 | 620 🗌 |
| | 1200 | 1060 | 1089 | 620 🗌 |
| LA = Door Leaf width (LFM - 111) | 1250 | 1100 | 1139 | 620 🗌 |
| LS = Door jamb opening (LFM - 100) | * 1300 | 1160 | 1189 | 620 🗌 |
| ES = Outer jamb (LFM - 20) = length of the upper crossbeam | 1350 | 1210 | 1239 | 620 📕 🗌 |
| LFM = Wall hole width | 1400 | 1260 | 1289 | 670 📕 |
| | * 1450 | 1310 | 1339 | 720 |
| The dimensions on the technical drawing refer to the 1350 wall hole width and it is the dimension in which the encumbrance of the open door is symmetric. * Available standard dimension, it is possible to have a even intermediate dimensions (see page 1 7) by adju | | | , | |
| See in evidence | the minimum mease | ure possible by usi | ng "Soft Opening" | kit pages 27-2 |
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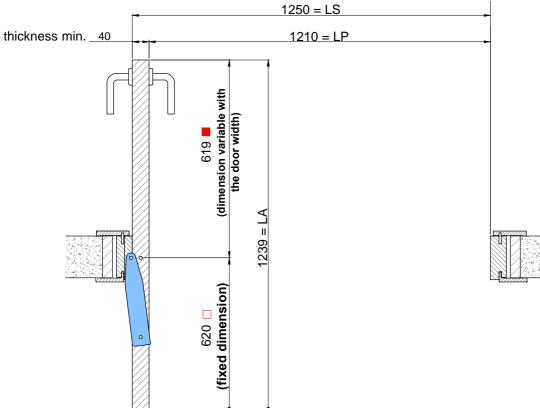


DIMENSIONAL DIAGRAM OF THE CENTERED DOOR WITH ARM LARGE (WE ADVISE USING THE MAGNETIC LOCK)

Wall thickness up to 230 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.





| | ENCUMBRANCE DOOR | | | |
|---|------------------------|--|-----------------------|--------------------------------------|
| | LFM wall hole width | LP passage dimension | LA door leaf width | max. encumbrance of the open door |
| LEGEND | 1100 | 960 | 989 | 620 🗌 |
| LP = Passage dimension (LFM - 140) | 1150 | 1010 | 1039 | 620 🗌 |
| | 1200 | 1060 | 1089 | 620 🗖 |
| LA = Door Leaf width (LFM - 111) | 1250 | 1100 | 1139 | 620 🗌 |
| LS = Door jamb opening (LFM - 100) | * 1300 | 1160 | 1189 | 620 🗌 |
| ES = Outer jamb (LFM - 20) = length of the upper crossbeam | 1350 | 1210 | 1239 | 620 📕 🗌 |
| LFM = Wall hole width | 1400 | 1260 | 1289 | 670 |
| | * 1450 | 1310 | 1339 | 720 |
| The dimensions on the technical drawing refer to the 1350 wall hole width and it is the dimension in which the encumbrance of the open door is symmetric. | | ard dimension, it is p te dimensions (see | | , |
| See in evidence | the minimum mease | ure possible by usi | ng "Soft Opening" | kit pages 27-28 |
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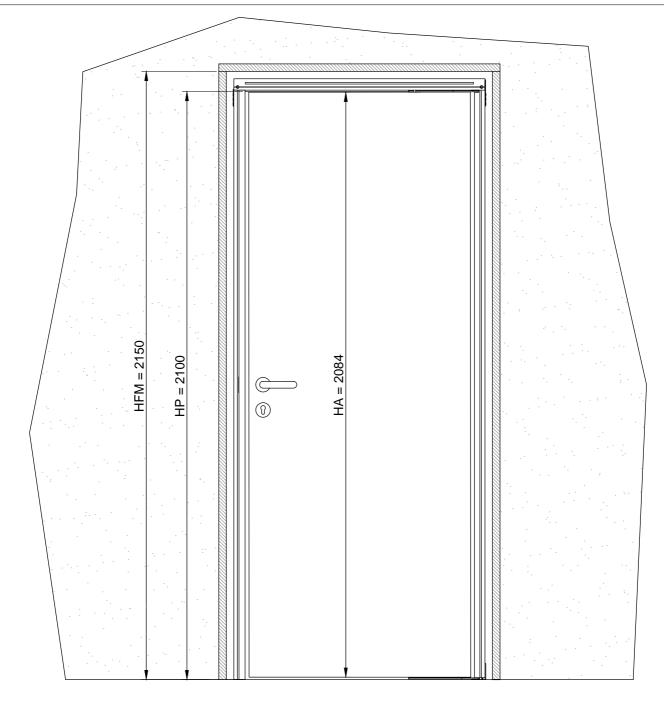
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| | HFM | HP | HA | |
|----|-----------------|--------------------------|------------------|-----------------|
| Wa | all hole height | height passage dimension | height door leaf | |
| * | 1950 | 1900 | 1884 | |
| * | 2000 | 1950 | 1934 | |
| * | 2050 | 2000 | 1984 | HP = (HFM - 50) |
| * | 2100 | 2050 | 2034 | HA = (HFM - 66) |
| * | 2150 | 2100 | 2084 | |
| * | 2200 | 2150 | 2134 | |
| * | 2250 | 2200 | 2184 | |

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

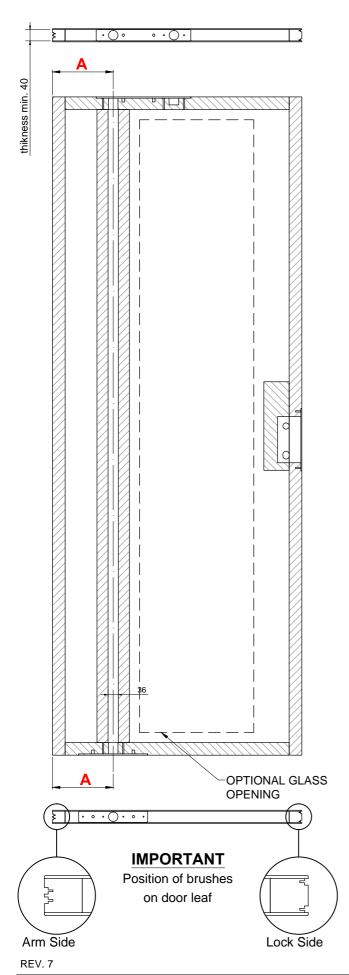
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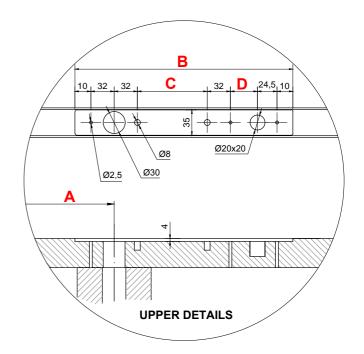


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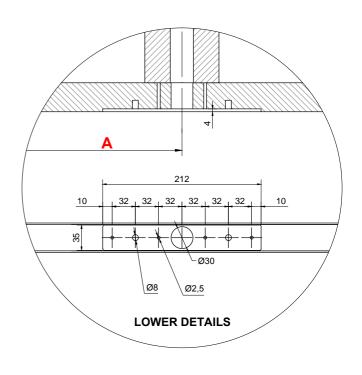
| | | | | VERT | ICAL DIMENSIONS | |
|---|---|---|---------|--|---|---|
| | | | | HP= (H | FM-50) HA= (HFM | И-66) |
| | | | WAI | HFM | HP HEIGHT PASSAGE DIMENSION | HA DOOR LEAF HEIGHT |
| | HEIGHT | | | 1950 | 1900 | 1884 |
| | | | | 2000 | 1950 | 1934 |
| | STANDARD | | | 2050 | 2000 | 1984 |
| | TAN | | | 2100 | 2050 | 2034 |
| | \ v | | | 2150 | 2100 | 2084 |
| = Door Leaf Height | | | | 2200 | 2150 | 2134 |
| at He | | | | 2250 | 2200 | 2184 |
| | | | | | | |
| 4 | | | | HORIZ | ONTAL DIMENSION | |
| A = Door | ш | | ب | LP= | (LFM-140) LA= (LI | FM-111) |
| LA = Door Lear Width | LARGE | BASE | SMALL | LFM WALL HOLE WIDTH | LP WIDTH PASSAGE DIMENSION | LA DOOR LEAF WIDTH |
| ✓✓ | | | | 610 | 460 | 499 |
| | | | ۲ | 650 | 510 | 539 |
| Minimum dimension with "Soft Opening" SMALL arm | | ۲ | ۲ | 700 | 560 | 589 |
| | | • | • | 750 | 610 | 639 |
| | | \odot | \odot | 800 | 660 | 689 |
| Minimum dimension with "Soft Opening" BASE arm | | | | 050 | 740 | 700 |
| Minimum dimension with "Soft Opening" BASE arm | | ۲ | | 850 | 710 | 739 |
| Minimum dimension with "Soft Opening" BASE arm | | •• | | 900 | 760 | 789 |
| Minimum dimension with "Soft Opening" BASE arm | | ••• | | 900 950 | 760 810 | 789 839 |
| Minimum dimension with "Soft Opening" BASE arm | | | | 900 950 1000 | 760 810 860 | 789 839 889 |
| | | ••• | | 900 950 | 760 810 | 789 839 |
| | • | | | 900 950 1000 1050 | 760 810 860 910 | 789 839 889 939 |
| | • | | | 900 950 1000 1050 1100 | 760 810 860 910 960 | 789 839 889 939 989 |
| | - | | | 900 950 1000 1050 1100 1150 | 760 810 860 910 960 1010 | 789 839 889 939 989 1039 |
| | • | | | 900 950 1000 1050 1100 1150 1200 | 760 810 860 910 960 1010 1060 | 789 839 889 939 989 1039 1089 1139 1189 |
| | • | | | 900 950 1000 1050 1100 1150 1200 1250 1300 1350 | 760 810 860 910 960 1010 1060 1110 1160 1210 | 789 839 889 939 989 1039 1089 1139 1189 1239 |
| | • | | | 900 950 1000 1050 1100 1150 1200 1250 1300 1350 1400 | 760 810 860 910 960 1010 1060 1110 1160 1210 1260 | 789 839 889 939 989 1039 1089 1139 1189 1239 1289 |
| Minimum dimension with "Soft Opening" BASE arm | • | | | 900 950 1000 1050 1100 1150 1200 1250 1300 1350 1400 1450 | 760 810 860 910 960 1010 1060 1110 1160 1210 | 789 839 889 939 989 1039 1089 1139 1189 1239 1289 1339 |



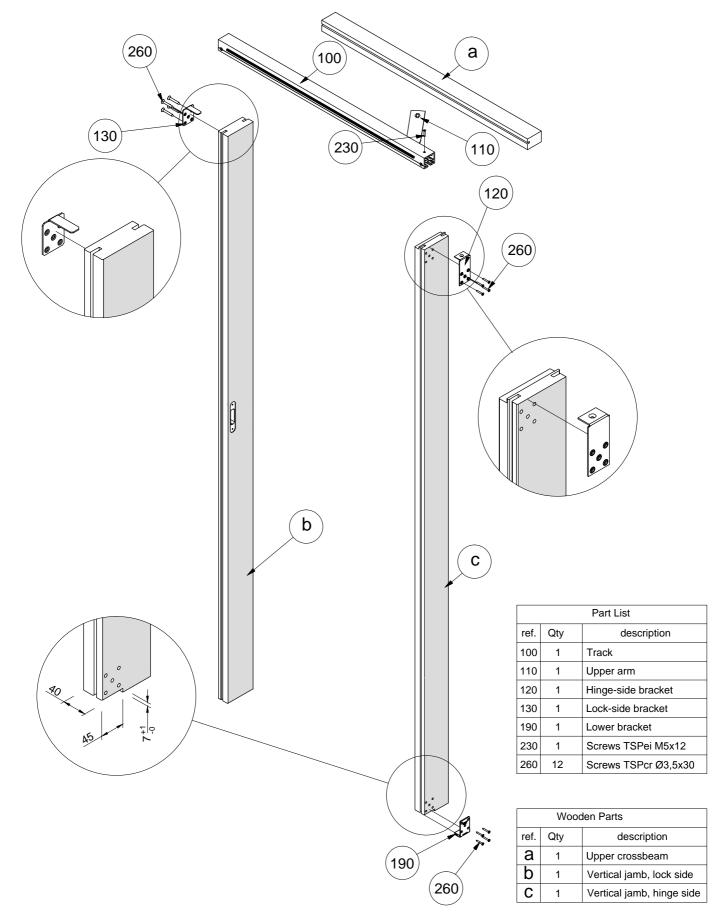




| Variable measures according to arm used | | | | | |
|---|-----|-------|------|------|--|
| | Α | В | С | D | |
| BASE arm | 192 | 276 | 96 | 39,5 | |
| SMALL arm | 144 | 227,3 | 47,3 | 39,5 | |
| LARGE arm | 306 | 390 | 224 | 25,5 | |



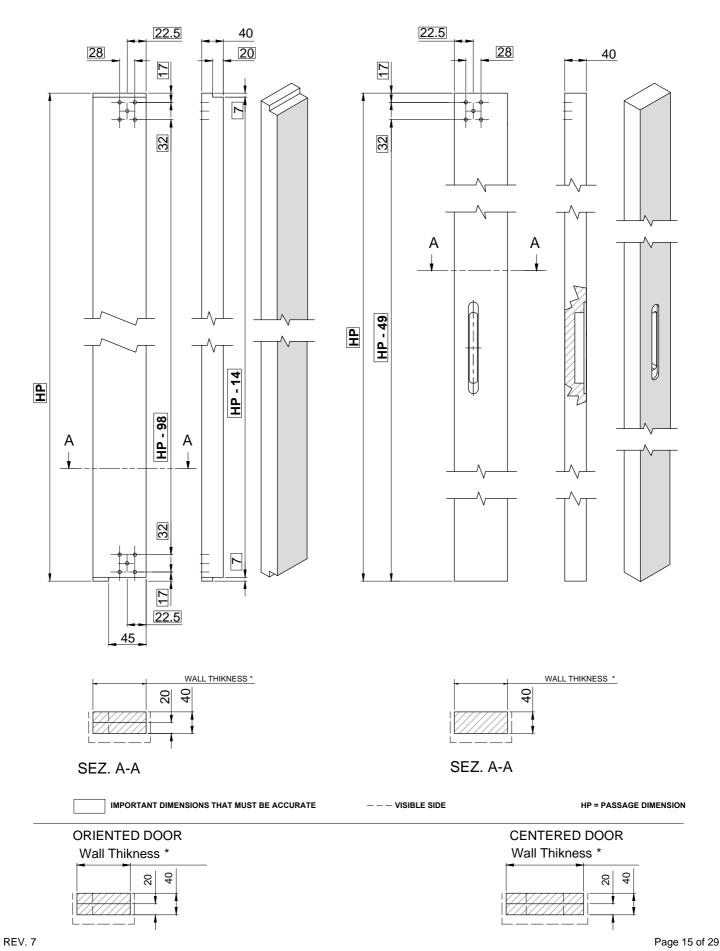




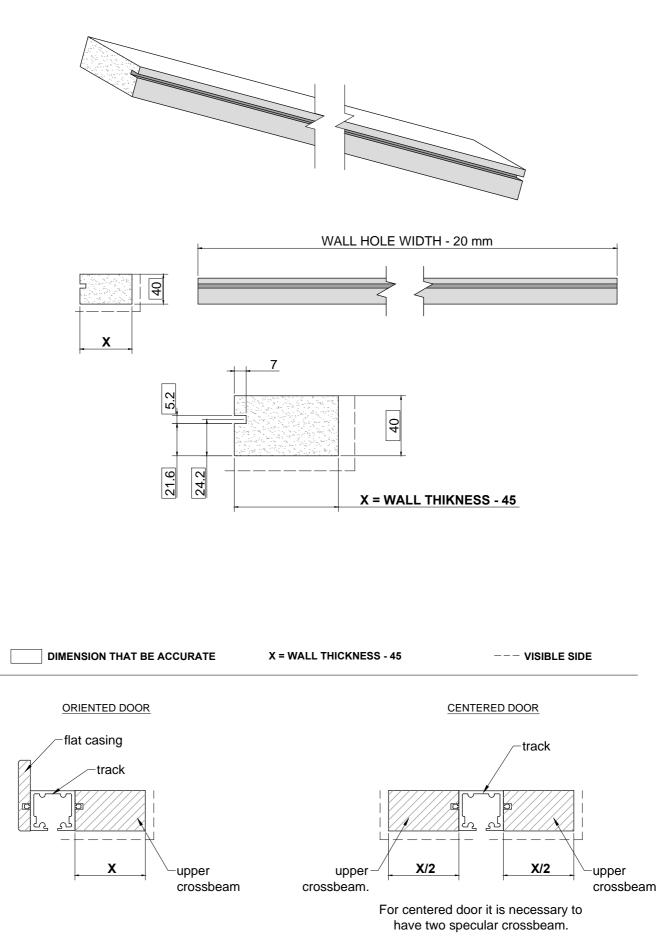


HINGE SIDE

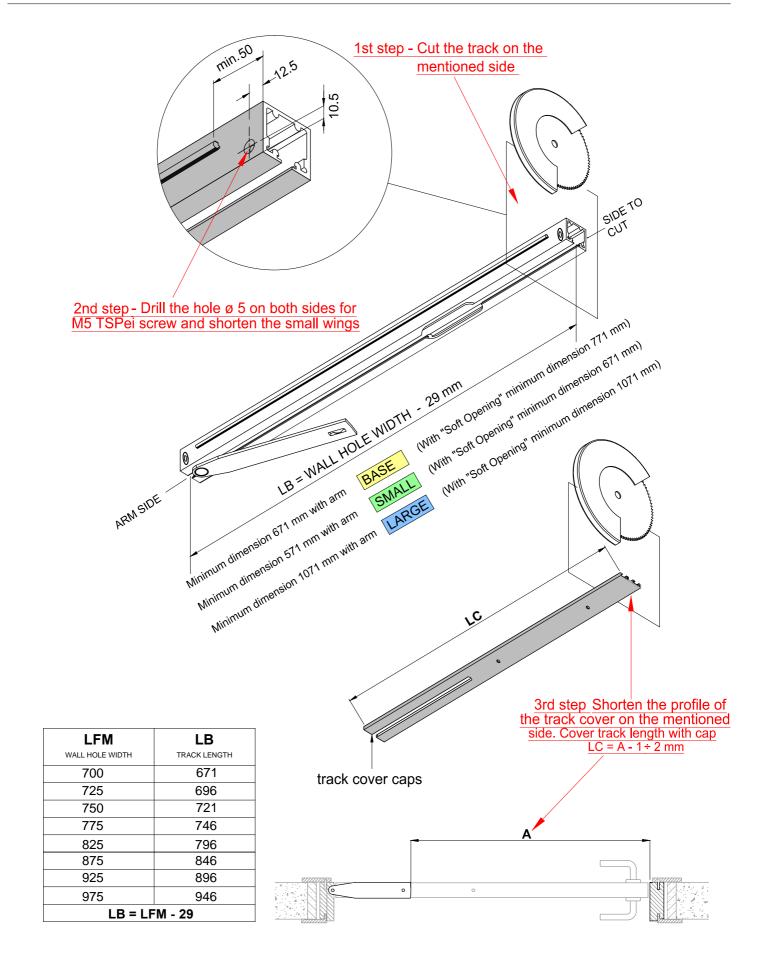
LOCK SIDE







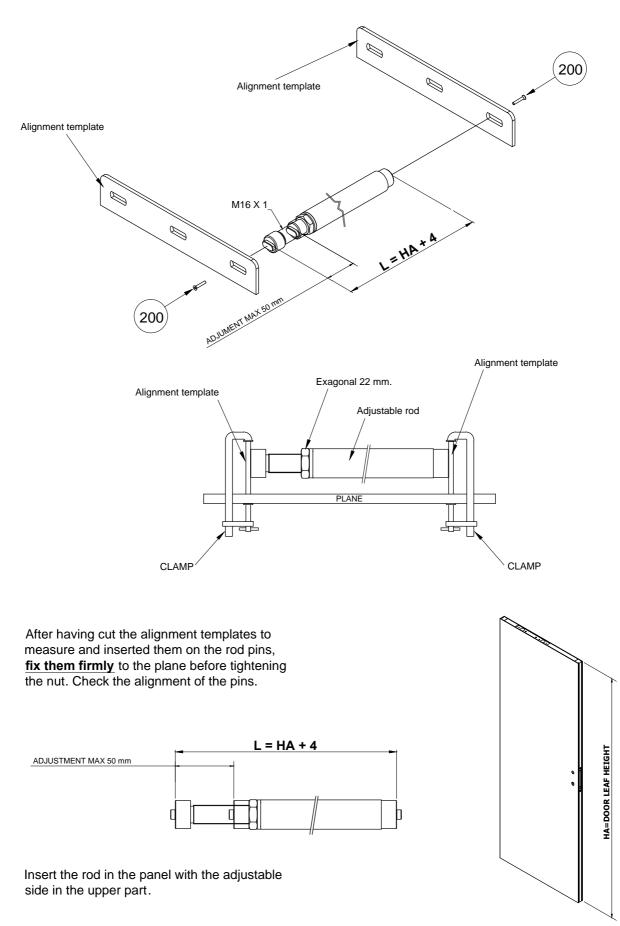




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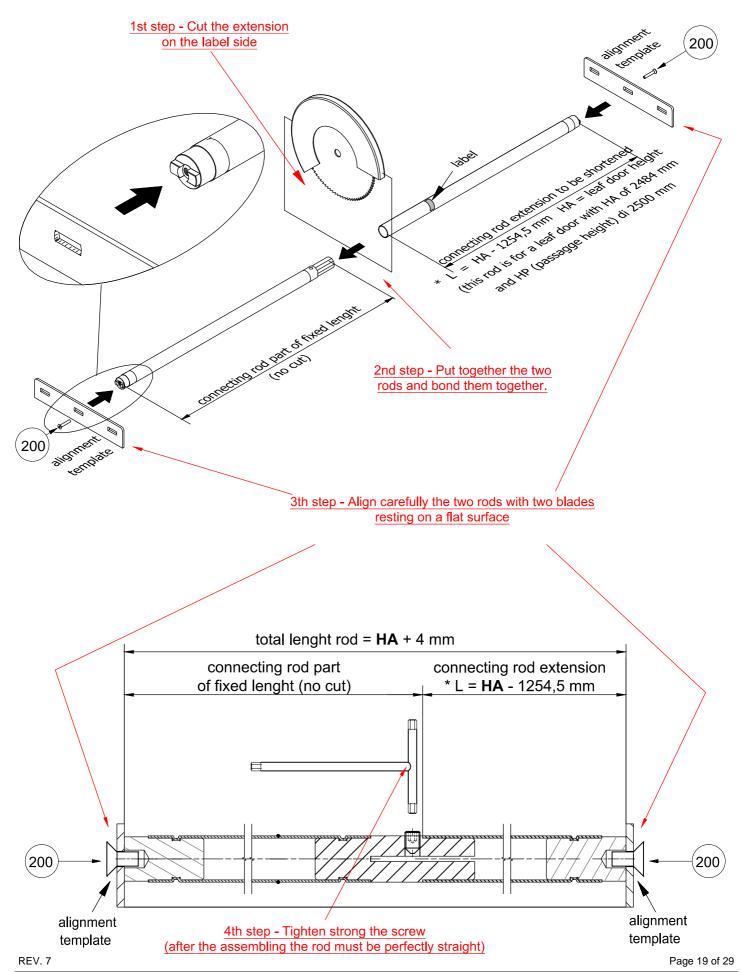








ADJUSTMENT OF THE CONNECTING ROD FOR NOT STANDARD HEIGHTS.

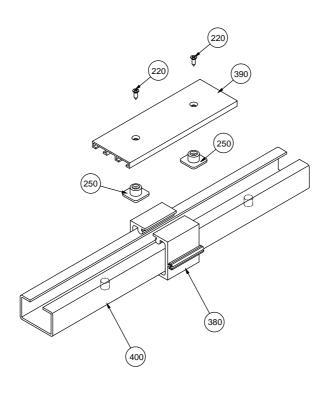


CELEGON 30035 Mirano (Venezia), Via G. Galilei, 6 - Z.I. T +39 (0)41 5728404 F +39 (0)41 5728522 www.ergon.eu info@ergon.eu

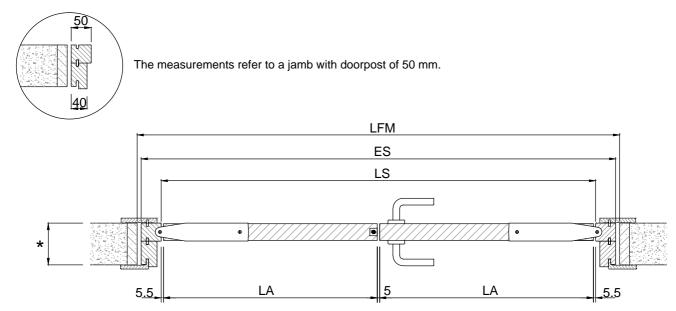


KIT UNION TRACKS FOR DOOR WITH TWO DOOR LEAFS WITH GRGON SYSTEM

2



| | | 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 |



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

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

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

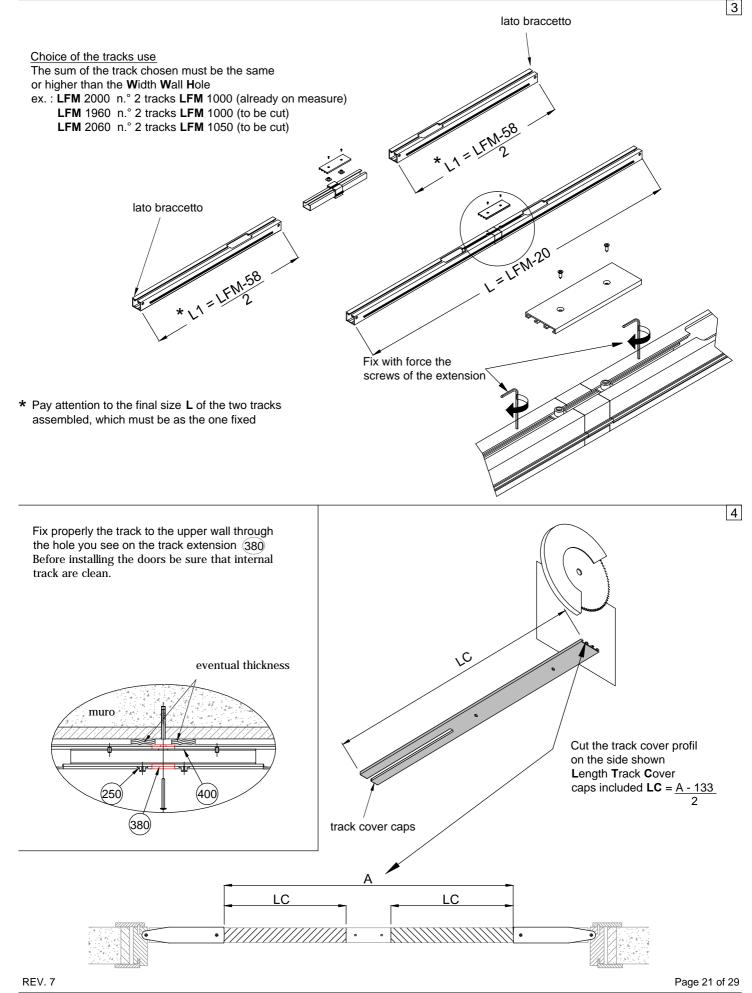
LFM min. 2300 mm. with **LARGE** arm with "Soft Opening" **LFM** min. 2300 mm.

REV. 7

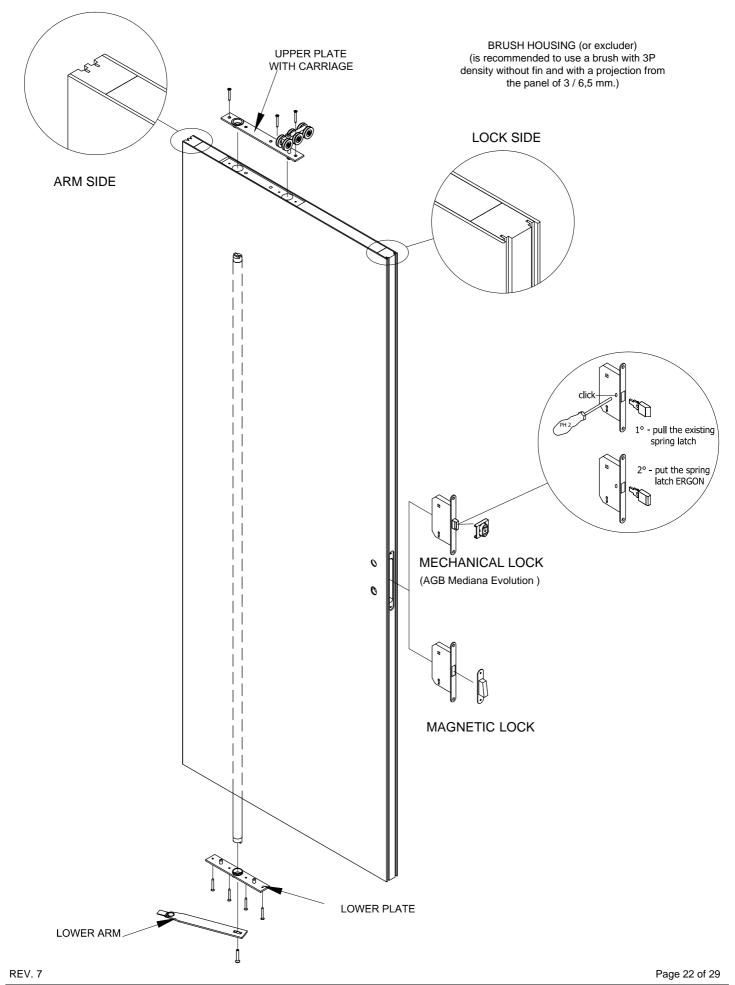
| Legend | | | |
|--|--|--|--|
| LP = Passage Dimension (LFM - 200) | | | |
| LA = Door Leaf Width (LFM - $\frac{136}{2}$) | | | |
| LS = Door Jamb Opening (LFM - 120) | | | |
| ES = O uter Jamb (LFM - 20 = length of the track and upper crossbeam) | | | |
| LFM = Wall Hole Width | | | |

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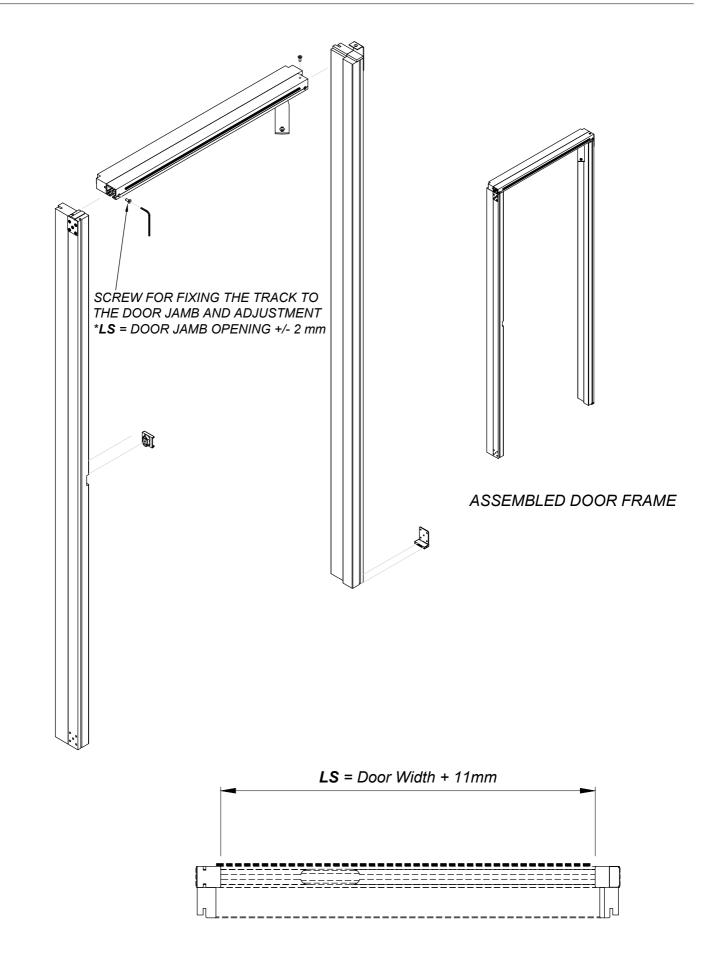




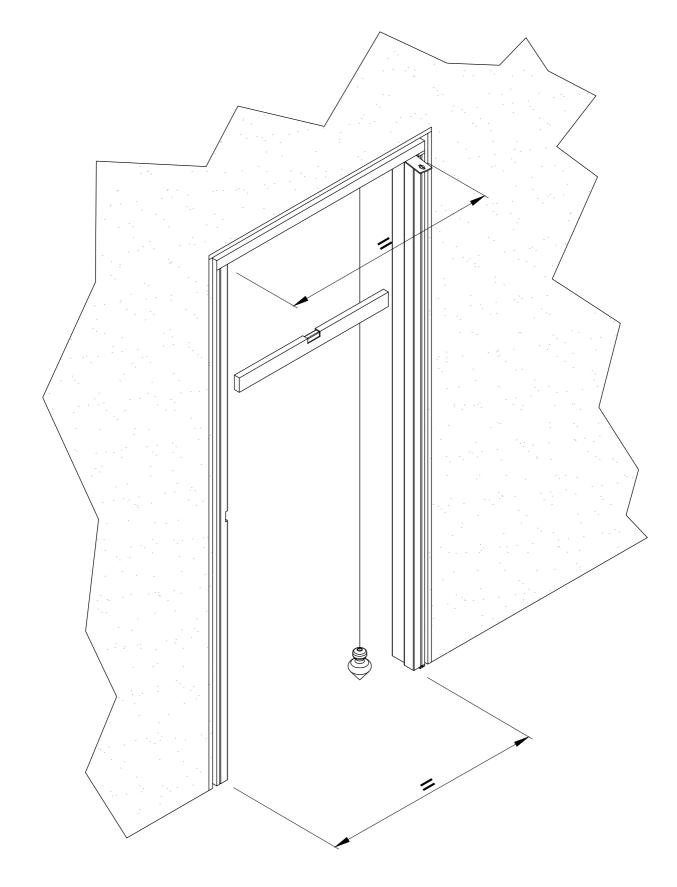






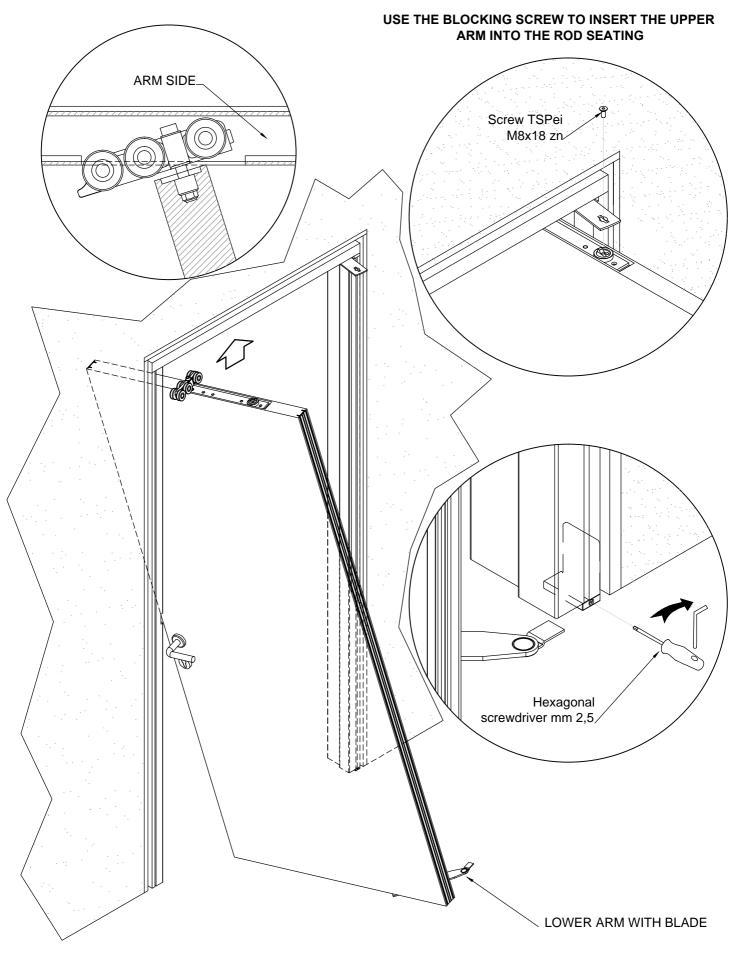




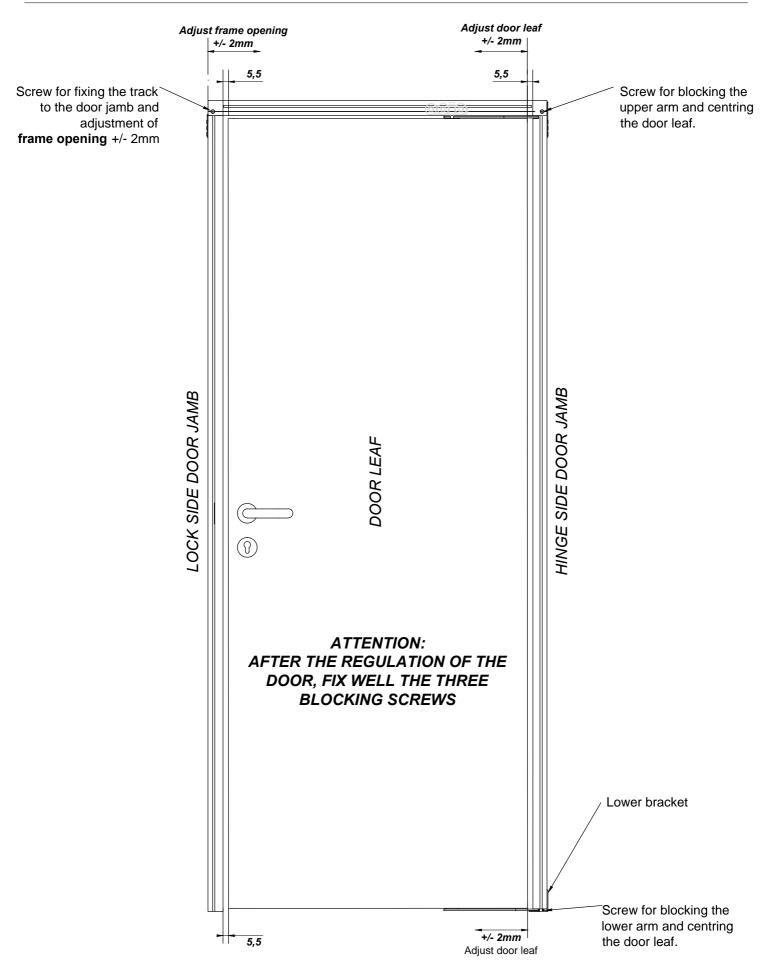


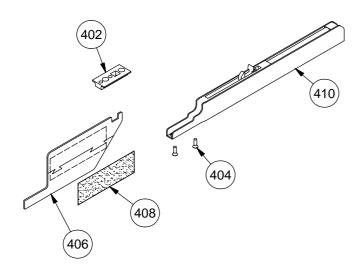
NOTE: THE LEVELLING OF THE TRACK AND THE PLUMB OF THE DOOR JAMBS MUST BE PRECISE





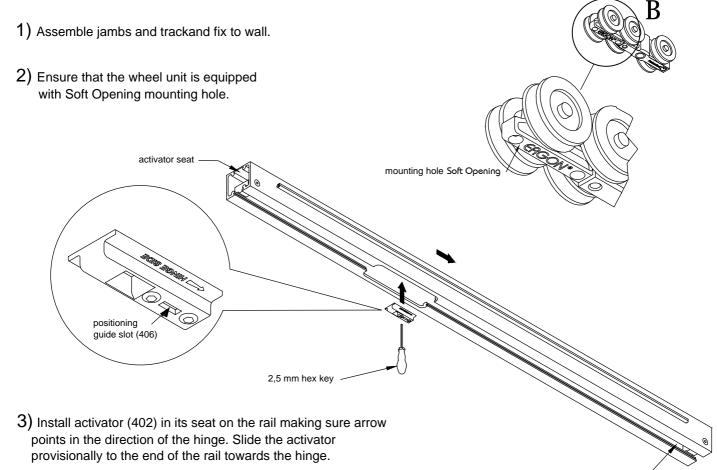






| List of Components | | | |
|--------------------|------|--------------------------------|--|
| Ref. | Q.ty | Description | |
| 402 | 1 | Activator | |
| 404 | 2 | Screw TSP+ M3x8 - ISO 7046 | |
| 406 | 1 | Activator positioning template | |
| 408 | 1 | Sticker | |
| 410 | 1 | Soft Opening | |

Installation

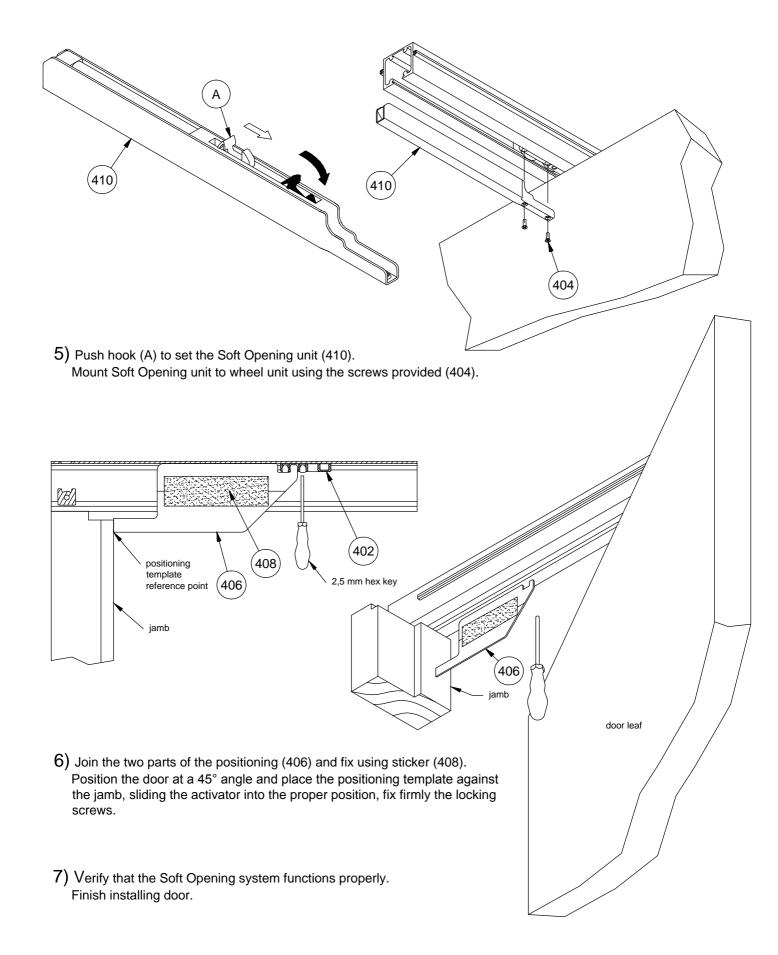


hinge arm side /

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

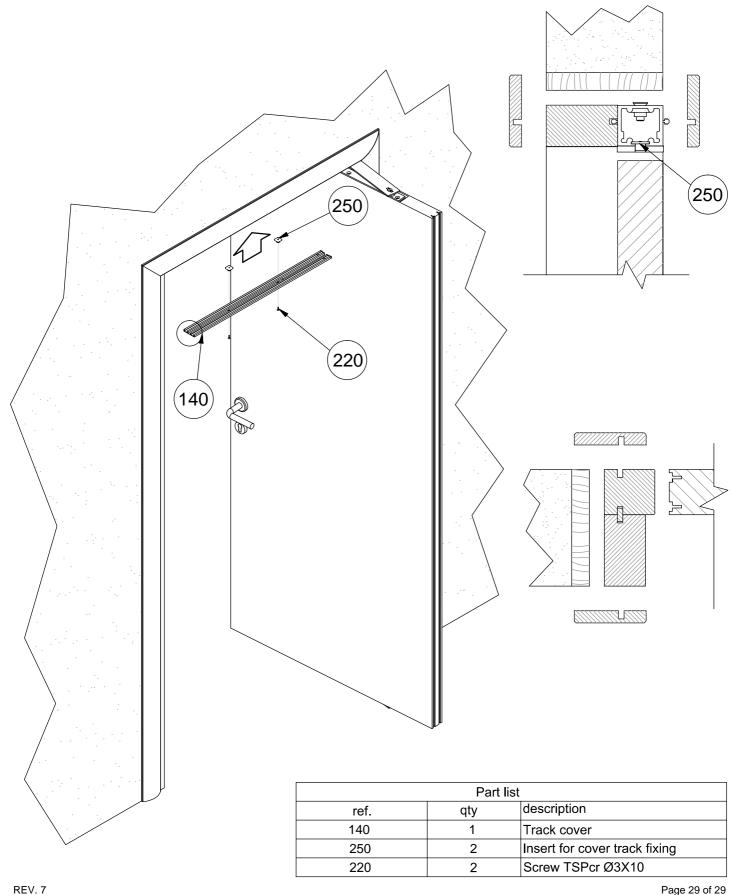
N.B. If the door is already installed, remove the track cover and then install the activator in its seat on the rail.







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.



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