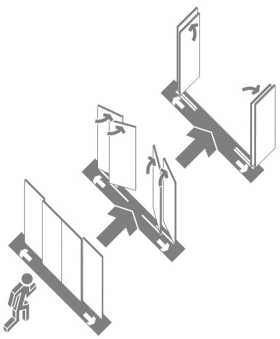
SESAMO



# ARIETE

Antipanic Breakaway System

INSTALLATION MANUAL

www.tuv.com
TÜVRheinland
ID:9105038848

# CERTIFICATE

**The Certification Body TÜV Rheinland Italia S.r.l.**

certifies, in accordance with the TÜV Rheinland Group procedures, that the Company

**SESAMO S.r.l.**
**Strada Gabannone, 8/10**
**I - 15030 Terruggia (AL)**

SESAMO

has established and applies a quality management system for the following scope:

**Design, manufacturing and assistance of automatic entrance devices.** EA 17, 18

Through an Audit, Report No. 1130610, proof has been furnished that the quality management system fulfils the requirements of the standard

**UNI EN ISO 9001:2008**

Please refer to the Quality Manual for the details about the exclusions with respect to the requirements of the standard.

Certificate Registration No. **39 00 1130610**.

This Certificate is valid from 2011-08-20 to 2014-07-15.

The reference date for all the next audits is (day-month): 04-06.

**Milan, 2011-08-20.** First Certification: 2006-10-17

The certification responsible
TÜV Rheinland Italia S.r.l., Via E. Mattei, 10 - I - 20010 Pogliano Milanese (MI)

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

SGQ N° 083A
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

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## Contents



We would like to thank you for choosing this product.

In order to obtain the best performance of the ARIETE system, the Sesamo Company recommends that you read and carefully follow the installation and use instructions provided in this manual. The installation of the ARIETE system must be performed only by professionally qualified personnel to whom this manual is directed. Any errors during the installation phase may be the source of danger for people or things. The packaging materials (wood, plastic, cardboard, etc.) should not be discarded in the environment or left within reach of children since they are potentially dangerous. Each individual phase of the installation must be performed in conformity with the current regulations and, in any case, according to the dictates of general good practices. Ensure, before beginning the installation, that the product is integral and has not been damaged during transport or as a result of improper storage. Before installing the product ensure that each architectonic and structural element of the entrance (beam fastening surfaces, fixtures, guide, etc.) is suitable and sufficiently sturdy to be automated. Conduct a careful analysis of the risks and make appropriate modifications to eliminate the areas of dragging, crushing, shearing and of danger in general. The manufacturer of the ARIETE system is not liable for any unobservance of general good practices or specific regulations in the construction of the fixture to be motorised and of any failures of the same. All of the protective safety devices of the automatic door (photocells, active sensors, etc.) must be installed in conformity with the regulations and directives in force, the risk analysis, the system typology, the use, the traffic, and the forces and inertias in play. Always pay particular attention to the zones were there may occur: crushing, shearing, dragging and any other danger in general, placing appropriate signs if necessary. Use only original spare parts in maintenance or repair operations. Do not tamper with or alter for any reason the internal parts of the ARIETE system. The manufacturer declines any responsibility in the event that the internal parts of the ARIETE system are tampered with or used improperly. The installer of the ARIETE system is obligated to provide the person in charge of the automatic door with the user's manual and all the information necessary for a correct use. Pay particular attention to the messages in this manual marked by the danger sign. These may either be warnings aimed at preventing potential damage to the equipment or specific signals of potential danger for the safety of the installer or other people involved. This system has been designed for the breakaway of automatic sliding doors in case of emergency. Any other use will be considered contrary to the use foreseen by the manufacturer who, consequently, cannot be held liable.

## ARIETE

Ariete is available in different models according to the characteristics of the leaf to which it must be coupled and on the basis of the surface finish.

In particular, it is necessary to choose the type of system using the following stock table once the width and weight of the leaf are known:

| Leaf width | ARIETE | |
|---|---|---|
| [mm] | **PF04.01 - PF04.02** | **PF04.08 - PF04.09** |
| (min.=570) | Leaf weight with Ariete (12 Kg) included | |
| 600 | From 0 to 135kg | |
| 700 | From 0 to 115kg | |
| 800 | From 0 to 115kg | |
| 900 | From 0 to 90kg | From 50 to 125kg |
| 1000 | From 0 to 80kg | From 50 to 115kg |
| 1100 | From 0 to 70kg | From 50 to 110kg |
| 1200 | | From 50 to 100kg |
| 1300 | | From 50 to 90kg |
| 1400 | | From 50 to 80kg |

Ariete is available untreated or with silver-coloured anodising treatment.

This manual does not make any distinction between the different models available since the assembly follows the same scheme.

⚠ **ATTENTION**: If the width of the leaf is greater than 1200 mm, it is necessary to install a third carriage to the leaf (element not provided in the KIT, to be ordered separately).

## Operation typology of the ARIETE antipanic breakaway system

### TOTAL ARIETE (T.A.)

Breakaway system for sliding and semi-fixed door leaves (**Fig. 1 and 2**).

*Example: 2 sliding leaves*

| | |
|---|---|
| **I** | Interior |
| **E** | Exterior |
| **SA** | Breakaway direction |
| **LI** | Crossbeam inspection side |
| **V** | Emergency passageway |

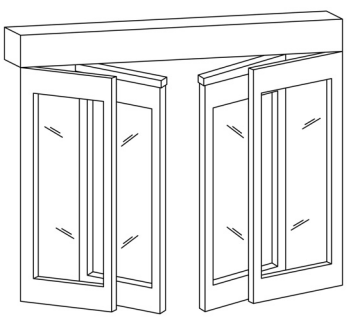


Fig. 2

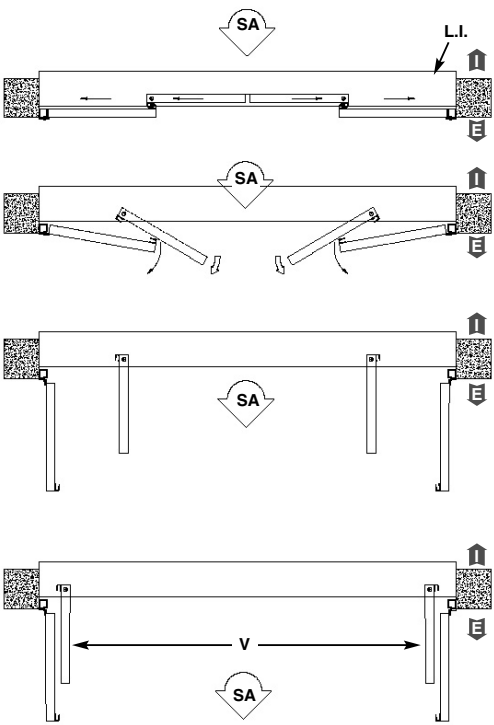



Fig. 1

## TOTAL ARIETE

Standard Doors (**Fig.3a**)

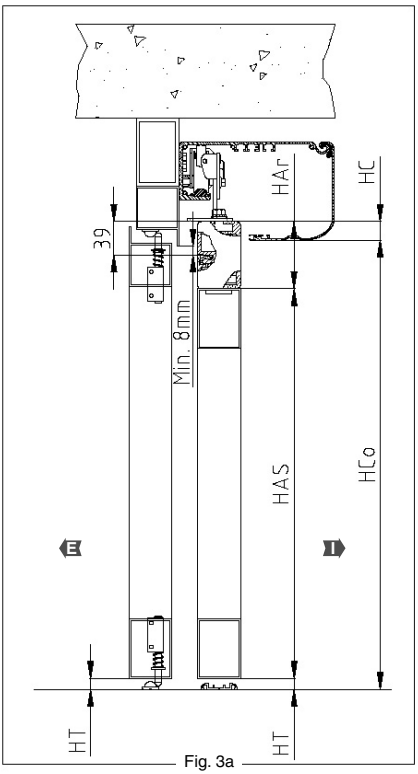



Fig. 3a

SESAMO Magnum Doors (**Fig.3b**)

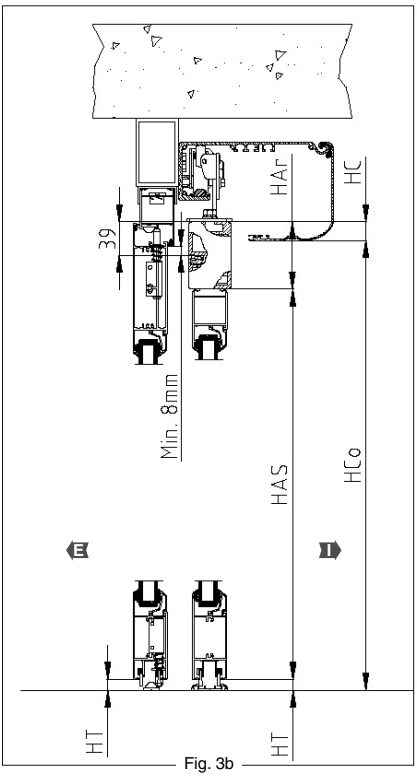



Fig. 3b

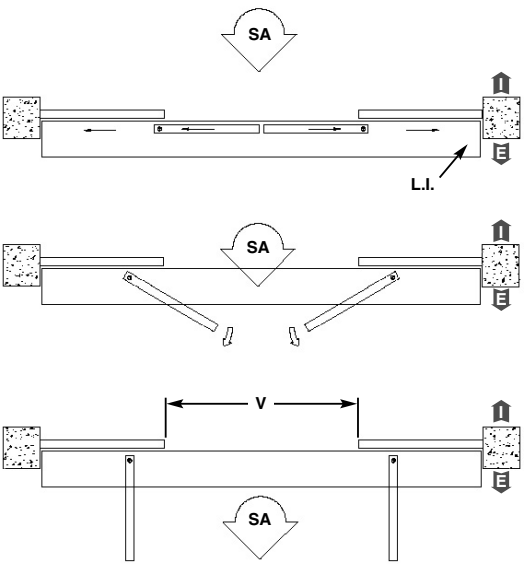
| | | |
|---|---|---|
| HCo | Under-cover height | |
| HAF | Fixed leaf height | |
| HAS | Sliding leaf height | HCo + HC –HAr - HT |
| HAr | ARIETE system height | 78,5mm |
| HC | Under-cover – under-carriage distance | ✻ |
| HT | Under-sliding leaf – floor distance | 13mm |
| I | Interior | |
| E | Exterior | |

✻ For HC refer to the manuals of the automatism installed.

⚠ **ATTENTION:** Keep the minimum distance of 8mm between the sash and the lower ARIETE section shown in the figure.

## PARTIAL ARIETE

Breakaway system for sliding leaves only (**Fig. 4 and 5**).




*Example: 2 sliding leaves*

Fig. 4

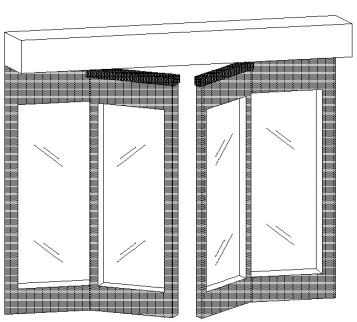


Fig. 5

| | |
|---|---|
| **I** | Interior |
| **E** | Exterior |
| **SA** | Breakaway direction |
| **LI** | Crossbeam inspection side |
| **V** | Emergency passageway |

## PARTIAL ARIETE

Standard Doors (**Fig.6a**)

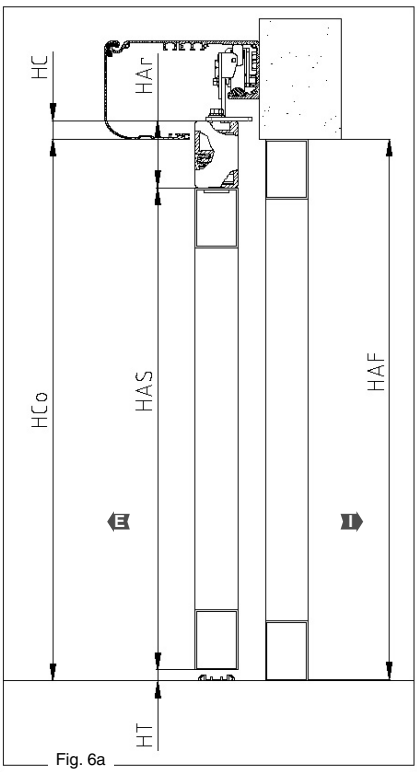


Fig. 6a

SESAMO Magnum Doors (**Fig.6b**)

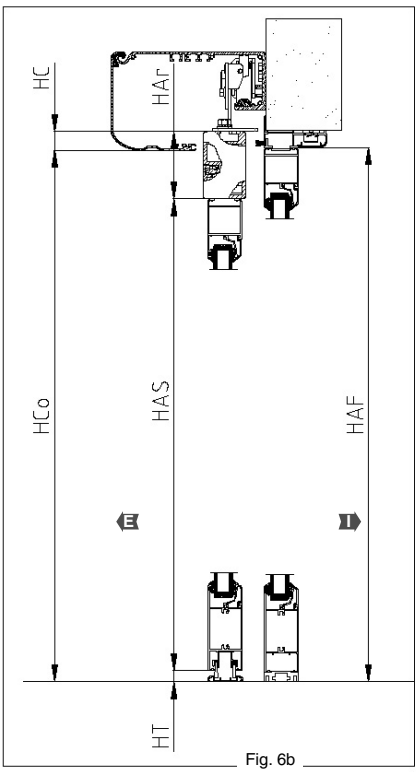


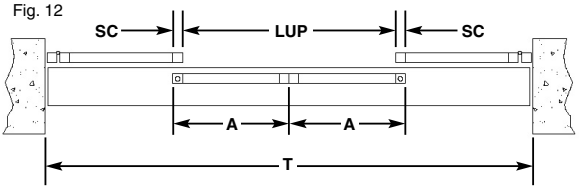
Fig. 6b

| | | |
|---|---|---|
| HCo | Under-cover height | HAF |
| HAF | Fixed leaf height | HCo |
| HAS | Sliding leaf height | HCo + HC –HAr - HT |
| HAr | ARIETE system height | 78,5mm |
| HC | Under-cover – under-carriage distance | ✻ |
| HT | Under-sliding leaf – floor distance | 13mm |
| I | Interior | |
| E | Exterior | |

✻ For the value of HC refer to the manual of the automatism installed.

## FORMULAS for crossbeams with the ARIETE system

Fig. 12




| | |
|---|---|
| **SC** | End overlap |
| **LUP** | Width of useful passageway |
| **A** | Leaf width |
| **X** | Casing thickness |
| **Y** | Leaf thickness |
| **Qmc** | Machine quotient in rear |

### Partial ARIETE

Refer to the formulas provided in the manual of the automatism used without any modification.

### Total ARIETE

Standard Doors (**Fig.13a**)

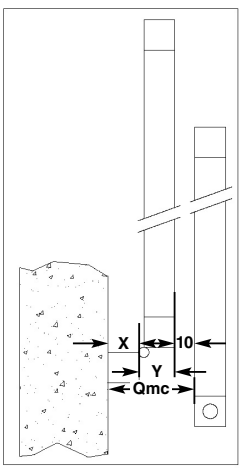



Fig. 13a

Magnum Door (**Fig.13b, 13c**)

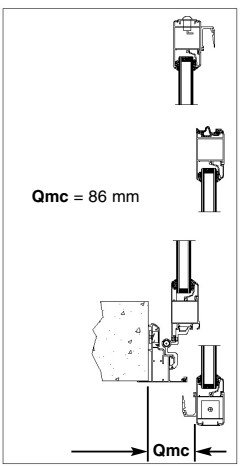



Fig. 13b

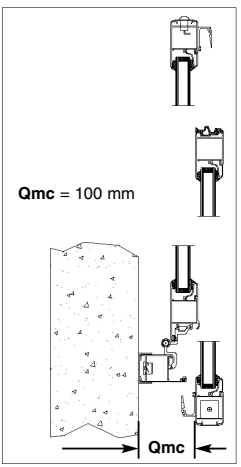



Fig. 13c

**TOTAL ARIETE**
**(sliding leaves and semi-fixed leaves)**

| | A known | LUP known | T known |
|---|---|---|---|
| **T** | 4A-2SC+2Qmc | 2LUP+2SC+2Qmc | - |
| **LUP** | 2A-2SC | - | $\frac{T-2SC-2Qmc}{2}$ |
| **A** | - | $\frac{LUP+2SC}{2}$ | $\frac{T+2SC-2Qmc}{4}$ |

## Preparation of the sliding leaf

### Standard Doors

In the case of Standard doors:

- Perform the 3 slots and the 2 holes with diameter of 6.5mm on the upright **A** that will host the vertical rod of the ARIETE system (**Fig.14**).
- Prepare a steel plate of minimum thickness 4mm with length equal to **L = Leaf Width – (2x50)**, and a width suitable to guarantee a solid and secure fastening between the lower ARIETE section and the upper crosspiece **B**. Drill and thread the plate following the indications along the entire length (**Fig. 15**).
- Drill the upper crosspiece **B** of the leaf following the indications along the entire length of the crosspiece (**Fig 16**).
- Work the lower crosspiece **C** according to the scheme indicated by the side of the strickle arm (**Fig. 17**).
- Insert the steel plate into the correct seat of the upper crosspiece **B** (**Fig. 18**).

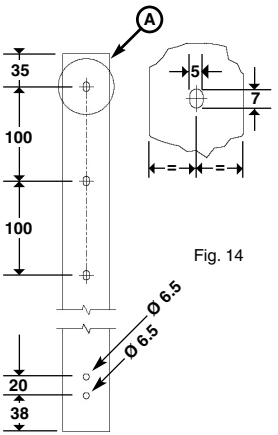


Fig. 14

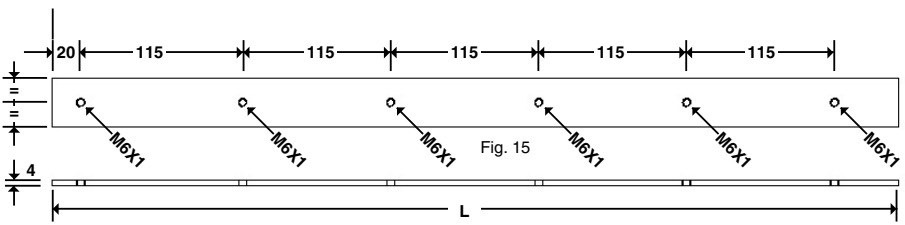


Fig. 15

**ATTENTION**: Verify that the threaded holes of the plate are concentric with those present on the upper crosspiece B and that they are spaced exactly according to the proportions of the drawing.

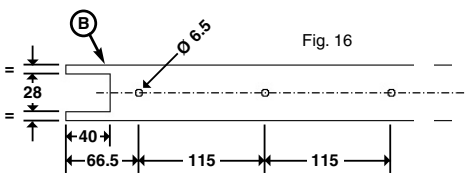


Fig. 16

**ATTENTION**: Use appropriately sized doors suitable to support the forces and the stresses caused by the breakaway of the leaves, in the case of emergency, by means of the ARIETE system.

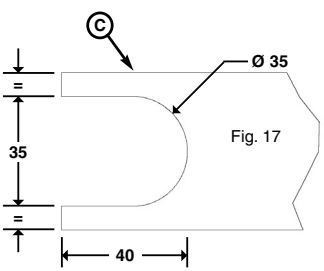


Fig. 17

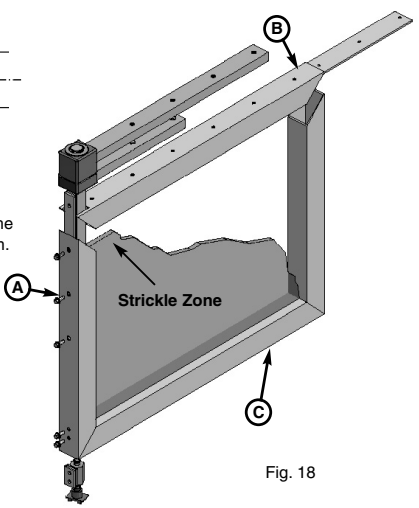
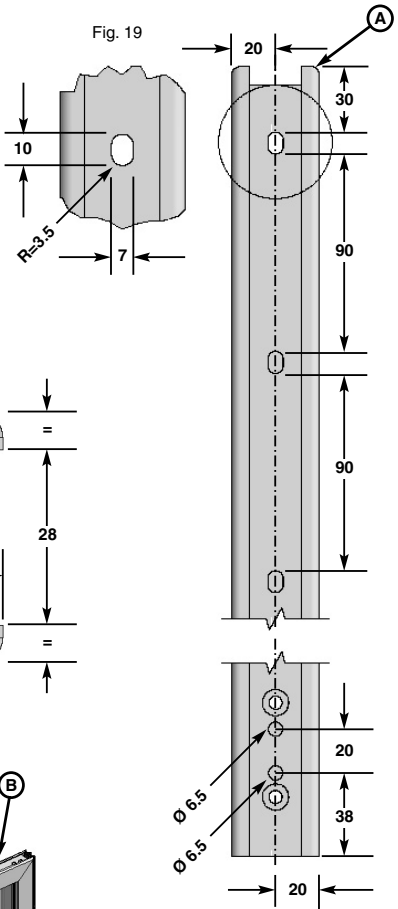


Fig. 18

Fig. 19




## SESAMO Magnum Doors

In the case of SESAMO Magnum doors, position the lower section/leaf fastening plaques into the correct seat on the upper crosspiece and, as in the working of the Magnum sections, perform:

- The 3 slots and the 2 holes of diameter 6.5mm on the upright **A** that will host the vertical rod of the ARIETE system (**Fig. 19**).
- An opening on the upper crosspiece **B** (**Fig. 20**).

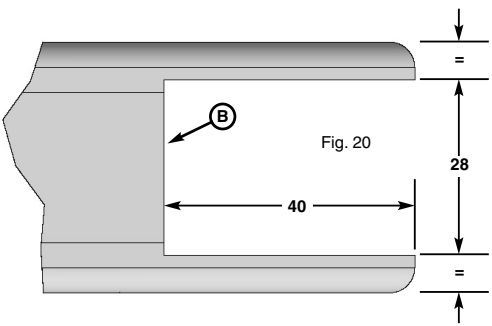



Fig. 20

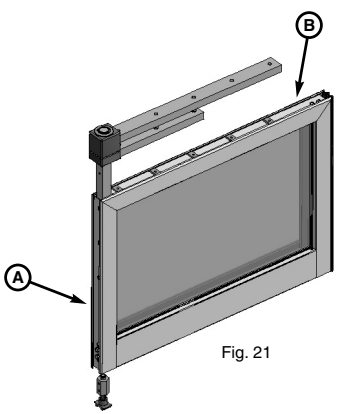



Fig. 21

## Preparation of the semi-fixed leaf

### Standard Doors

In the case of Standard doors:

- Perform an opening on the upper crosspiece **B** and on the lower crosspiece **C** (**Fig. 22**).
- Calculate the centre of the top slot (quota X) so that the distance between this and the supporting plane of the coupling (**see Fig. 57, 58**) is equal to 50 mm (**Fig. 23**).
- perform the slots on the upright **A** opposite of that which will host the hinge (**Fig. 24**).

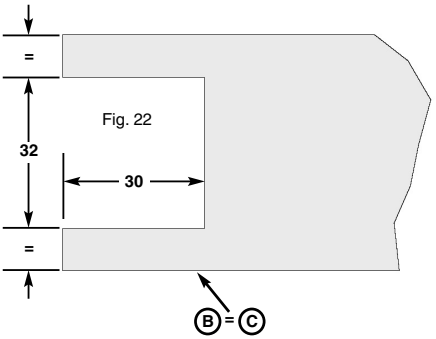


Fig. 22

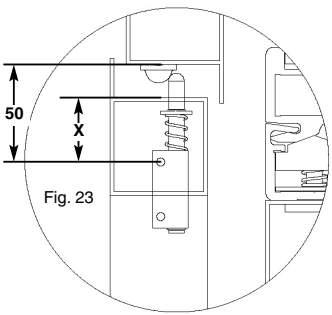


Fig. 23

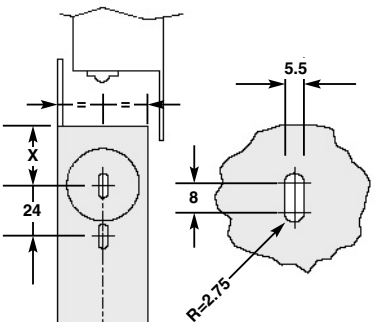


Fig. 24

**ATTENTION**: Use appropriately sized doors suitable to support the forces and the stresses caused by the breakaway of the leaves, in the case of emergency, by means of the ARIETE system

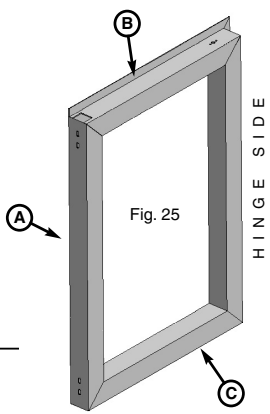


Fig. 25

### SESAMO Magnum Doors

In the case of SESAMO Magnum Doors perform:

- the slots on the upright **A** opposite of that which will host the hinge (**Fig. 26**).

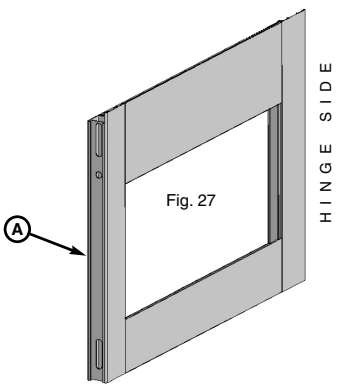



Fig. 27

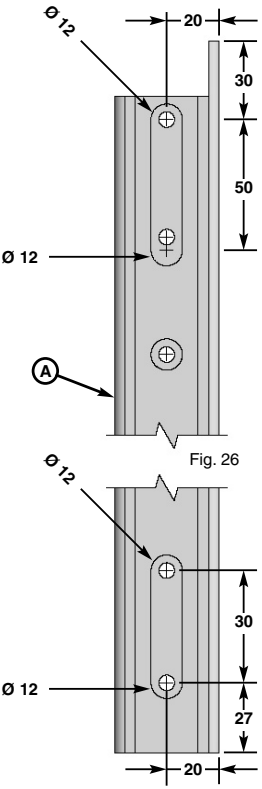



Fig. 26

## Phases of assembly and installation of the ARIETE system

### Materials provided in the ARIETE Kit

- Upper worked section
- Lower worked section
- Worked guide section
- Vertical steel bar with rotation pin
- Lower steel bar
- Upper steel bar with pin seat
- Accessories box + screws + optionals

⚠ **ATTENTION**: Before installing the ARIETE system ensure that:

- All the architectonic and structural parts that support the automatism (beam fastening surfaces, etc.) and all the elements that make up the installed automatism (carriages, guides, etc.) are suitable to support the forces and the stresses caused by the breakaway of the leaves, in the case of emergency, by means of the ARIETE system.

Fig. 28

## Cutting of the sections

Identify the correct case (*Case A or Case B*) referring to the various operational typologies listed below (**Fig. 32-40**).

⚠ **ATTENTION**: Be very careful to cut the correct side.

Cut the upper section and the lower section at the correct length using the indicated formula (**Fig. 29-31**).

**L = A + G - 60**

**A** = Leaf width (aluminium only)

**G** = seal dimension (Magnum Sections: G = 4 mm)

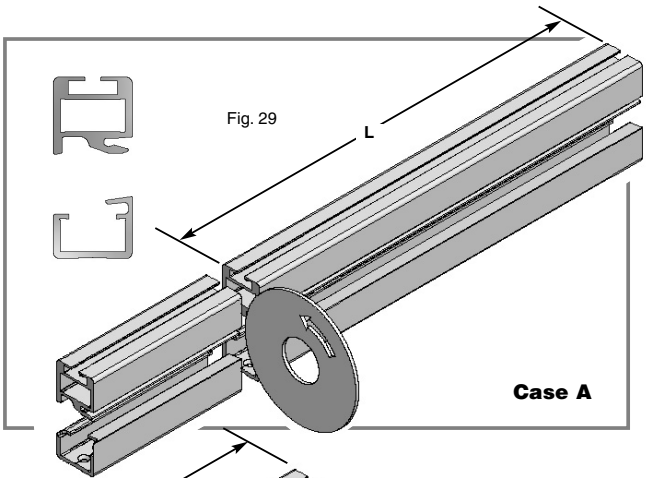



Fig. 29

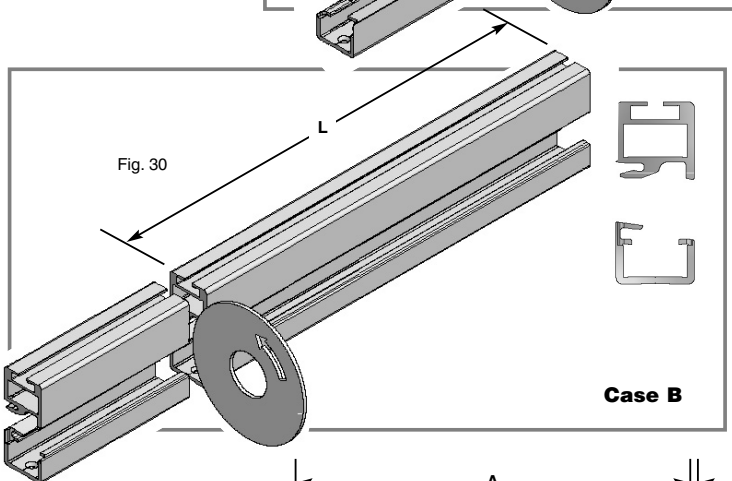



Fig. 30

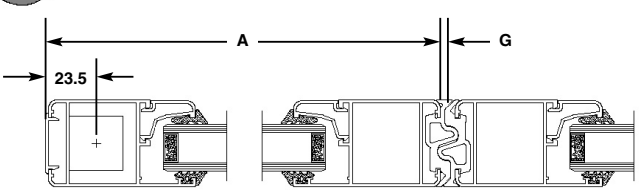



Fig. 31

## PARTIAL ARIETE

1 Leaf opens LX P.A.

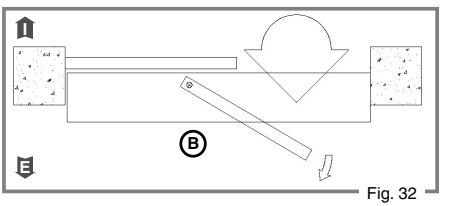



Fig. 32

1 Leaf opens RX P.A.

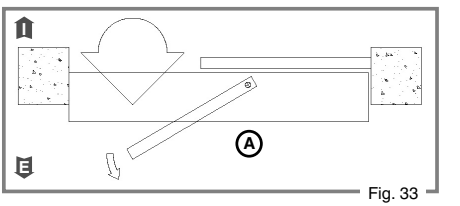



Fig. 33

2 Leaves P.A.

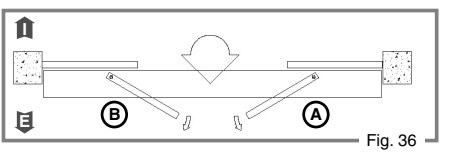



Fig. 36

## TOTAL ARIETE

1 Leaf opens RX T.A.

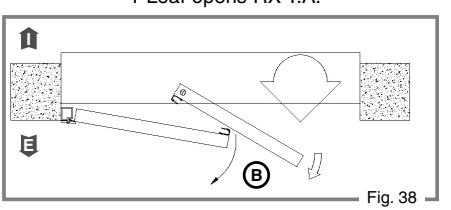



Fig. 38

1 Leaf opens LX T.A.

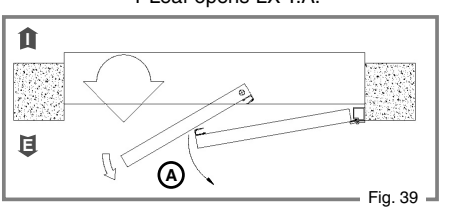



Fig. 39

2 Leaves T.A.

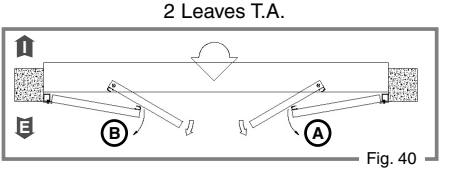



Fig. 40

Cut the floor guide section at the correct length using the indicated formula (**Fig. 41a-c**).

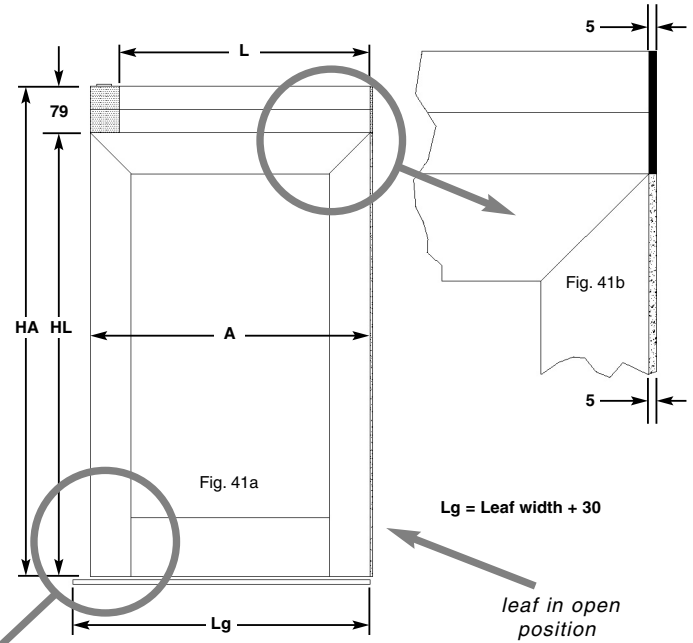



Fig. 41a

Fig. 41b

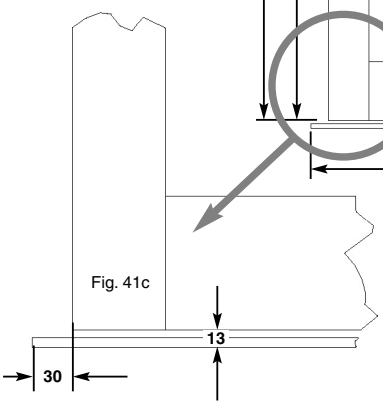



Fig. 41c

## Assembly of the rotation pin complex (Fig. 42a)

Insert in sequence onto the vertical rod (**1**) :

- lower blade (**2**) (with the two locking holes turned downwards) blocked with two elastic pegs 6x20 (**3**) inserted into the hole on the vertical rod
- the upper blade (**5**), respecting the direction indicated in **Fig. 42b**
- 5 M8x16 conical point dowels (**4**) (screw them in so that the head is 2mm under the surface of the the upper blade (**5**))
- the cube cover (**6**)
- turned strickle fastening washer (**7**)
- the strickle fastening seeger Ø24 (**8**)

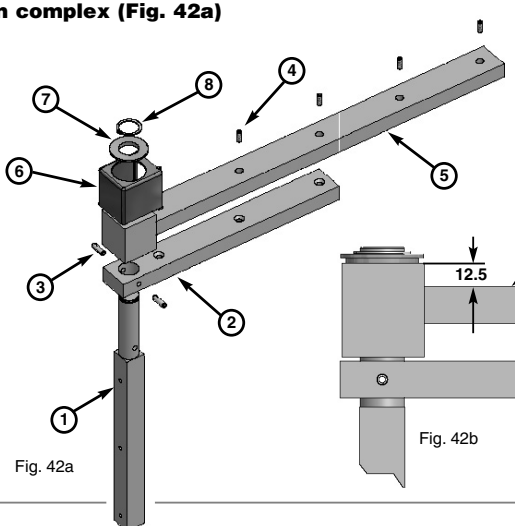



Fig. 42a




Fig. 42b

## Positioning of the (strickle) rotation pin complex onto the sliding leaf

### SESAMO Magnum Sections

Thread the (strickle) rotation pin complex onto the vertical section of the sliding leaf, inserting the lower blade cover into the correct position (the 2 conical couplings of the cover inserted into the 2 holes of the lower blade), fix the vertical rod of the strickle by screwing the 3 M6x8 TE flanged screws (**Fig 43**). Do not over-tighten the screws since the final fastening will occur after having positioned the lower section (**Fig. 47 page 17** ).

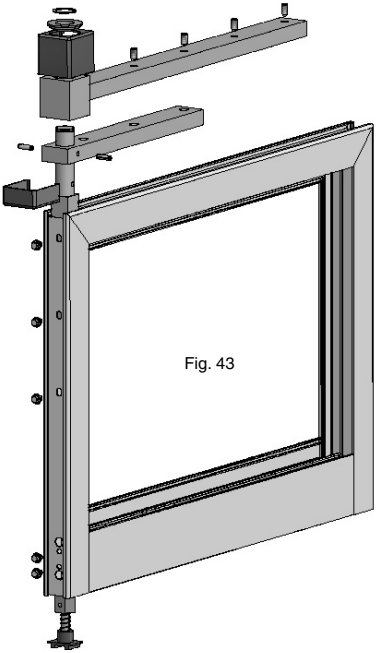


Fig. 43

⚠ **ATTENTION**: Be very careful about the direction of breakthrough.

### Standard sections

Thread the (strickle) rotation pin complex onto the vertical section of the sliding leaf, inserting the lower blade cover into the correct position (the 2 conical couplings of the cover inserted into the 2 holes of the lower blade), fix the vertical rod of the strickle by screwing the 3 M6x8 TE flanged screws (**Fig. 44**). Do not over-tighten the screws since the final fastening will occur after having positioned the lower section (**Fig. 47 page 17** ).

In the case of Standard sections place between the internal upright and the strickle rotation pin one or more steel or aluminium blades so that the centre of the rotation axis is exactly at 23.5mm from the external upright (**Fig 45, 46**).

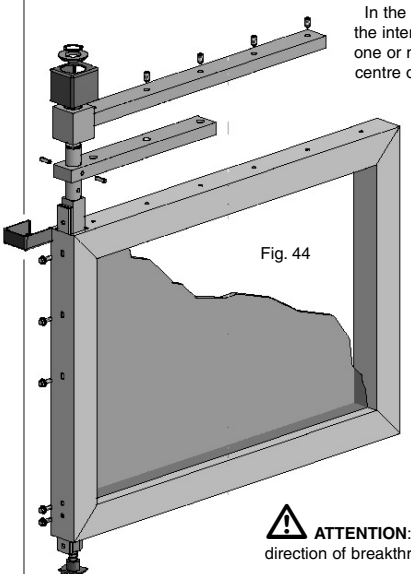


Fig. 44

**A** = 23,5 – 12,5 – S

**A** = distance between the internal upright and the rotation pin

**S** = thickness of the upright section

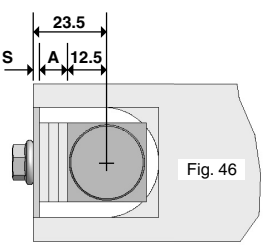



Fig. 46

⚠ **ATTENTION**: Be very careful about the direction of breakthrough.

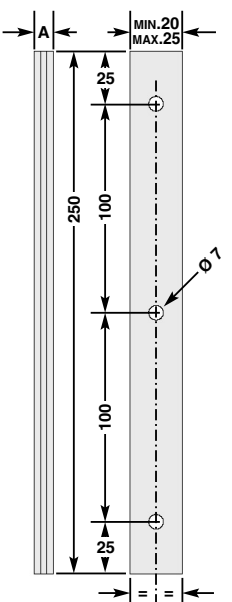



Fig. 45

## Positioning and fastening of the lower and upper sections

Lower section (**Fig. 47a**):

Put the lower blade of the strickle onto the lower section until stopping it against the lower blade cover.

The fastening occurs by screwing 3 M6x30 TS CEI screws in the zone with the strickle and the M6x12 TS CEI screws in the free zone suitably spaced (at least 1 screw every 2 holes). If necessary, loosen the fastening screws of the strickle to the upright previously positioned (**Fig. 43 and 44**).

In the case of SESAMO Magnum doors the screws are screwed to the lower section/leaf fastening plaques.

In the case of SESAMO Standard doors the screws are screwed to the lower section/leaf steel plate (**Fig. 15 page 9**).

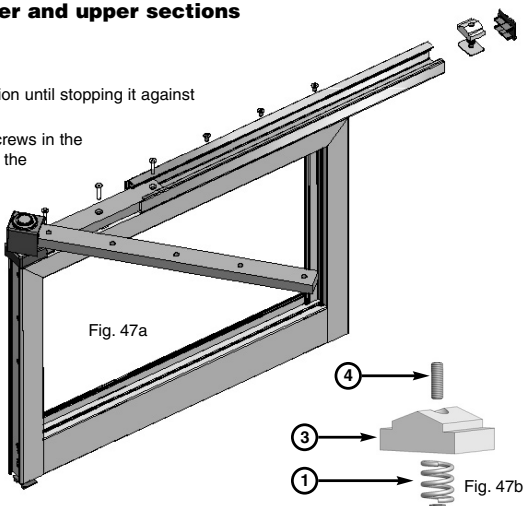


Fig. 47a




Fig. 47b

Insert inside the lower section the release force regulator assembled as follows (**Fig. 4b**):

- put the spring (**1**) onto the release force regulator plate (**2**)
- position the release force regulator slide (**3**)
- insert a M5x16 conical point dowel (**4**)

Tighten well the M6x8 TE flanged screws used for the vertical fastening of the strickle onto the upright (**Fig 43 and 44**)

Position the section cap with the reference arrow turned upwards.

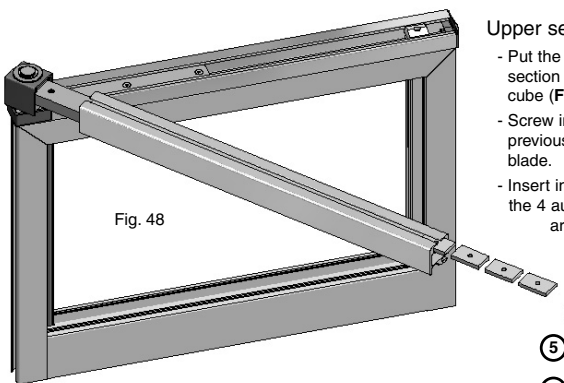


Fig. 48

Upper section (**Fig. 48**):

- Put the upper blade of the strickle onto the upper section and stop it against the cube cover cube (**Fig. 48**).
- Screw in the 5 M8x16 conical point dowels previously inserted into the holes of the upper blade.
- Insert into the appropriate seat of the upper section the 4 automatism adapter plaques. If 3 carriages are mounted, 2 more plaques have to be inserted.
- Position the section cap with the reference arrow turned upwards.

Assembly of the guide shoe complex (**Fig. 49a, 49b**)

Put the guide shoe pin (**Fig 49a, part 1**) inside the hole on the guide shoe (**Fig 49a, part 2**)

Insert in sequence onto the guide shoe pin:

- the guide shoe spring (**Fig. 49a, part 3**)
- the guide shoe body (**Fig. 49a, part 4**)
- the 11mm seeger into the appropriate seat (**Fig. 49a, part 5**)
- the self-blocking 5mm seeger for the fastening of the guide shoe onto the pin (**Fig. 49a, part 6**)

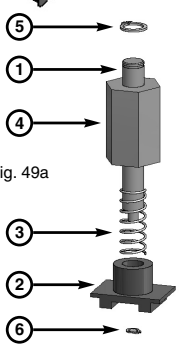



Fig. 49a

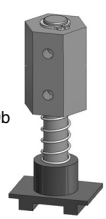


Fig. 49b

## Positioning of the guide shoe complex onto the sliding leaf

Insert the guide shoe complex into the vertical section of the sliding leaf and fasten it with two M6x8 TE flanged screws (**Fig. 50**).

In the case of Standard sections place between the internal upright and the guide shoe rotation pin one or more steel or aluminium blades (**Fig. 51**) so that the centre of the rotation axis is exactly at 23.5mm from the external upright (**see Fig. 45, 46**), the fastening screws must be chosen according to the thickness of the spacer so as to not obstruct the running of the guide shoe pin (**Fig 52**).

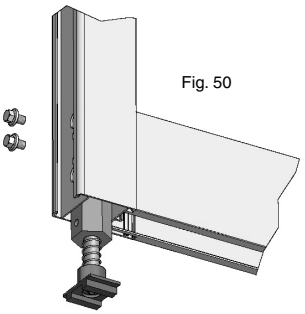


Fig. 50

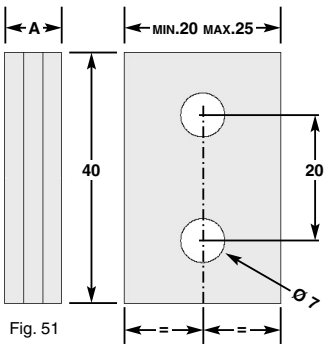



Fig. 51

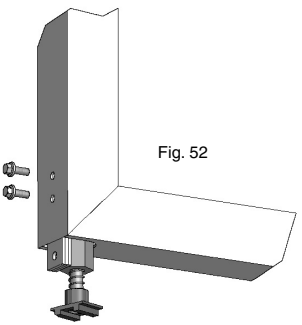


Fig. 52

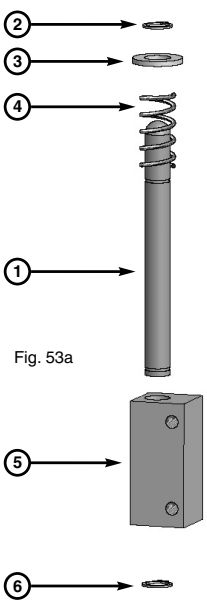



Fig. 53a

## Assembly of the semi-fixed leaf release device complex (Fig. 53a, b)

Mount the 8mm seeger (**Fig. 53a, part 2**) into the appropriate seat on the semi-fixed release device pin (**Fig. 53a, part 1**).

Insert in sequence onto the semi-fixed release device pin:

- one or more 8mm washers to obtain the desired preloading (**Fig. 53a, part 3**)
- the semi-fixed spring (**Fig. 53a, part 4**)
- the semi-fixed release device body (**Fig. 53a, part 5**)

Finish everything with the seeger 8mm (**Fig. 53a, part 6**) in the appropriate seat.

⚠ **ATTENTION**: It is possible to vary the retention force of the semi-fixed leaf exclusively by adding one or more washers (**Fig 53a, part 3**).

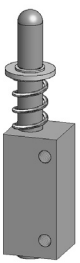


Fig. 53b

## **Positioning of the semi-fixed release complex onto the semi-fixed leaf** (TOTAL ARIETE)

### SESAMO Magnum Sections (**Fig 54a**)

In the case of the SESAMO Magnum sections insert the 2 assembled semi-fixed release groups into the vertical section of the semi-fixed leaf, fix them with the M5x16 TE flanged screws and appropriate plaques (positioned as in **Fig. 54b**) inserted into the external seat of the upright. Do not over-tighten the fastening screws so as to allow for a later adjustment of the height (**Fig. 57**).

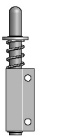
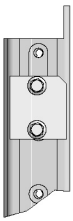


Fig. 54b



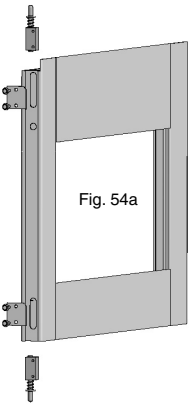


Fig. 54a

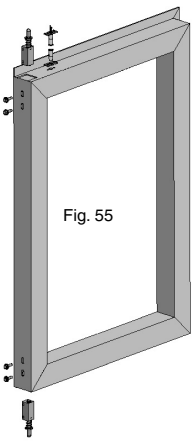


Fig. 55

HINGE SIDE

### Standard sections (**Fig 55**)

In the case of Standard sections, insert the two assembled semi-fixed release groups into the vertical section of the semi-fixed leaf and fasten them with the M5x16 TE flanged screws. Do not over-tighten the fastening screws so as to allow for a later adjustment of the height (**Fig. 57**).

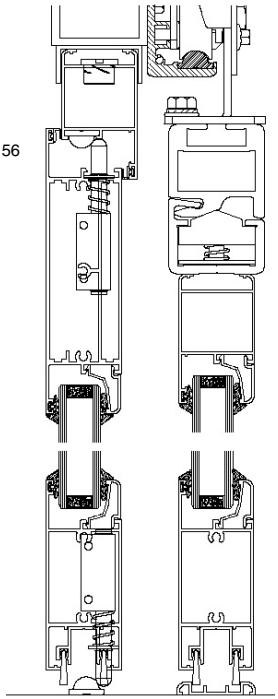


Fig. 56

## **Fastening of the semi-fixed release coupling** (TOTAL ARIETE)

### SESAMO Magnum Sections

In the case of SESAMO Magnum sections fasten the semi-fixed release coupling to the floor, in a central position with respect to the semi-fixed leaf, with 2 6mm plugs and 2 AF 4x40 screws and work on the slots to move the coupling into contact with the hemispherical zone of the release device (**Fig 56, 57**).

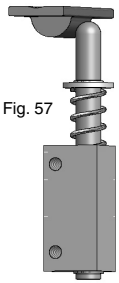


Fig. 57

Insert the upper semi-fixed release coupling into the seat of the “glassholder” of the rabbet frame before assembling it and fastening it to the door with 2 AF 4.2x9.5 screws (**Fig. 56**).

Adjust the height of the release device so that its hemispherical end touches the coupling at the middle of the curved ramp (**Fig. 57**). Tighten well the M5x16 TE flanged screws.

⚠ **ATTENTION**: Pay particular attention to the adjustment of the device since any error may compromise the correct operation. Do not use the slots to vary the preloading of the spring, for this purpose action can be taken exclusively at the moment of the device assembly (**Fig.53a, b**).

## Standard sections

In the case of Standard sections fasten the semi-fixed release coupling to the floor, in a central position with respect to the semi-fixed leaf, with 2 6mm plugs and 2 AF 4x40 screws.

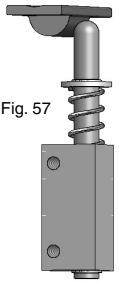


Fig. 57

Fasten the upper semi-fixed release coupling to the door with 2 AF 4.2x9.5 screws in a central position with respect to the semi-fixed leaf and work on the slots to move the coupling into contact with the hemispherical zone of the trigger device (**Fig. 57, 58**).

Adjust the height of the release device so that its hemispherical end touches the coupling at the middle of the curved ramp (**Fig. 57**). Tighten well the M5x16 TE flanged screws.

⚠ **ATTENTION**: Pay particular attention to the adjustment of the device since any error may compromise the correct operation. Do not use the slots to vary the preloading of the spring, for this purpose action can be taken exclusively at the moment of the device assembly (**Fig.53a, b**).

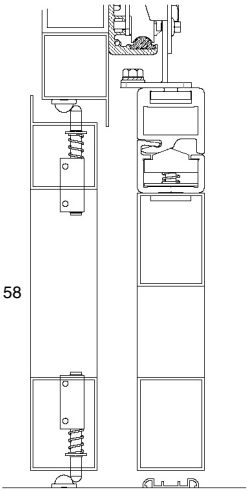


Fig. 58

## **Fastening of the sealing sections** (TOTAL ARIETE)


Fig. 59a

- Cut the sealing section to the length HL = H leaf – 78.5 mm (**Fig. 41a, 59a**).
- Drill the fixed and sliding leaves following the scheme in **Fig. 60a, b**. Provide for at least 1 screw every 400mm, excluding the strickle zone of the sliding leaf.
- Drill the sealing sections in the fastening zones according to the scheme in **Fig. 59b**. The position and the interaxis of the holes must correspond with those performed on the sealing sections.
- Fasten the sealing sections onto the fixed and sliding leaves using appropriately sized self-threading screws.
- Insert the brush and the rubber profile into the appropriate channels of the sealing section (**Fig. 59c**)

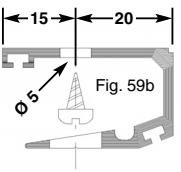



Fig. 59b

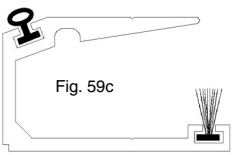


Fig. 59c

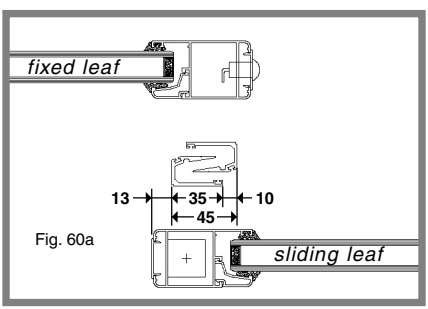



Fig. 60a

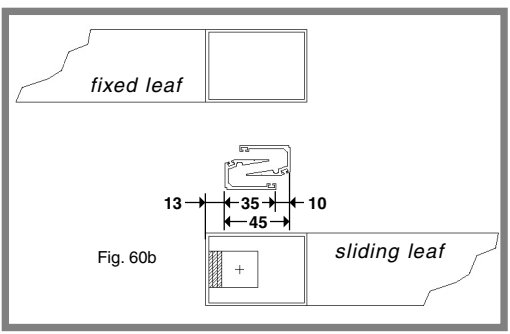



Fig. 60b

# Leaf positioning

## Leaf position

TOTAL ARIETE:

Both with the Standard doors as well as with the SESAMO Magnum doors the distance between the sliding leaf and the semi-fixed leaf must be 30mm (**Fig 61a, b**).

Fig. 61a

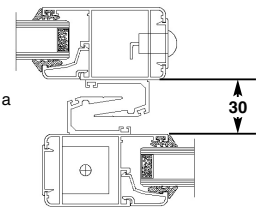
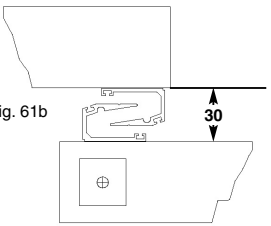


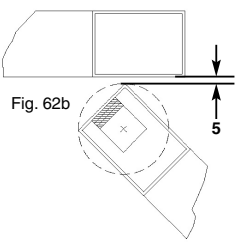

Fig. 61b




PARTIAL ARIETE:

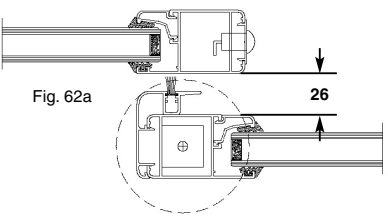
In the case of SESAMO Magnum doors position the sliding leaf at a distance of 26mm from the fixed leaf (**Fig 62a**).

Fig. 62b




In the case of Standard doors adjust the distance so that the end of the sliding leaf does not collide with the fixed leaf during the breakthrough phase: maintain at least 5mm between the fixed leaf and the most protruding point of the sliding leaf in rotation (**Fig. 62b**).

Fig. 62a




## Fastening of guide to floor

In the case of Standard doors position the guide cap on both sides.

In the case of SESAMO Magnum doors position the guide cap only and exclusively on the side near the guide shoe of the leaf in the open position (**Fig. 63**).

Make a series of holes with a diameter of 5mm along the entire length of the guide in correspondence with the centre-line. The interaxis between the holes must be of approximately 300mm. The fastening holes of the two ends must be located at 6mm from the cut in order to guarantee the locking, by means of the head of the fastening screw, of the polymeric finishing element (**Fig 64**).

*Sliding leaf in open position*

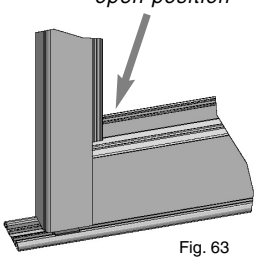
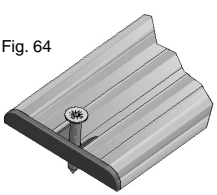


Fig. 63

Fig. 64



Fasten the guide to the floor with AF 4x40 TPS screws and respective 6mm plugs for the entire opening course of the sliding leaf (**see Fig. 41a, c**).

⚠ **ATTENTION**: Verify that the characteristics of the floor are such as to guarantee a correct and solid fastening of the guide section, in particular:

- use shims to level any differences in height
- verify that the fastening suggested is consistent with the type of pavement, if necessary resort to other types of fastening, verifying that this does not impede the running of the shoe (the head of the screw must not interfere with the shoe).

## Fastening of the carriages

Fasten the carriages onto the leaves according to the manual of installation of the relative automatism installed using the automatism adapter plaques inserted previously (**Fig. 65a, b**).

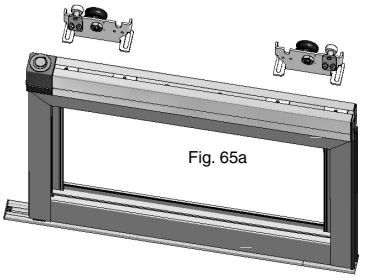


Fig. 65a

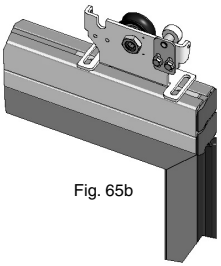


Fig. 65b

⚠ **ATTENTION**: In the case of Ariete on leaves of width greater than 1200mm, install a third carriage at the centre of the leaf.

## Fastening of the glass

Both in the case of sections with glass to insert as well as in the case of sections with snap glassholders, for the fastening of the glass, a single seal is used in addition to silicone so as to make the glass integral with the sash (**Fig. 66**).

⚠ **ATTENTION**: It is important to adequately shim the glass so as to draw up the barycentre (the point of application of the resultant of the weight force ***p*** of the glass) to the rotation pin of the leaf (**Fig. 67**).

$$G < L/2$$

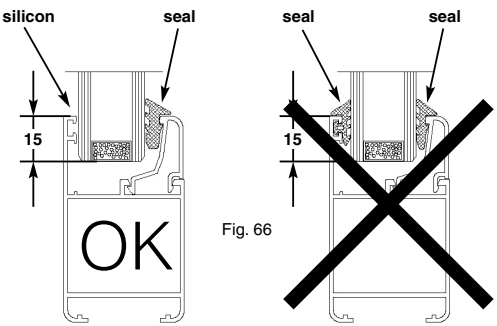



Fig. 66

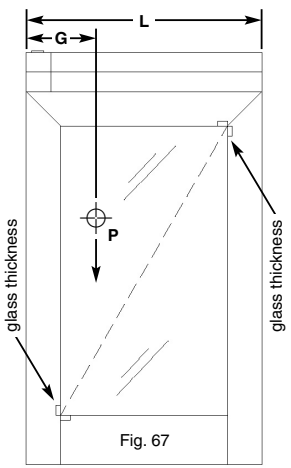



Fig. 67

⚠ **ATTENTION**: Use safety glass suitable to support the forces and the stresses caused by the breakaway of the leaves, in the case of emergency, by means of the ARIETE system.

## Magnetic reed installation

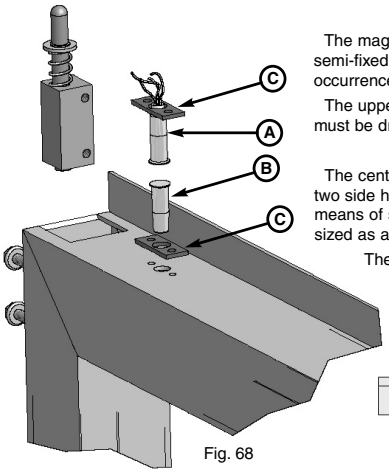



Fig. 68

The magnetic reed (**Fig. 68, part. A**) enables the monitoring of the opening of the semi-fixed leaf and thus communicates to the control unit of the automatism the occurrence of the breakaway.

The upper crossbeam of the semi-fixed leaf and the respective rabbet section must be drilled according to the scheme in **Fig. 69**:

The central hole will house the body of the magnetic head (**Fig. 68 part. B**), the two side holes allow for the fastening of the spacer (**Fig. 68 part C** and **Fig. 70**) by means of self-threading screws, the diameter of the two holes must be adequately sized as a function of the screws used.

The plaque mentioned above must be realised according to the following indications (**Fig. 70, 71**).

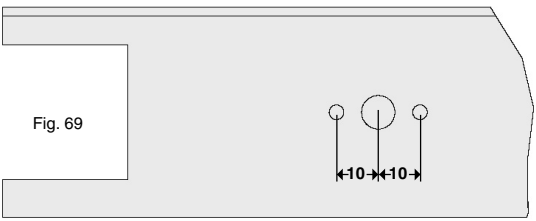



Fig. 69

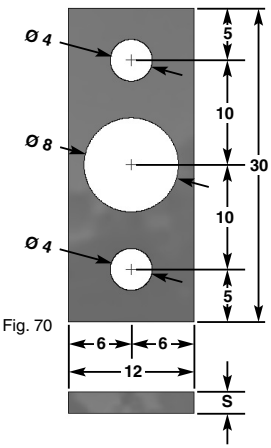



Fig. 70

$$S = \frac{(A-6-2)}{2}$$

**ATTENTION**: The spacers (**Fig. 70**) must be realised with a **diamagnetic** material (aluminium, plastic, etc.). The contact of the magnetic reed must be connected in series with the safety photocell contact on the control unit of the automatism as follows:

**MILLENNIUM**: connect in series to the COM - SAFE CLOSE contact

**PRATIKA MCR1**: connect in series to the 10 – 14 contact

In the case of other automatisms refer to the relative manual.

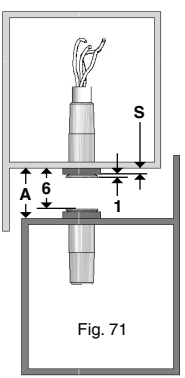



Fig. 71

**ATTENTION**: Using this type of connection, at the moment of breakaway the door leaves are moved into the completely open position. To obtain the stop of the automatism use the safety photocell illustrated on pages 24/25. In the case of automatisms of the Millennium series it is possible to change, with the Millennium Ware software, the default state of the COM - SAFE OPEN contact making it become NC (normally closed). At this point it is sufficient to connect the magnetic contact in series to the COM - SAFE OPEN contact to obtain the stop of the automatism after breakaway.

## Photocell wall support

The photocell wall support kit allows for the installation of a pair of supplementary photocells that communicate the occurrence of the breakaway of the leaves to the control unit of the automatism.

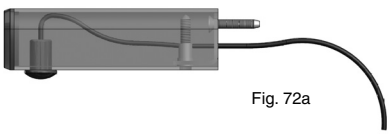


Fig. 72a

The KIT is composed of:

- Wall fastening plaque (**1**);
- Semi-oval extruder in treated aluminium (**2**);
- Extruder closure cap (**3**);
- Screws necessary for the assembly.

The photocell support should be completed with the single-beam photocell KIT with relative amplifier to be purchased separately.

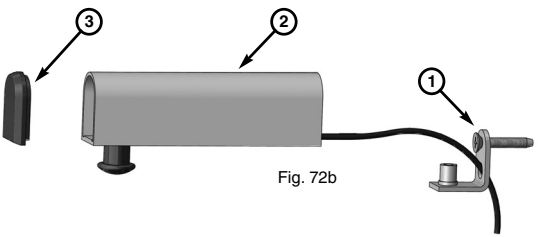



Fig. 72b

⚠ **ATTENTION**: The dimensioning of the KIT is based on the elements present in the Sesamo catalogue, the combination with different devices is not recommended.

### Installation

- The preliminary operations provide for the arrangement of an adequate canalisation for the cables of the beams. The openings of the canalisations for the TX and RX beam must be located at the same height above ground, not less than 2100mm (lower heights may confuse the passage of a person with the occurrence of the breakaway).
- Drill the wall immediately above the canalisations with a bit for 6mm plugs, the distance of the hole must be such as to guarantee a solid fastening of the device and to guarantee, in any case, the passage of the cable once the support plaque is fastened (if necessary use the plaque itself as a reference). Introduce into the hole the plastic part of the plug provided in the KIT.

• Fasten the plaque to the wall by means of the AF screw provided in the KIT, screwing it into the plug previously introduced into the wall. Pay particular attention to the alignment of the plaque, the bracket must be perfectly perpendicular to the floor (**Fig. 73**)

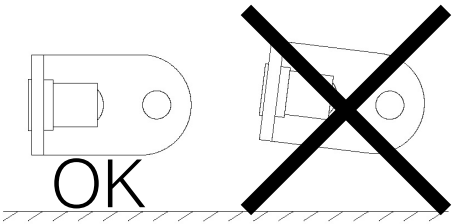



Fig. 73

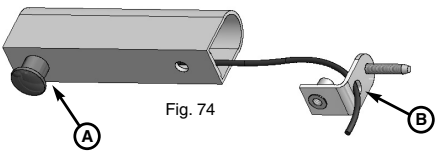



Fig. 74

• Insert the beam cable of the photocell into the appropriate hole **A** of the aluminium extruder, then introduce it into the canalisation through hole **B** of the support plaque. Insert the body of the beam into hole **A** until the head end of the beam rests against the aluminium surface (**Fig. 74**)

• Put the aluminium section onto the support plaque fastened to the wall and block it by screwing the M5 dowel provided in the KIT (**Fig. 75**)

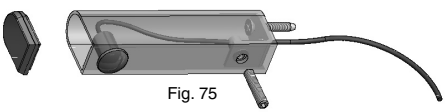


Fig. 75

⚠ **ATTENTION**: verify that the dowel does not crush the beam cable during the fastening.

• Press on the semi-oval cap provided in the pack.

• Perform the electrical connections making reference to the manual included in the photocell kit and connect the outputs according to the scheme shown in the table. In the case of other automatisms refer to the relative manual. Use the jumper to set the NO function on the amplifier.

| Photocell amplifier | Pratika | Millennium |
|---|---|---|
| 6 | 14 | COM |
| 7 | 0 | SAFE OPEN |

## Testing of the system

At the end of the installation carefully test the system.

Using a dynamometer verify that the release force ***F*** of the sliding leaf is less than 220N (approximately 22kg); the measurement must be performed by positioning the dynamometer at a height of 1000mm in correspondence with the end of the leaf (**Fig. 76**).

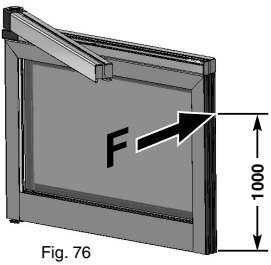


Fig. 76

### Adjustment of the release force

The release force F previously measured may be adjusted by operating on the appropriate device positioned inside the lower section. Repeat the regulation until the attainment of the desired release force (**Fig. 77**).

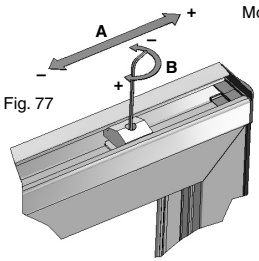


Fig. 77

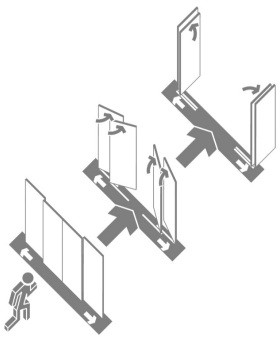
Moving the regulator along the lower section, a rough variation of the release force (**A**) is obtained. The final adjustment is performed by operating on the dowel placed inside the device using an Allen key (**B**). To vary the position of the regulation device for the release force it is necessary to act beforehand on the spring preloading regulator by turning the Allen key in the anticlockwise direction (the preloading of the spring in fact impedes the movement of the regulator into the proper seat).

⚠ **ATTENTION**: In order to be able to operate on the release force regulation device it is necessary that the door leaf is in the breakaway position.

⚠ **ATTENTION**: Verify that at the moment of breakaway the control unit of the automatism registers the event, interrupting the sliding of the leaves. If this does not occur, check the electrical connections cited in the chapters regarding the magnetic reed (total Ariete) and the safety photocell.

**WARNING!** This product falls within the scope of the Directive 2012/19 / EU concerning the management of waste for electrical and electronic equipment. (RAEE). The appliance must not be disposed of with domestic waste as it is made of different materials that can be recycled to suitable structures. Inquire through the municipal authority regarding the location of the ecological platforms suitable to receive the product for disposal and the subsequent correct recycling. It should also be remembered that, upon purchase of an equivalent appliance, the distributor is obliged to collect the product for disposal free of charge. The product is not potentially dangerous for human health and the environment, it does not contain harmful substances as per Directive 2011/65 / EU (RoHS), but if abandoned in the environment it negatively impacts on the ecosystem.

**The crossed-out bin symbol indicates the compliance of this product with the regulations regarding waste for electrical and electronic equipment. The abandonment in the environment of the equipment or the illegal disposal of the same are punished by law.**



# ARIETE

Antipanic Breakaway System

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