



# MOUNTING MANUAL

EXTENDIBLE GLASS PARTITION  
FLK SERIES



acristalia



- P. 07**      **1. VIABILITY OF THE PROJECT**
- 1.1. MAXIMUM AND MINIMUM DIMENSIONS**
  - 1.2. TYPE OF POSTS**
  - 1.3. MEASUREMENTS**
- P. 09**      **2. COMPONENTS**
- 2.1. PROFILES**
  - 2.2. ACCESSORIES**
  - 2.3. IRONWORK**
  - 2.4. SEALS**
  - 2.5. SCREWS**
  - 2.6. MOUNTING TOOLS**
- P. 13**      **3. MEASUREMENTS OF THE GLASS**
- 3.1. TYPES OF GLASS**
    - Fixed glass
    - Mobile glass
- P. 16**      **4. MOUNTING OF THE EXTENDIBLE GLASS PARTITION**
- 4.1. SELECTION OF POSTS**
  - 4.2. REMOVE THE LATERAL ENDING CAP**
  - 4.3. REMOVE THE TOP ENDING CAP OF THE FIXED PROFILE**
  - 4.4. REMOVE THE SPRING BLOCK**
  - 4.5. REMOVE THE MOBILE PART**
  - 4.6. FIXATION OF THE GLASS TO THE MOBILE PART**
  - 4.7. FIX THE GLASS TO THE FIXED PROFILES\***
  - 4.8. PLACE THE MOBILE PART**
  - 4.9. CHECK THE PROPER FUNCTIONING**
  - 4.10. FIX THE SPRING BLOCK**
  - 4.11. FIX THE SPRING BLOCK**
  - 4.12. PLACE THE LATERAL ENDING CAP**
- P. 23**      **5. INFORMATION TO TAKE INTO ACCOUNT TO MOUNT THE EXTENDIBLE GLASS PARTITIONS**



## **EXTENDIBLE GLASS PARTITION FLK SERIES**

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# 1 VIABILITY OF THE PROJECT

## 1.1. MAXIMUM AND MINIMUM DIMENSIONS

Chart 1: Maximum and minimum dimensions

	Minimum	Maximum
<b>Width</b>	1000 mm	2000 mm
<b>Closed / open height</b>	1000 mm / 1700 mm	1200 mm / 1900 mm

Note: A prior study will be required for any other dimensions.

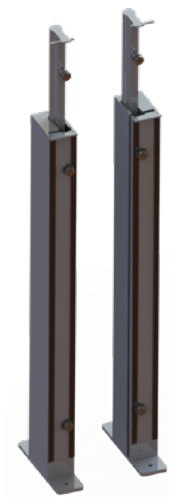
## 1.2. TYPE OF POSTS

The posts have a fixed height of 750 mm. The spring loads inserted in the posts must be chosen according to the weight of the glass of the movable module to ensure the correct functioning of the system. The weight is determined by the width of the extendible glass partition. As shown in the chart N°.2, each width has a corresponding spring load.

Chart 2: Types of posts

Width	Spring load (N)
1000	80
1100	80
1200	90
1300	90
1400	105
1500	105
1600	115
1700	115
1800	125
1900	125
2000	135

Pair of posts



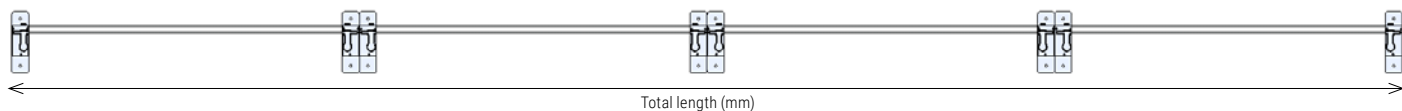
## 1.3. MEASUREMENTS

### Linear installation

The width of the extendible glass partitions with linear installation will be determined by the following formula: (see FIG.: 1.1.).

$$\text{Extendible glass partition width (mm)} = \frac{\text{total length (mm)}}{\text{no. extendible glass partitions}}$$

Fig. 1.1.



Note: the value of the width obtained must be within the maximum and minimum measurements of the section 1.1.

**Installation with angle**

For the solution with angle, cut 73 mm away of the anchoring plate (see FIG. 1.2, 1.3, 1.4). The base must be previously removed.

Fig. 1.2.

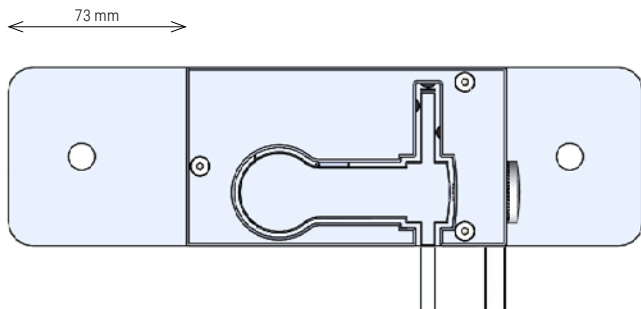
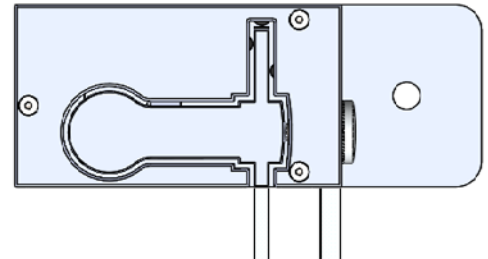


Fig. 1.3.

After having cut the anchoring plate.



In this case, two measures must be controlled (see FIG. 1.4):

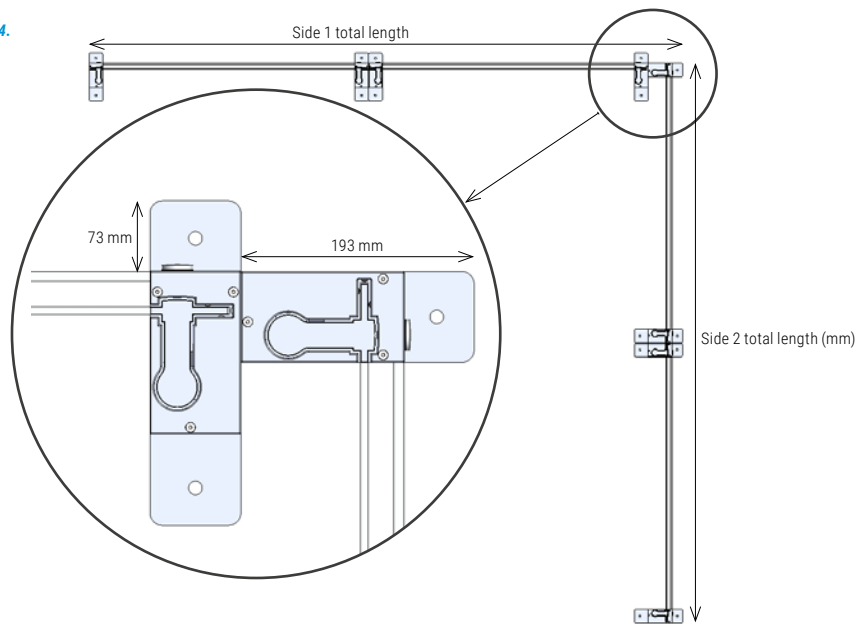
- Side 1: the width of the extendible glass partitions will be determined according to the following formula:

$$\text{Extendible glass partition width (mm)} = \frac{\text{side 1 length (mm)} - 193 \text{ mm}}{\text{no. extendible glass partitions}}$$

- Side 2: the width of the extendible glass partitions will be determined by the following formula:

$$\text{Extendible glass partitions width (mm)} = \frac{\text{side 2 length (mm)} - 73 \text{ mm}}{\text{no. extendible glass partitions}}$$

Fig. 1.4.



Note: the value of the width obtained in each case must be within the maximum and minimum dimensions of the section 1.1.

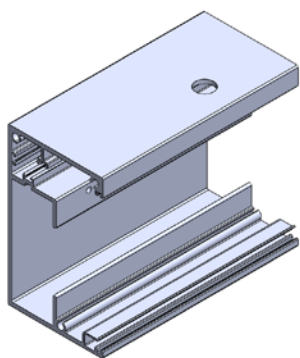


## 2 COMPONENTS

### 2.1. PROFILES

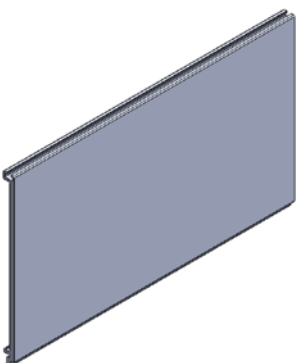
#### Fixed profile (REF: ALU0155)

It has a structural function as it is the base for the anchoring of the fixed glass. In addition, it will guide the mobile module.



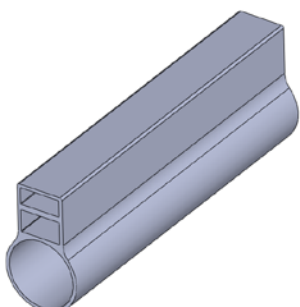
#### Side ending cap profile (REF: ALU0156)

It's a covering cap for the fixed profile.



#### Mobile profile (REF: ALU0157)

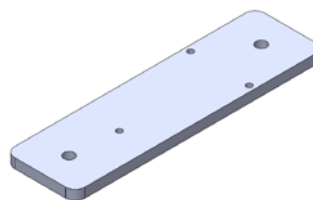
This profile is the base to fix the mobile glass and insert the springs.



### 2.2. ACCESSORIES

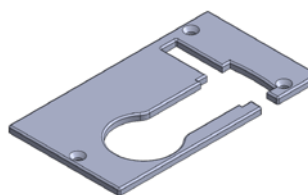
#### Floor anchoring plates (REF: ACC0234)

This plate will be screwed to the fixed profile. It gives stability and it will be a support to fix the extendible glass partition to the floor.



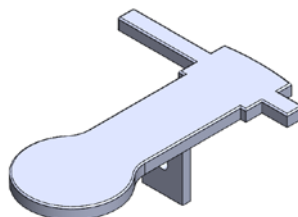
#### Fixed profile cap (REF: ACC0232)

This cap is screwed to the top part of the fixed profile.



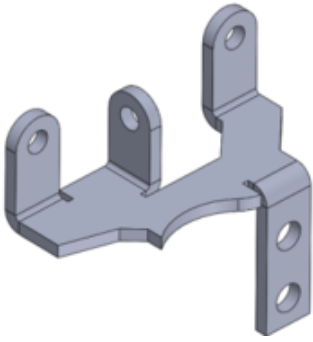
#### Mobile profile cap (REF: ACC0233)

This cap is screwed to the top part of the mobile profile.

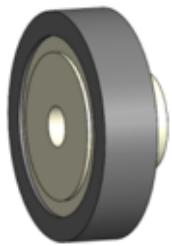


**Guiding element (REF: ACC0238)**

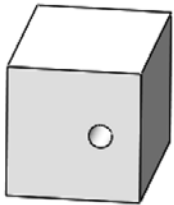
This accessory is fixed to the mobile profile. It is used as a support to fix the guide bearings.

**Guide bearings (REF: ACC0011)**

The bearings are fixed to the guiding element. They will guide the mobile module inside the fixed profile.

**Springs block (REF: POL0010)**

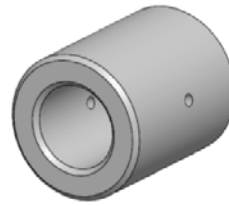
This part is screwed inside the fixed profile. It will block the mobile module so that it won't go out.

**Gas spring (REF: ACC0239)**

Pneumatic spring with block and unblock mechanism to rise the mobile module.

**Cylinder for spring fixation (REF: ACC0241)**

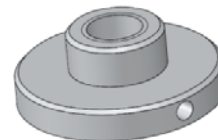
This part is inserted inside the mobile profile. It is used as a support for the fixation of the gas spring to the mobile profile.

**Brush (REF: ACC0004)**

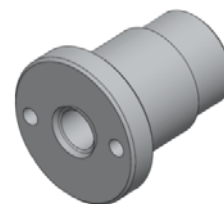
This accessory is inserted in the corresponding slots of the fixed profile and the side ending cap profile. It avoids the dirtiness inside the profile.

**2.3. IRONWORK****Button for glass fixation (REF: HER0293)**

This element is used to fix the glasses to the corresponding profiles.

**Button for mobile profile (REF: HER0294)**

Element fixed to the mobile profile with the button for glass fixation. Used as a support for the fixation of the mobile glass and separates the glass from the aluminium profile.



## 2.4. SEALS

### Curved seal (REF: GOM0054)

Inserted inside the fixed profile. Used to create a separation between the glass and the aluminium profile.



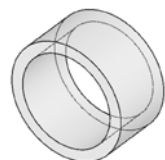
### Flat seal (REF: GOM0055)

Seal with double-sided adhesive. Stuck to the fixed glass to separate the glass and the profile and improve the fixation of the glass.



### Protection rubber for screw (REF: ACC0265)

It is a rubber that protects the drills of the fixed glass. Introduce one unit in each hole of the fixed glass.



## 2.5. SCREWS

### Mobile glass PVC washer-1mm (REF: TOR0078)

It protects the mobile glass avoiding direct contact with the fixation ironwork. One unit per ironwork.



### Fixed glass PVC washer-2mm (REF: TOR0119)

It protects the fixed glass avoiding direct contact with the fixation ironwork. One unit per ironwork.



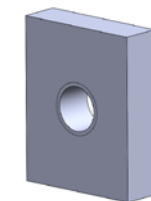
### Fixed glass washer (REF: TOR0084)

It protects the glass avoiding direct contact with the fixation ironwork. One unit per fixed profile drill.



### Nut for fixed glass (REF: TOR0100)

Fixation element, as well as HER0293 and grub screw TOR0094. One unit per fixed profile.



### Anchoring plate screw (REF: TOR0076)

Used to fix the anchoring plate ACC0234 to the fixed profile. Three units per base.



### Mobile profile screw (REF: TOR0034)

Used to fix the ending cap of the mobile profile ACC0233. One unit per ending cap.



### Guide bearing screw (REF: TOR0085)

Used to fix the bearing ACC0011 to the guiding element ACC0238. One unit for each bearing.



### Guiding element screw (REF: TOR0086)

Used to fix the guiding element ACC00238 to the mobile profile. Two units per guiding element.



### Fixed profile ending cap screw (REF: TOR0098)

Used to fix the ending cap of the fixed profile ACC0232. Three units per ending cap.



### Button grub screw (REF: TOR0094)

Fixing element, as well as HER0293 and nut TOR0100. One unit for each ironwork HER0293.



**Grub screw - Separation mobile profile (REF: TOR0095)**

Fixation element, as well as ironwork HER0294 and nut TOR0099. One unit for each ironwork HER0294.

**Guide bearing nut (REF: TOR0089)**

Used to fix the bearing ACC0011 to the guiding element ACC0238. One unit per bearing.

**Guiding element nut (REF: TOR0088)**

Used to fix the guiding element ACC00238 to the mobile profile. Two units per guiding element.

**Spring nut (REF: TOR0112)**

Used to level the mobile part of the extendible glass partition. One unit per spring.

**Grub screw (REF: TOR0099)**

Used as fixation element, as well as ironwork HER0294 and grub screw TOR0095. One unit per ironwork HER0294.

**Fixed profile nut (REF: TOR0101)**

Used as fixation element for the fixed profile ending cap ACC0232. Three units per ending cap.

**Short metal rod (REF: TOR0077)**

Used to fix the gas spring ACC0239 to the mobile profile. One unit per spring.

**2.6. MOUNTING TOOLS****Mounting tool for buttons (REF: ACC0244)**

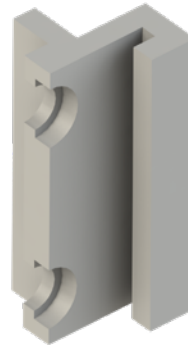
Used to fix the buttons HER0293 and HER0294. One per mounting kit.

**Spare parts (REF: ACC0245)**

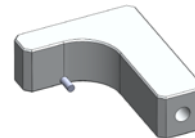
A couple of units will be provided for each mounting kit.

**Position part for mobile glass (REF: ACC0242)**

Used to fix the mobile glass to the glass. One unit per mounting kit is provided.

**Adaptation part (REF: ACC0243)**

Used to adapt the ironwork HER0293 and ACC0244. One unit per mounting kit.



### 3 MEASUREMENTS OF THE GLASS

#### 3.1. TYPES OF GLASS

The extendible glass partition is made of two units of glass, a fixed glass and a mobile glass. Each one has different characteristics and dimensions detailed below:

##### • Fixed glass

It will be a tempered glass or tempered laminated of 8 mm thickness. This glass will be fixed to 2 fixed profiles with threads connections. To do so, 4 drills will be realized at each end of the glass. Here is a description of the different operations to realize:

##### Measurements:

Measurements of the fixed glass according to FIG. 3.1.

**Fixed glass width (mm) = Extendible glass partition width - 2 mm**

**Fixed glass height (mm) = Extendible glass partition height - 50 mm**

FIG. 3.1



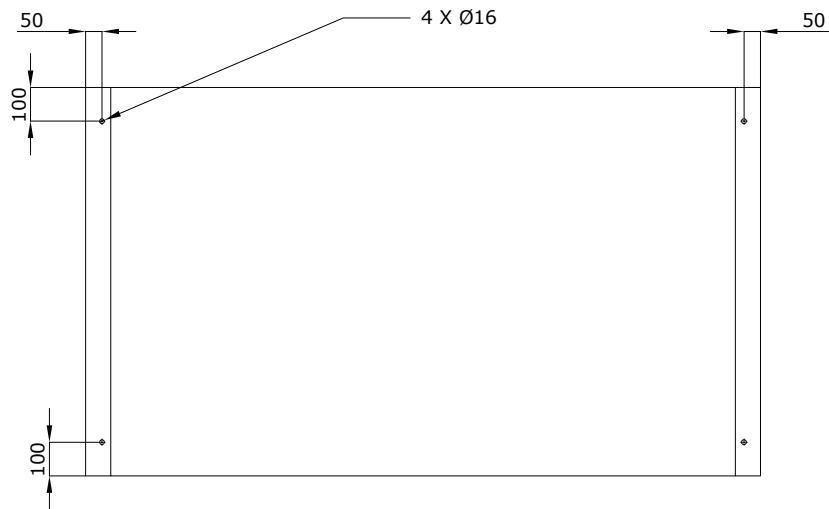
##### Machining::

4 drills of 14 mm of diameter will be realized. Measures according to FIG. 3.2.

**Horizontal distance between drills and edge = 50 mm**

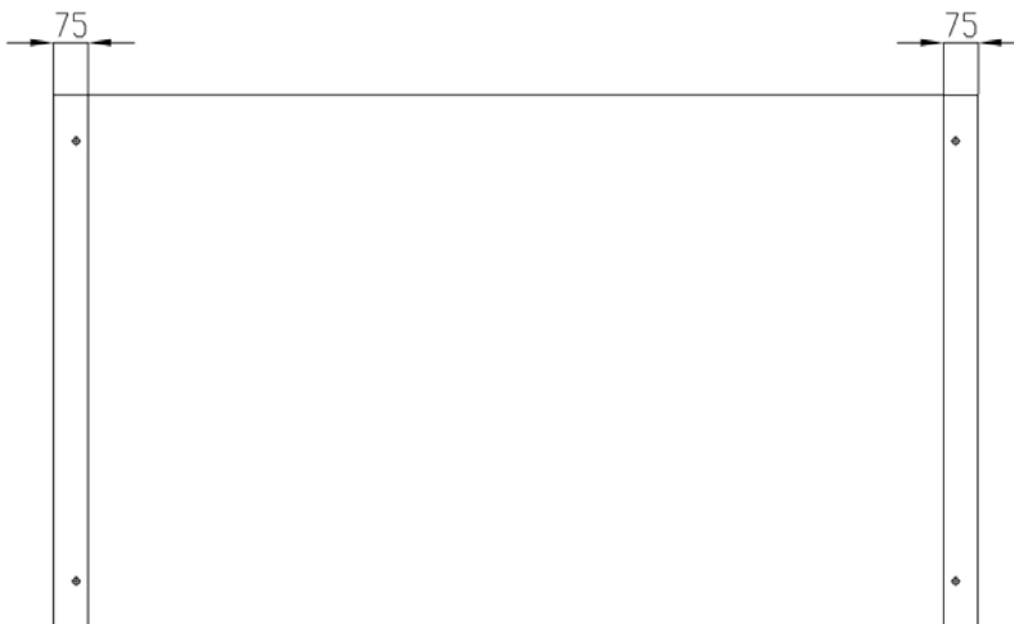
**Vertical distance between drills and edge = 100 mm**

FIG. 3.2

**Glass printing:**

Two stripes will be printed on each glass with the same colour as the profiles. The width of the stripes is 75 mm as shown in FIG. 3.3.

FIG. 3.3

**• Mobile glass**

It will be a tempered glass of 6 mm thickness. This glass will be fixed to 2 mobile profiles with thread connections. To do so, 4 drills will be realized at each end of the glass. Here is a description of the different operations to realize:

**Measurements:**

Measures of the fixed glass according to FIG. 3.4.

**Mobile glass width (mm) = Extendible glass partition width - 18 mm**

**Mobile glass height = 750 mm**

FIG. 3.4

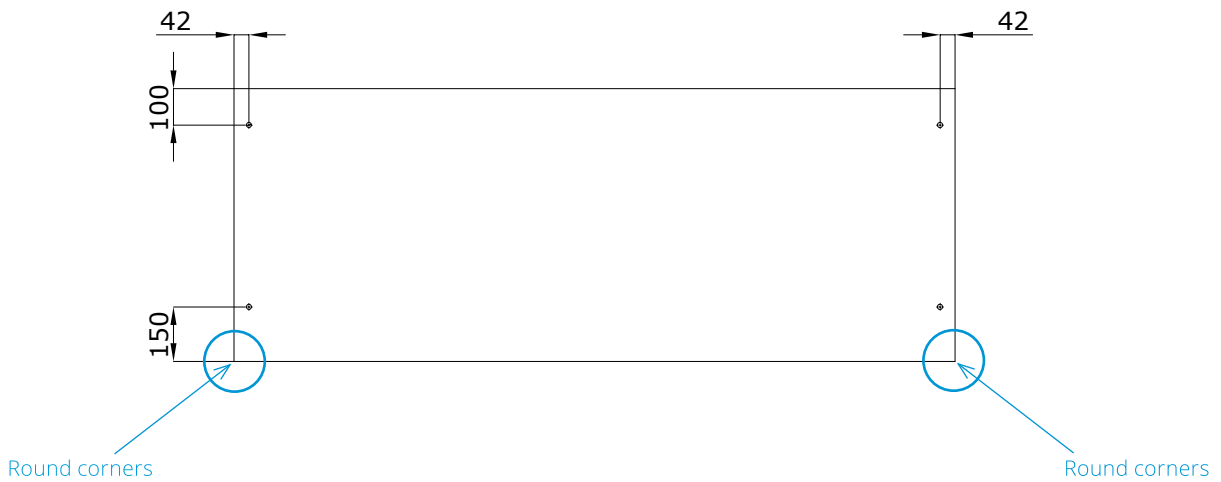


**Machining:**

4 drills of 16 mm of diameter will be realized. Measures according to FIG. 3.5.

- Horizontal distance between drills and edge = 42 mm
- Vertical distance between top drills and edge = 100 mm
- Vertical distance between bottom drills and edge = 150 mm

FIG. 3.5



**Important note:** The bottom corners of the glass must have a small radius to facilitate the sliding of the glass inside the profile.

## 4 MOUNTING OF THE EXTENDIBLE GLASS PART

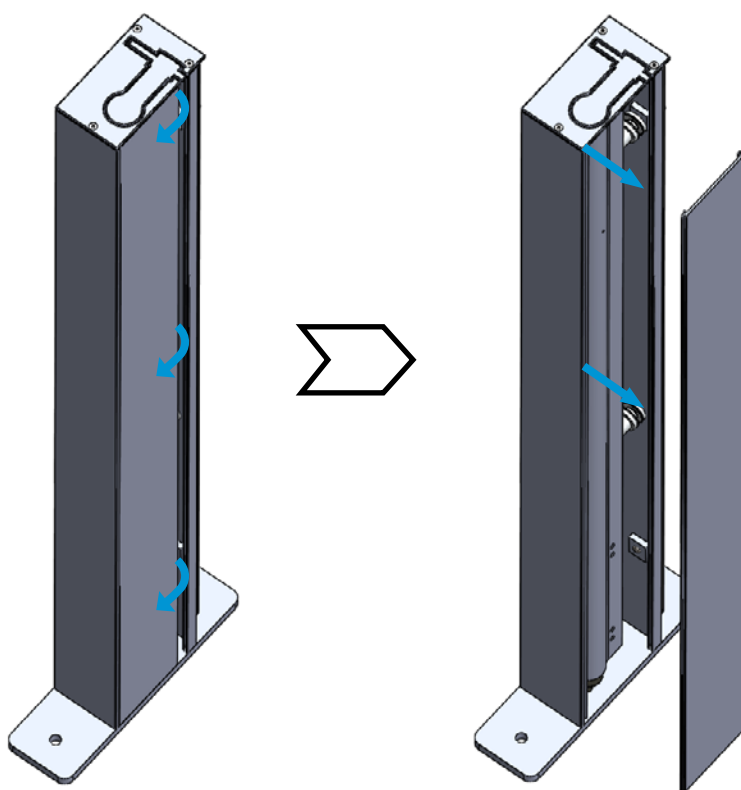
### 4.1. SELECTION OF POSTS

If you have a stock of posts (for projects not defined yet), select the adapted pair of posts according to the chart 2 in the section 1.2.

### 4.2. REMOVE THE LATERAL ENDING CAP

Remove the ending cap as shown in the drawing below (FIG. 4.1).

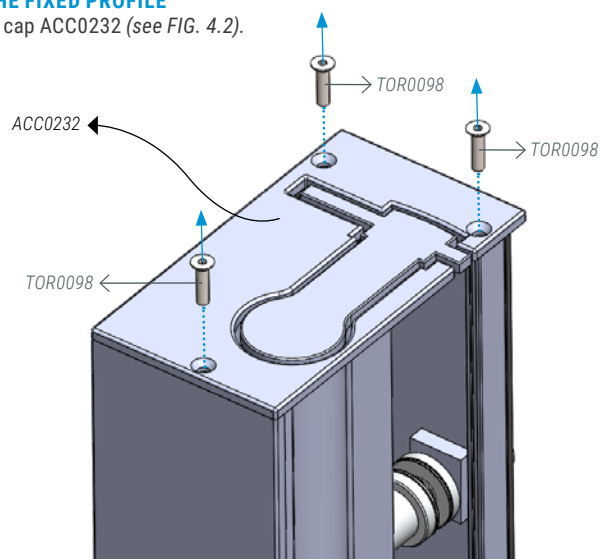
FIG. 4.1



### 4.3. REMOVE THE TOP ENDING CAP OF THE FIXED PROFILE

Remove the 3 screws TOR0098 of the ending cap ACC0232 (see FIG. 4.2).

FIG. 4.2

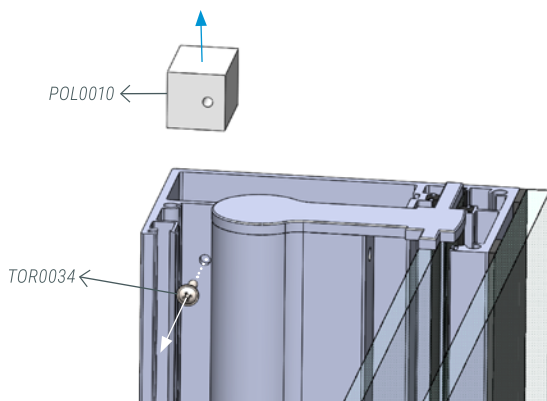




**4.4. REMOVE THE SPRING BLOCK**

Remove the screw TOR0034 used to fix the POL0010 part. (see FIG. 4.3).

FIG. 4.3



**4.5. REMOVE THE MOBILE PART**

Remove totally the mobile part by sliding it inside the fixed profile. (Ver FIG. 4.4).

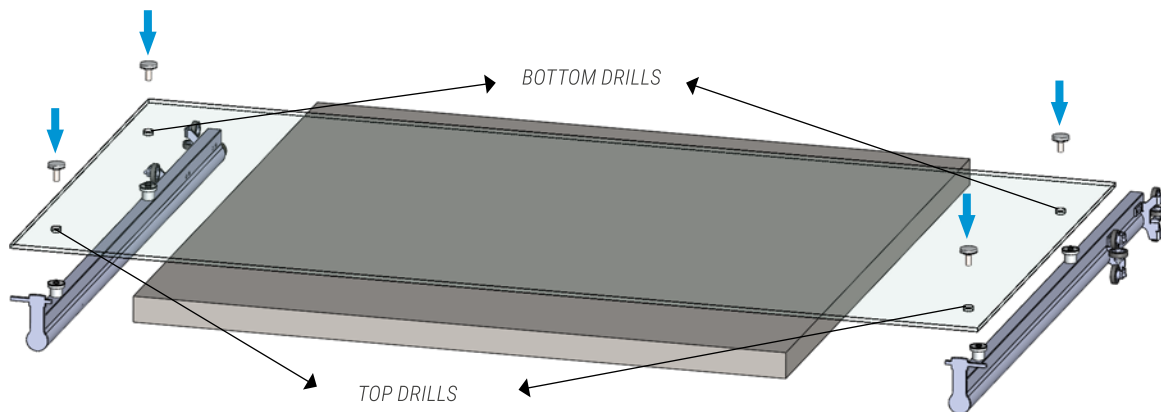
FIG. 4.4



**4.6. FIXATION OF THE GLASS TO THE MOBILE PART**

Lean the glass on an horizontal surface leaving space on each extremity to fix the mobile profiles. Place them under the glass (see FIG. 4.5). It is very important to use the mounting tools provided.

FIG. 4.5



Place the profiles and thread the parts HER0293 without adjusting it. Add one washer TOR0078 per ironwork to protect the glass from direct contact with the metal.

First, fix the drills of the top part.

- Vertical adjustment: place the tool ACC0242 (see FIG. 4.6.a) and move the profile so that the top face of the tool matches with the top face of the glass (see FIG. 4.6.b).

FIG. 4.6.a

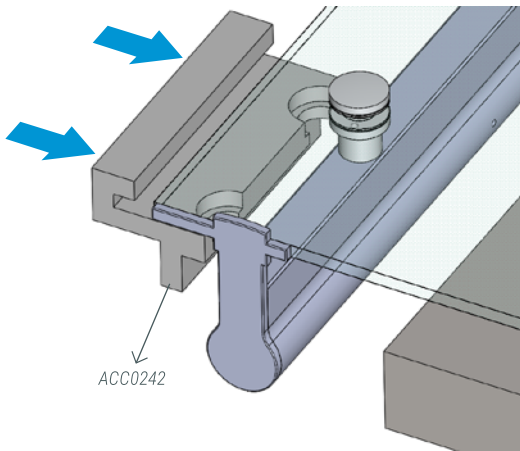
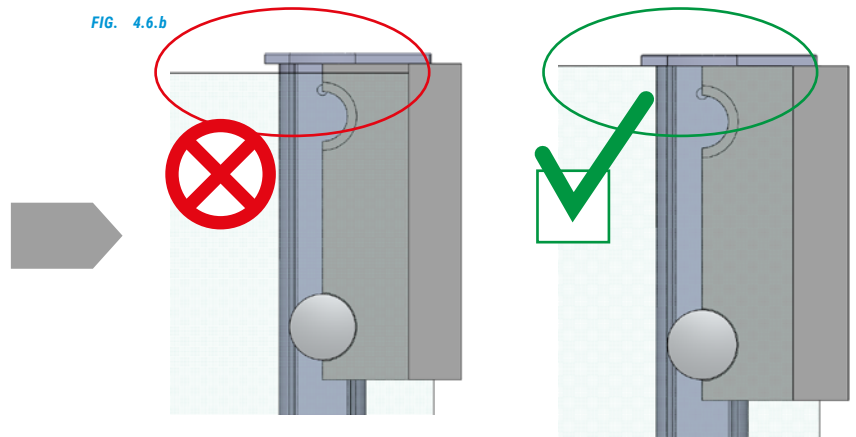
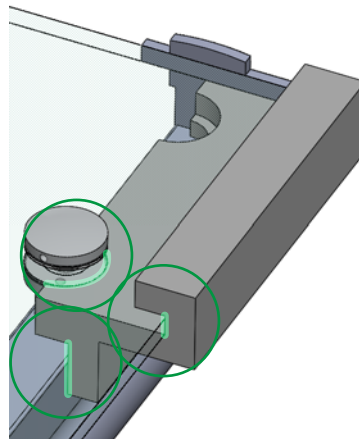


FIG. 4.6.b



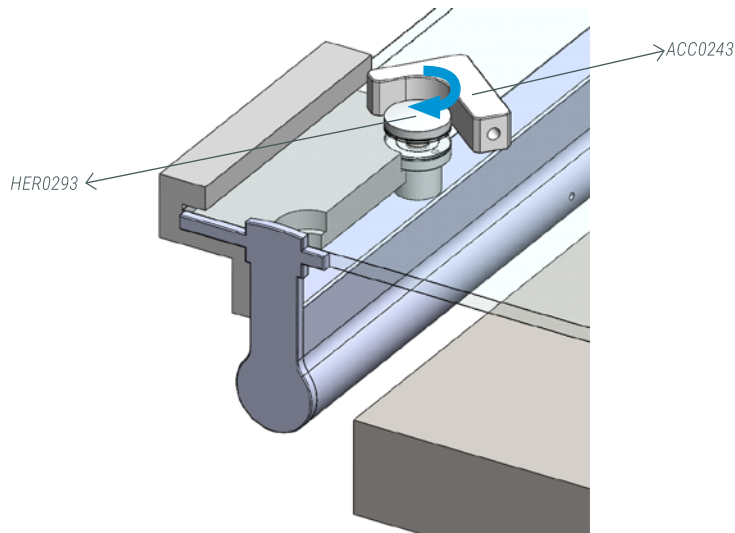
- Horizontal adjustment: properly done when the lateral face of the profile and the edge of the glass are in contact with the tool ACC0242. (see Fig. 4.7).

FIG. 4.7



When the mobile profile is in its correct position, fix the HER0293 part with the tools ACC0243 and ACC0244. (see FIG. 4.8).

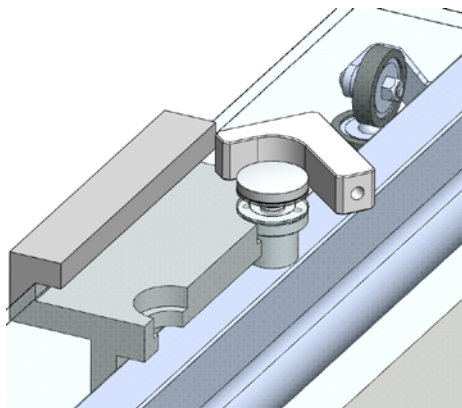
FIG. 4.8



Fix the drills of the bottom part:

- Horizontal adjustment: place the tool ACC0242 and check that the lateral side of the profile and the edge of the glass are in contact with the tool. (See Fig. 4.9).

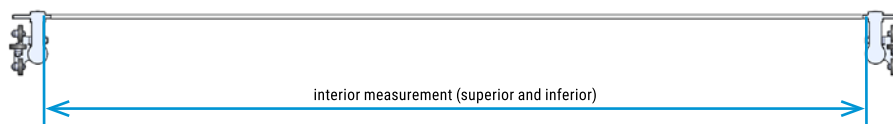
FIG. 4.9



#### Verification of the measurements of the mobile part

After this step, check the interior measurement between the profiles, at the top part and at the bottom part. The reference for the measurement is the flat face of the profile. This measurement must meet the following calculation in both zones:

$$\text{interior measurement} = \text{windbreak width} - 123 \text{ mm.}$$

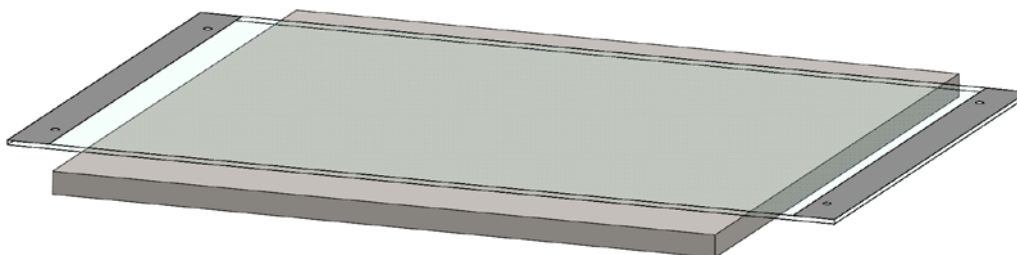


#### 4.7. FIX THE GLASS TO THE FIXED PROFILES\*

**\*IT IS RECOMMENDED THAT TWO WORKERS REALIZE THIS STEP.**

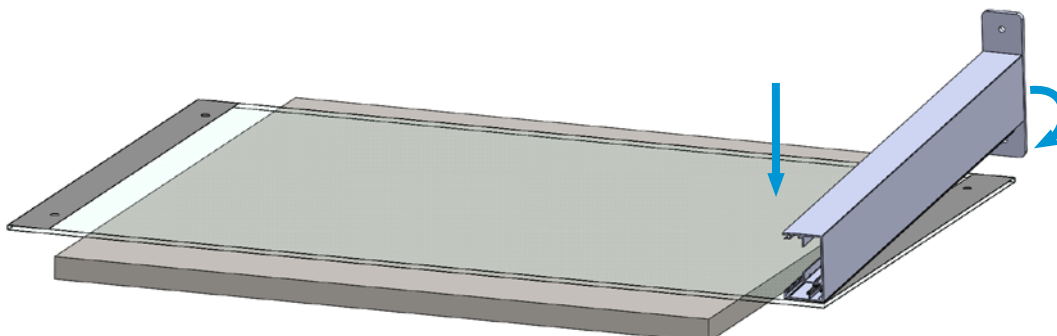
- Lean the profiles on a flat horizontal surface with the face of the coating upwards. The fixed profile will be fixed on this side. (see FIG. 4.10).

FIG. 4.10



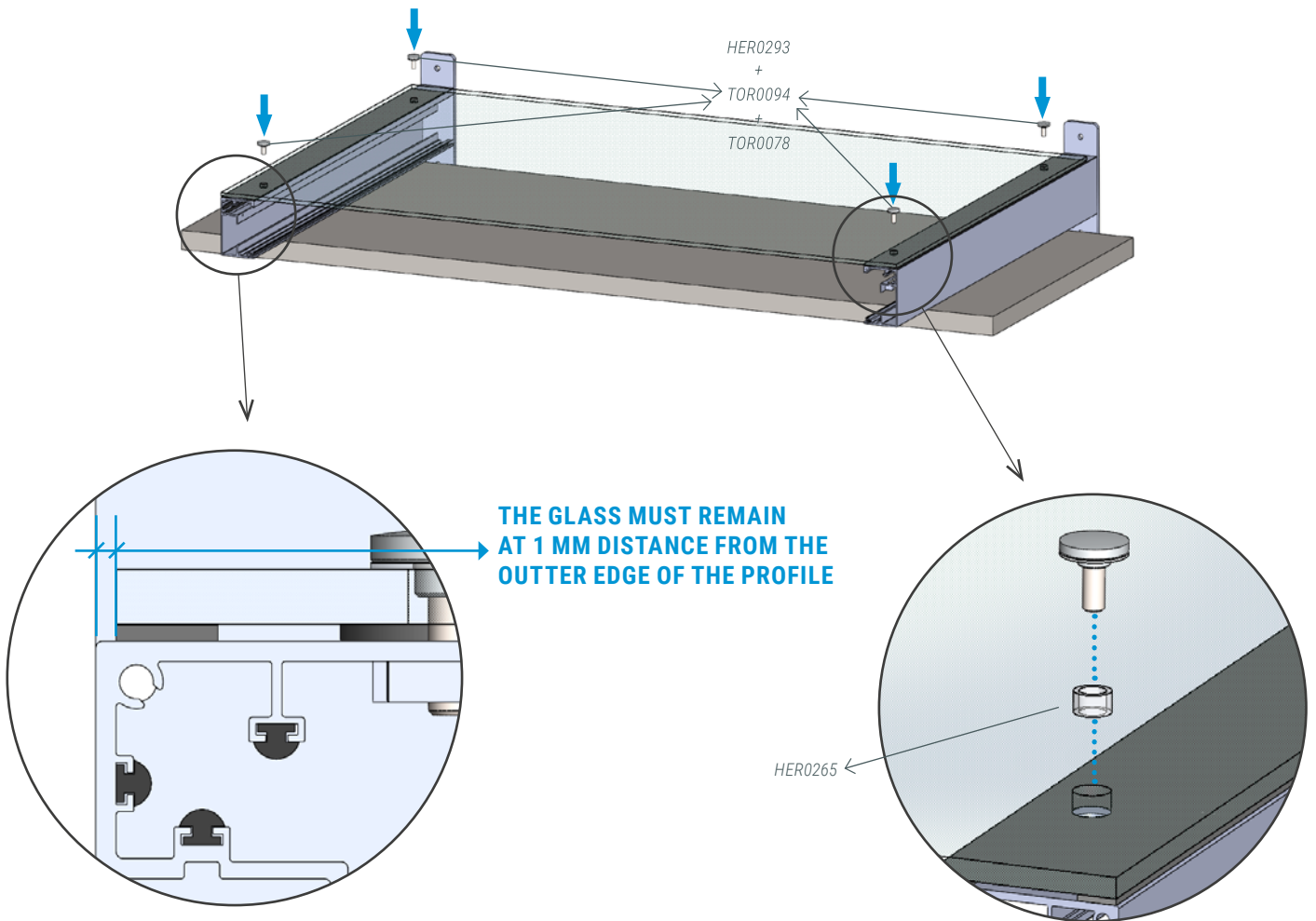
- Remove the tape of the seals GOM0055 stuck to the fixed profiles.
- Each worker will hold an end of the profile. Start sticking the top corner. The edge of the side of the glass must be flush with the seal GOM0055. This process requires special care. (See FIG. 4.11).

FIG. 4.11



- Once each post have been stuck, put the product backwards with the posts leaned on the working surface. Fix the glass with the ironwork HER0293 thanks to the tools ACC0244 and ACC0243. (See FIG. 4.12).

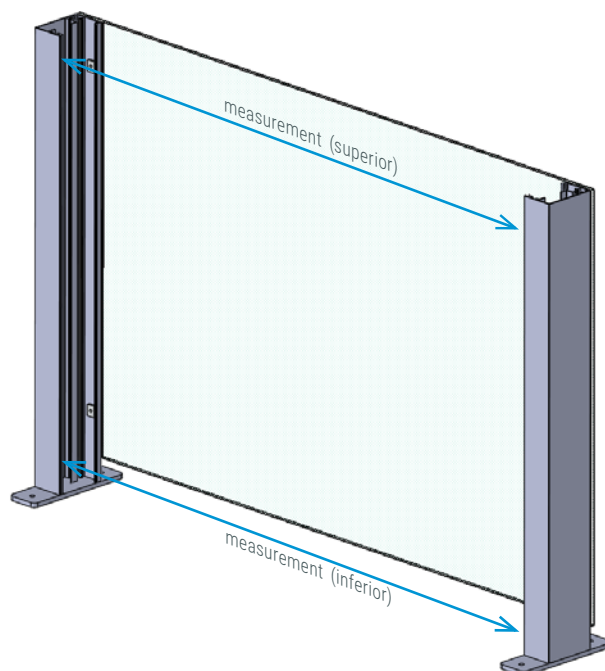
FIG. 4.12



**Verification of the measurements of the fixed part**

After this step, and once the windbreak is placed in vertical position, check the interior measurement between profiles at the top part and at the bottom part. This measurement must meet the following calculation in both zones:

$$\text{interior measurement} = \text{extendible glass partition width} - 144 \text{ mm.}$$



#### 4.8. PLACE THE MOBILE PART

Place the fixed module upright on a leveled floor and introduce the mobile module inside the fixed profiles until the ends of the springs touch the base ACC0234. (See FIG. 4.13). Highly recommended: do not extend the springs. (See FIG 4.14).

FIG. 4.13

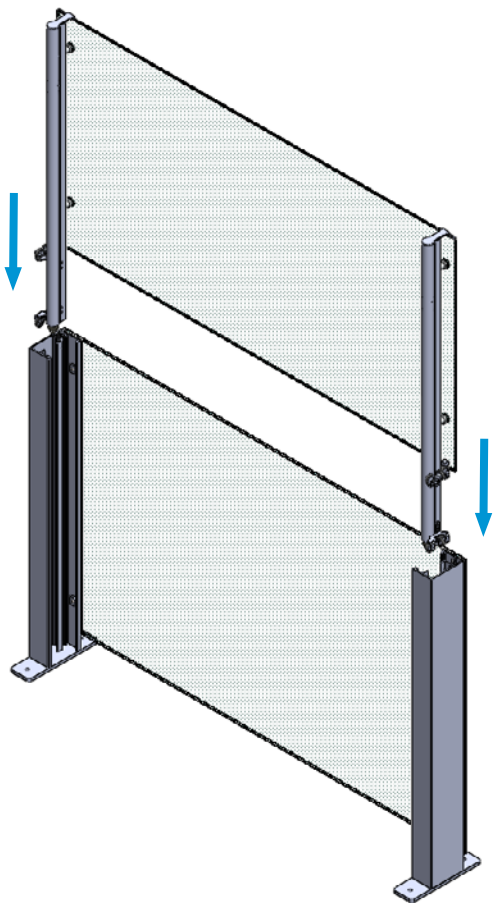
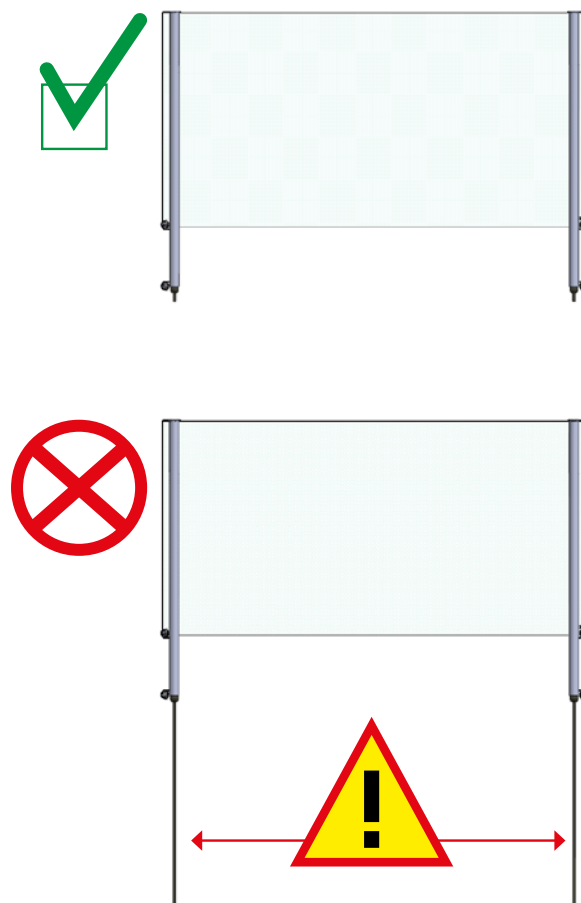


FIG. 4.14



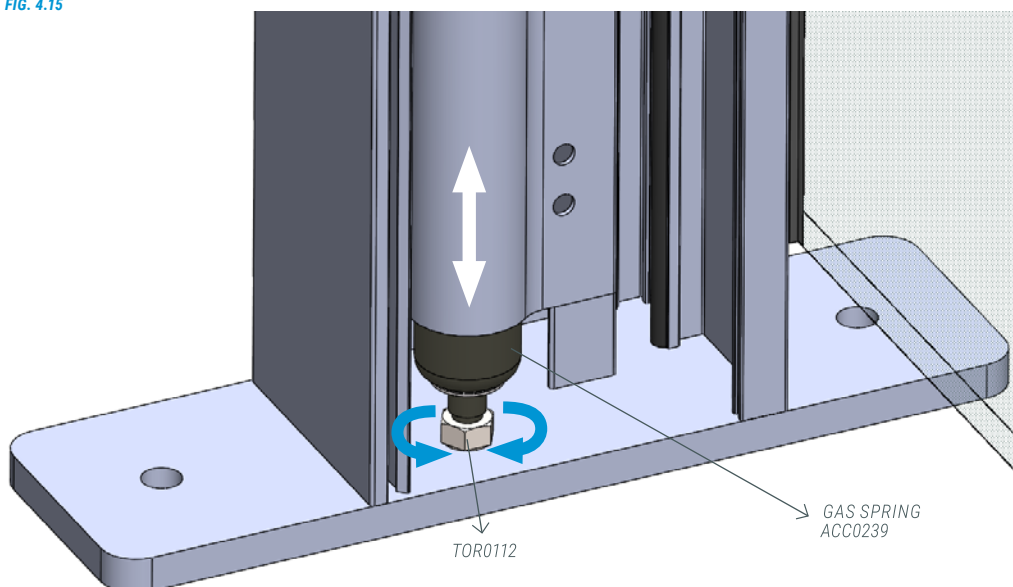
#### 4.9. CHECK THE PROPER FUNCTIONING

Once inserted, check the proper functioning of the system:

- There's no need to produce a huge effort when pressing the mobile part to make it rise.
- Both posts of the system unblock at the same time.
- The mobile module rises until it reaches the end of the track.
- The mobile module is not restrained when it is pressed to take it down.

If the system doesn't work properly, it is possible to adjust the level of the glass by rotating the nut TOR0112 screwed to the bottom end of the gas springs (see FIG. 4.15). It is also important that the measurements between the mobile profiles (section 4.6.1) and the fixed profiles (sector 4.7.1) are correct.

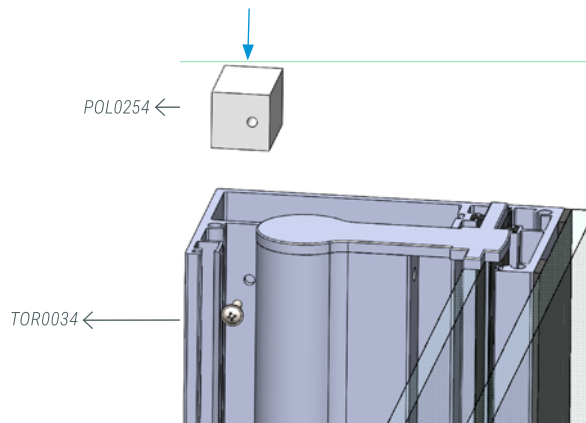
FIG. 4.15



**4.10. FIX THE SPRING BLOCK**

Fix the part POL0010 with the screw TOR0034 (See FIG. 4.16).

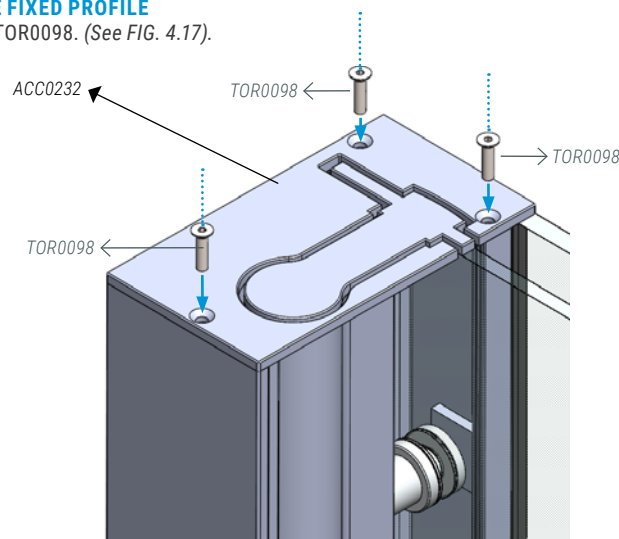
FIG. 4.16



**4.11. FIX THE TOP ENDING CAP OF THE FIXED PROFILE**

Fix the ending cap ACC0232 with screws TOR0098. (See FIG. 4.17).

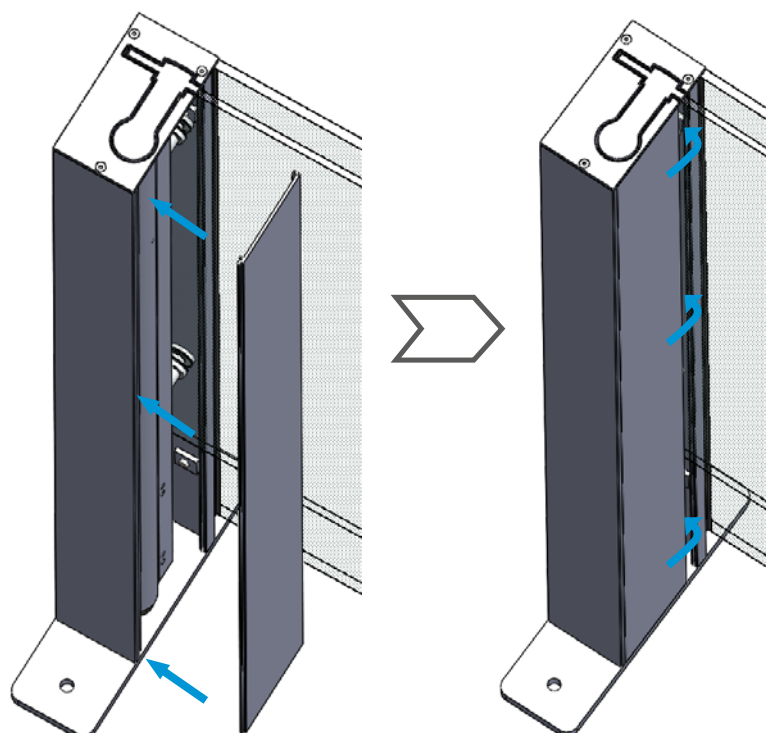
FIG. 4.17



**4.12. PLACE THE LATERAL ENDING CAP**

Place the profile ALU0156 so that it remains fixed to the profile ALU0155. (Ver FIG. 4.18).

FIG. 4.18



## **5** INFORMATION TO TAKE INTO ACCOUNT TO MOUNT THE EXTENDIBLE GLASS PARTITIONS

*THE EXTENDIBLE GLASS PARTITIONS WILL HAVE TO BE FIXED TO THE FLOOR WITH SCREWS OF DIAMETER BETWEEN 8 MM AND 10 MM OF MINIMUM LENGTH 90 mm.*

*WHEN THE SURFACE IS IRREGULAR, THE EXTENDIBLE GLASS PARTITIONS MUST BE LEVELED INDIVIDUALLY.*

