

# ASSEMBLY INSTRUCTIONS



## WINDSOR



## SECURITY DOORS



Dear client,

Thank you for purchasing a Scrigno security door. Please follow the instructions given below to install your new security door.

## TECHNICAL SPECIFICATIONS:

Electro-galvanised 12/10 steel body; 20/10 thermally insulated press-folded frame with non-polluting polyester powder paint for improved resistance to scratching and the weather. 20/10 manganese anti-drill plate to protect the lock, external anti-tube and anti-drill protection for European cylinder with unbreakable reinforcing flange to protect the mounting equipment. Double frame and door panel gasket for improved thermal and acoustic comfort. Thermally and acoustically insulated panels located inside the panel body.

Top and bottom draught excluders as standard equipment for widths less than 1400 mm.

Top and bottom thresholds as standard equipment for widths greater than 1400 mm.

**STANDARD EQUIPMENT:** Lock with rectangular bolt

## GENERAL INFORMATION:

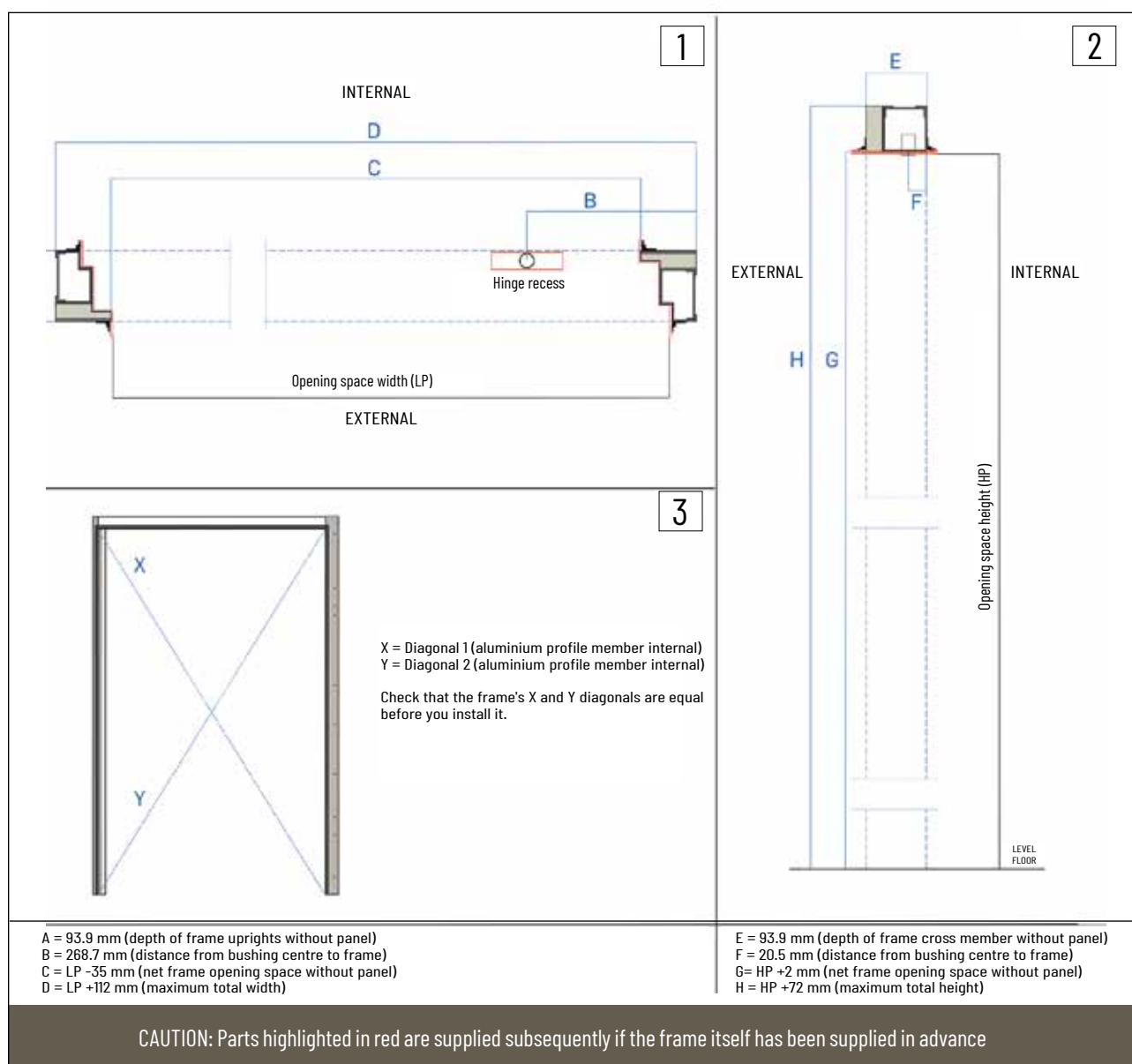
Unpack the door carefully so as not to damage it;

- do not use a box cutter or sharp tools to assist you in opening the package;
- take care when handling or storing the product;
- if the frame is supplied in advance, the delivery will consist of 2 packages: one containing the frame and one containing the accessories (12 masonry clamps and 12 M8x30 mm Allen studs);
- the standard supply consists of 4 packages: two containing the frame (as for advance frame delivery) plus two for the door panel and the box of hardware;
- the box of hardware contains: internal handle, external knob or handle, cylinder, adhesive frame gasket, frame finish panel and peephole (if requested).

## STEP 1: INSPECT THE FRAME

Check the dimensions of the frame before starting the installation.

To do so, calculate the correct dimensions for a door with opening space LP X HP as a reference. The width [fig. 1], height [fig. 2] and diagonal measurement [fig. 3] of the frame must be:



# WINDSOR

## STEP 1.2 INSTALLING THE FRAME

Start installing the frame without removing the spacers screwed onto the U-bolts.

Install the masonry clamps with the M8x30 Allen bolts using a 6 mm hex wrench through the Ø 22 mm holes in the uprights. Both the studs and the brackets are supplied together with the frame [fig. 4].

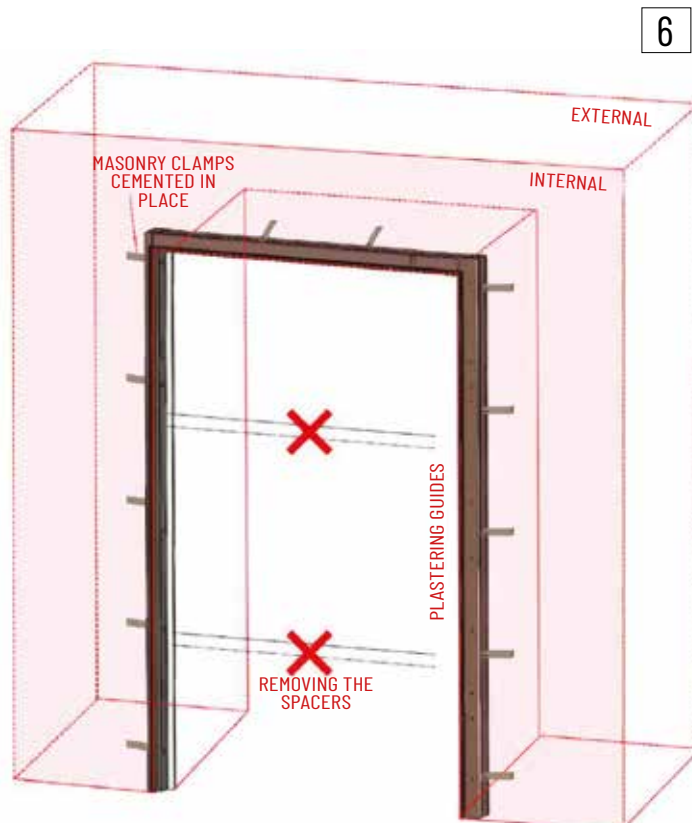
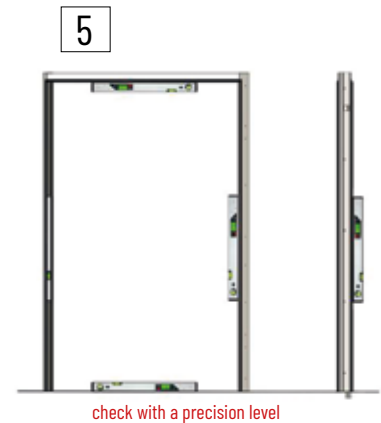
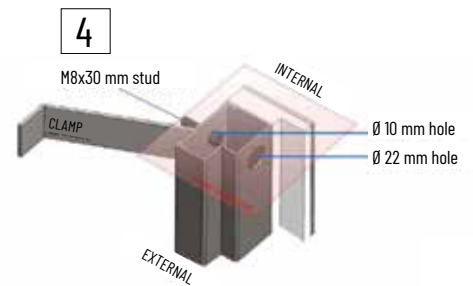
During the installation, check that the uprights are vertical using a precision level.

Also check that the frame's top cross member and the area of floor swept by the door are level [fig. 5].

Once the cement used to install the frame has set, remove the 2 spacers [fig. 6] and clean all mortar and plaster off the structure.



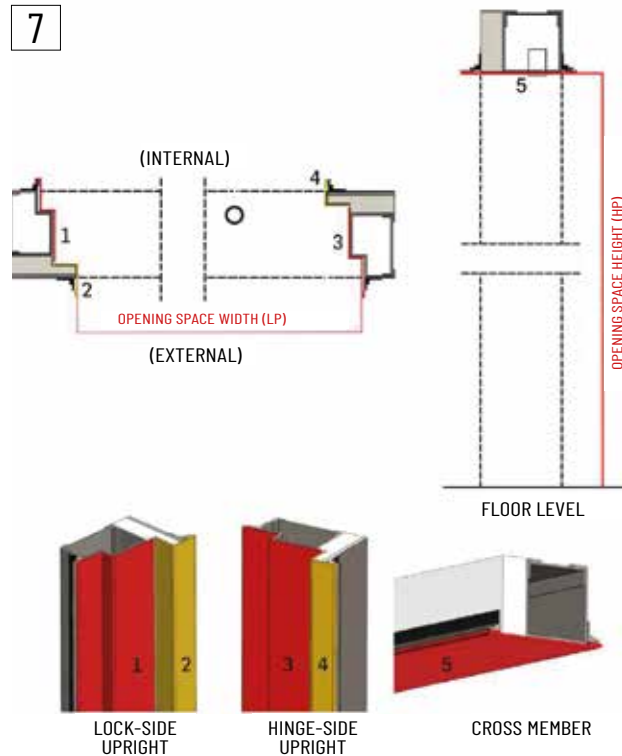
Not plumb, twisting and deformation can prevent the door working properly.



## STEP 2. INSTALLING THE PANELS

Install the panels to the frame on the side with the double-sided tape.

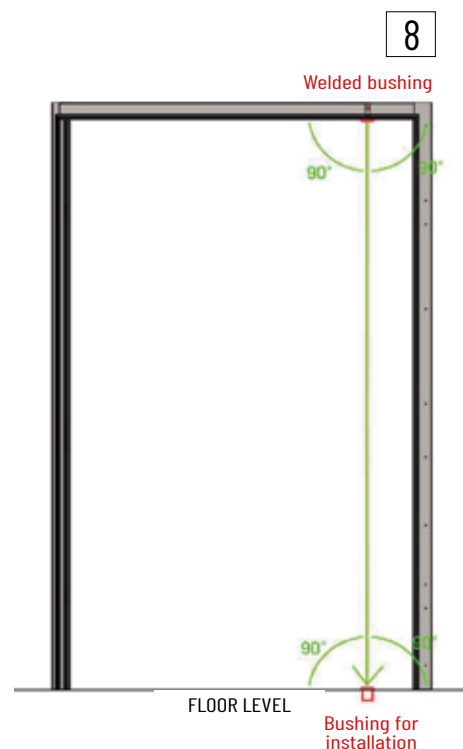
Check that the distance between the panels matches the specified opening space both vertically and horizontally [fig. 7].



## STEP 3. PREPARING THE LOWER BUSHING INSTALLATION

Drill the floor in line with the bushing welded to the frame with a  $\varnothing$  40 mm hole of depth 50 mm to install the second bushing.

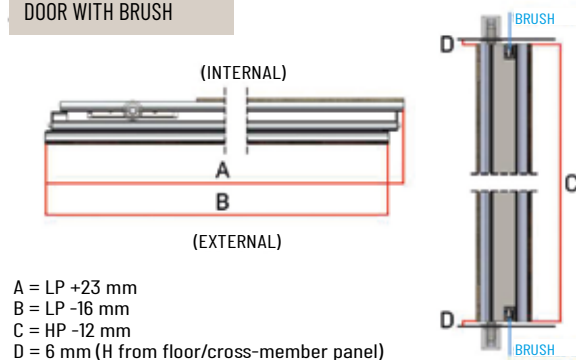
We recommend using a laser level to calculate the perpendicularity and slightly oversizing the 40 mm diameter hole so that it can then be filled with resin when the bushing is installed [fig. 8].



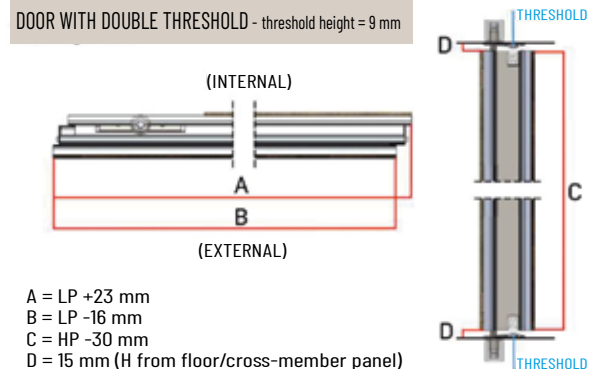
## STEP 4. CHECKING THE DIMENSIONS OF THE DOOR PANEL

Check the dimensions of the door before you install it.  
Calculate its dimensions using a standard door with opening space LP X HP as a reference.  
The width, height and diagonal measurements are:

### DOOR WITH BRUSH



### DOOR WITH DOUBLE THRESHOLD - threshold height = 9 mm



## STEP 5. FITTING THE DOOR PANEL INTO THE FRAME

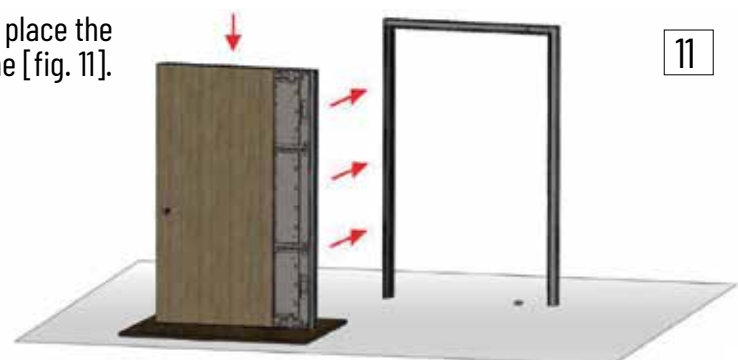
### 5.1 REMOVING THE INTERNAL PANEL

For ease of shipping, the internal panel may already be installed to the door panel, in which case it must be removed by taking off the hinge-side aluminium profile. If the panel has 2 segments, simply take off the smaller segment next to the hinge [fig. 9], otherwise remove the entire panel [fig. 10].



### 5.2 PREPARING THE DOOR PANEL

Place a 6 mm shim on the floor (preferably MDF), place the door on it and move it carefully towards the frame [fig. 11].



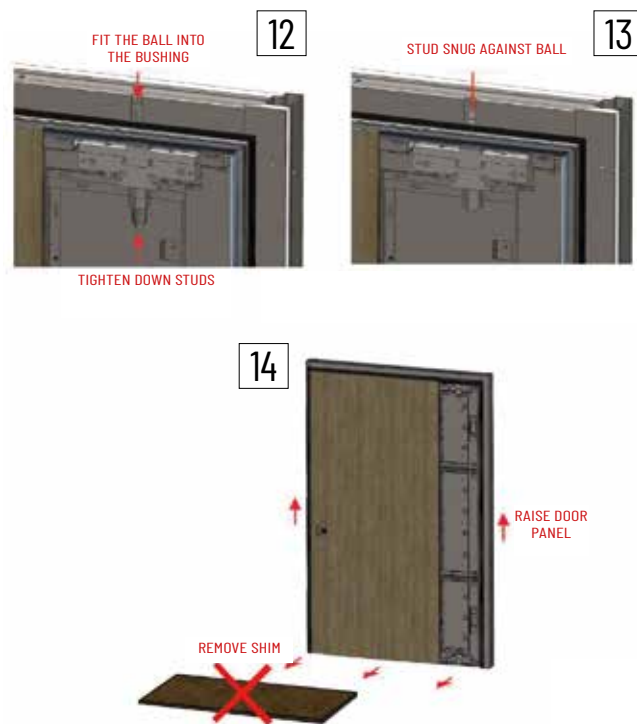
## 5.3 INSTALLING THE DOOR PANEL

The hinge studs have been backed off so that they do not protrude from the door panel, to facilitate insertion into the frame [fig. 12].

Insert the balls into the hinge bushings and position the door panel so that the studs are concentric relative to the bushings [fig. 13].

Now start tightening the studs down to that they are snug against the balls.

Once this is done, slightly raise the door panel and remove the shim [fig. 14].



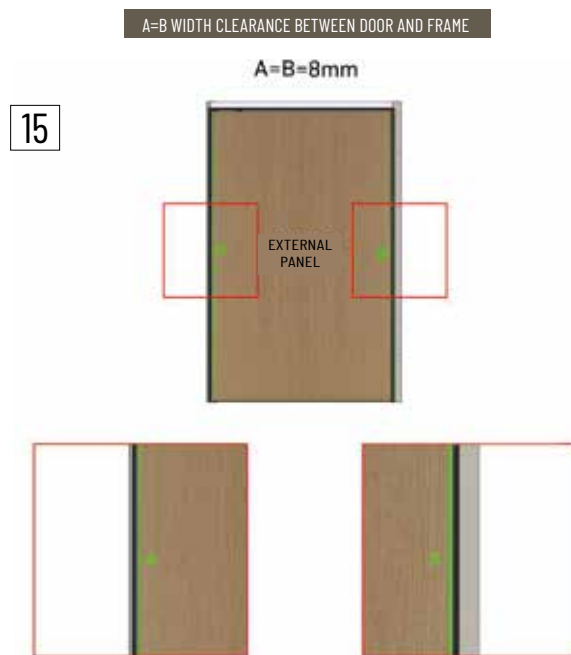
## STEP 6. CHECK THE POSITION OF THE DOOR PANEL

### 6.1 CHECK THE DOOR IS CENTRED ON THE FRAME

Check that the door panel is centred relative to the frame over its entire height [fig. 15]. Whether the door panel is fitted with a brush or threshold, dimension A=8 mm must be equal to dimension B (width-wise door/frame clearance).



The hinge can be adjusted if necessary to correct the installation (see "Hinge adjustments").



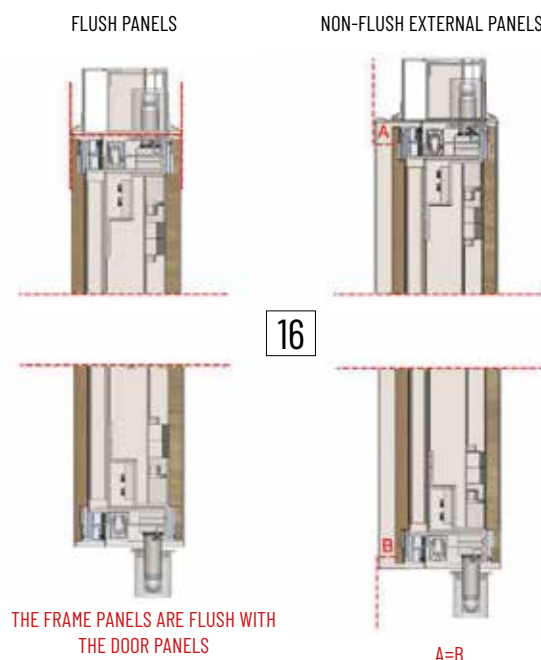
## 6.2 CHECKING THE ADHERENCE AND PERPENDICULARITY

Check that the panels are flush with the frame or cover panels.

If this is not specified (special order), A must be equal to B [fig. 16].



The hinge can be adjusted if necessary to correct the installation (see "Hinge adjustments").



## 6.3 CHECKING THE HEIGHT OF THE LOCK

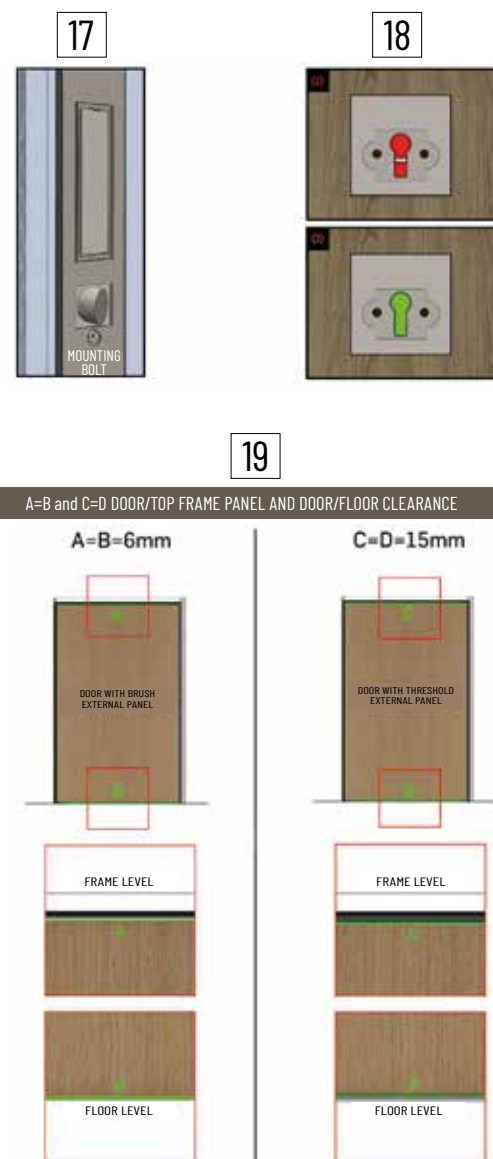
The cylinder is usually already installed in the lock, but if it is not, install it as follows (while the door is open):

- Back off the bolt on the lock-side upright next to the lock bolt [fig. 17] as much as necessary and hold it pressed in towards the interior of the lock. The bolt will retreat into the "Yale" hole to allow the cylinder to be inserted [fig. 18].
- Insert the cylinder (from the inside to the outside of the door), and use the key or knob to check that it operates.
- Once you have managed to give it at least one turn, release the bolt and screw it in a little.
- Try turning the lock its full number of times, checking that the key rotates smoothly. If it does, tighten the bolt down completely.
- Unturn the lock completely and use the key or knob to check that you can also retract the bolt.
- With the door still open, try turning the lock fully from the outside in both directions.

Now close the door and check that the centre of the bolt is aligned with the centre of the hole provided in the frame, and that the door panel is centred on the frame over its entire width [fig. 19].



The hinge can be adjusted if necessary to correct the installation (see "Hinge adjustments").





## 6.4 FINAL DOOR INSTALLATION CHECK

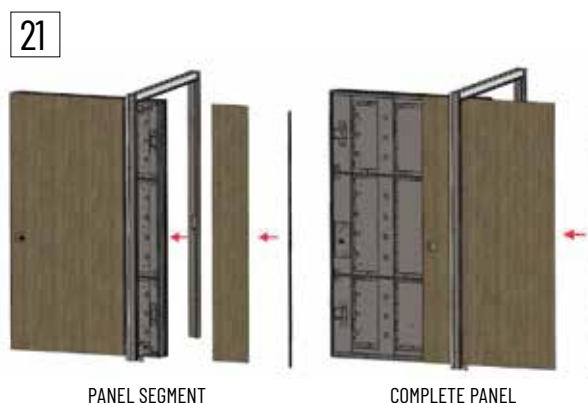
Close the door and turn the lock all the way, checking for vibration. If necessary, adjust the bolt register by slackening off the M6 bolt with a 5 mm hex key.

Once the closure is properly adjusted, tighten down the bolt [fig. 20].



## STEP 7. FITTING THE INTERNAL PANEL

Open the door and fit the panel segment or complete panel into the internal part, then seal the closure by re-installing the aluminium profile member [fig. 21].



## STEP 8. FITTING THE ACCESSORIES

- If the door has a cylinder equipped for an internal thumb turn, the cylinder is not installed in the lock but is included in the box of accessories.
- Once the cylinder has been installed, the length of the internal shank must be adjusted by cutting it with a hacksaw. We recommend that you remove the cylinder, measure and cut off the excess shank, and then reinstall it.

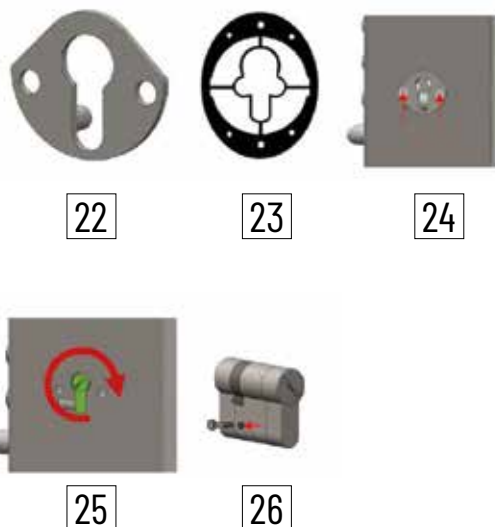
If the door has a double cylinder lock, the cylinders are not installed as described above, but using a cradle-type mounting [fig. 22]. To access the cylinder mounting points, remove the cylinder's internal finish plate and remove the plastic panel underneath it [fig. 23].

Carefully undo the two cradle mounting screws with a 6 mm wrench [fig. 24].

These screws also secure the guard: before you take them out completely, remove the guard and any shims to prevent them falling inside the body of the door. Take out the screws and the cradle. Turn the key a quarter turn so that the cylinder rod retracts into the cylinder [fig. 25] and remove the cylinder itself.

Undo the cradle mounting stud [fig. 26].

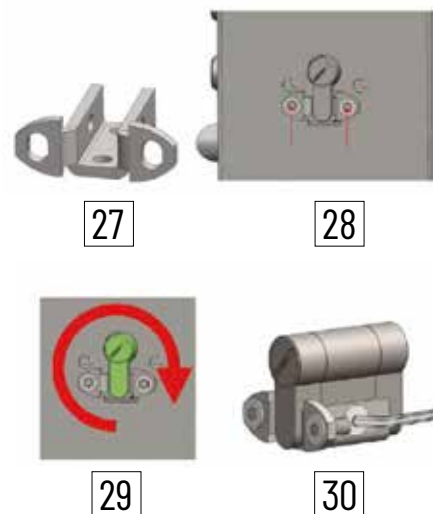
Restore the cylinder in reverse order to the above.



If the door has an electromechanical lock, the cylinders are secured with a cradle-type mounting [fig. 27]. To access the cylinder mounting points, remove the cylinder's internal finish plate and remove the plastic panel underneath it [fig. 23]. Undo the two cradle mounting screws with a 2.5 mm wrench [fig. 28].

Turn the key a quarter turn so that the cylinder rod retracts into the cylinder [fig. 29] and remove the cylinder and cradle. Undo the cradle screw securing the cylinder [fig. 30] with a 3 mm wrench.

Restore the cylinder in reverse order to the above.

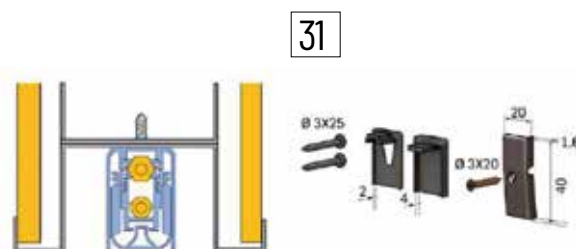


## STEP 9. INSTALLING THE DRAUGHT EXCLUDER BAR OR THRESHOLD

Clean all parts of the door using two non-abrasive cloths, one dry and one dampened with only water.

### DRAUGHT EXCLUDER [fig. 31]:

Adjust the downwards stroke of the draught excluder. Backing off the screw increases the stroke, lowering the bar so that the gasket touches the floor along its entire length.

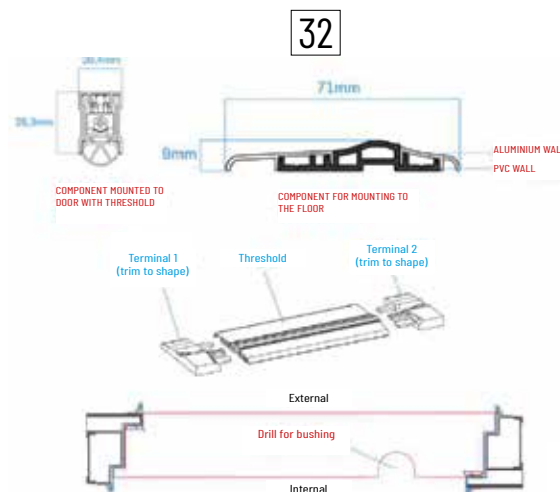


### THRESHOLD [fig. 32]:

#### CAUTION:

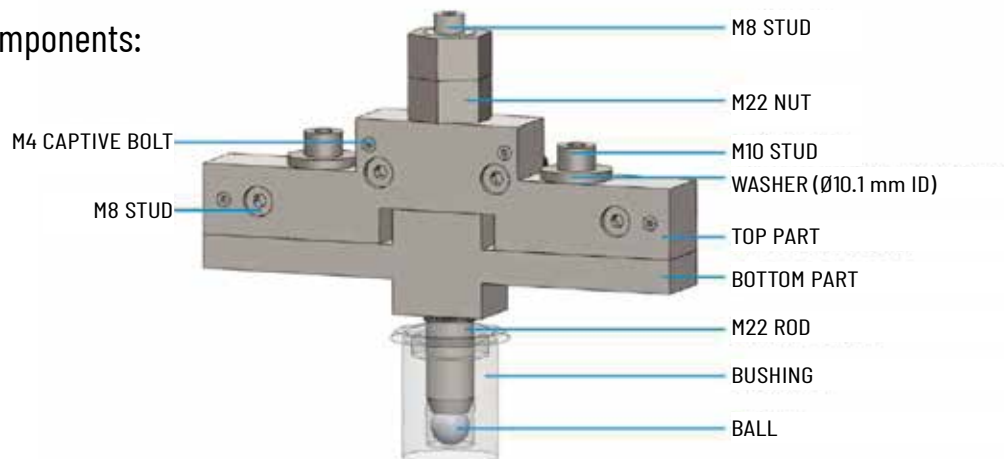
The threshold must be installed together with the frame and trimmed to fit the shape of the panels.

It must also be shaped, using appropriate tools, in the direction of the two bushings to allow the hinges to be inserted afterwards.



## ADJUSTING THE WINDSOR HINGES

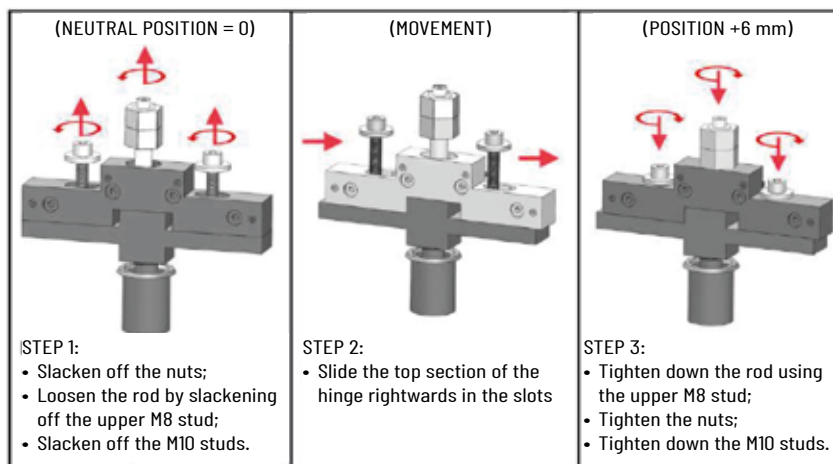
Hinge components:



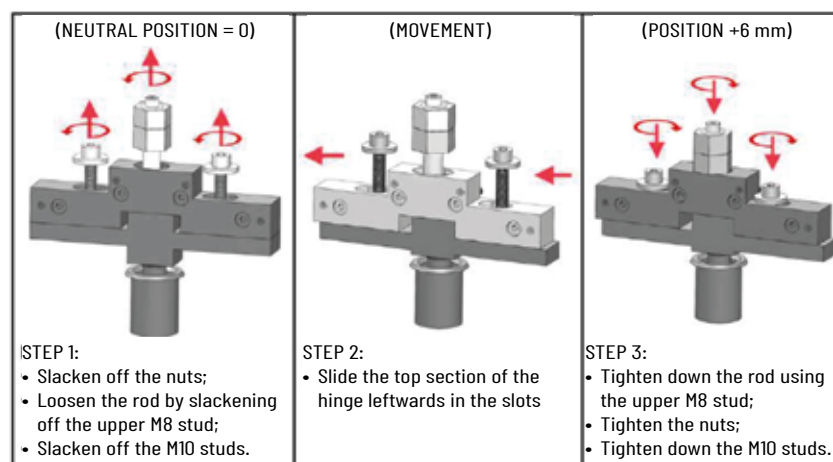
### 1 RIGHT/LEFT ADJUSTMENT

The hinge adjustment values shown in the figure are limits. Make sure not to exceed these limits.

#### RIGHTWARDS ADJUSTMENT:



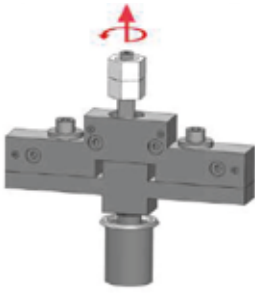
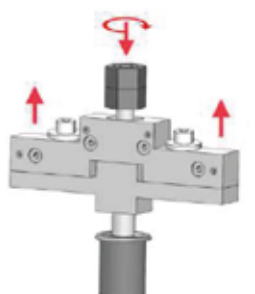
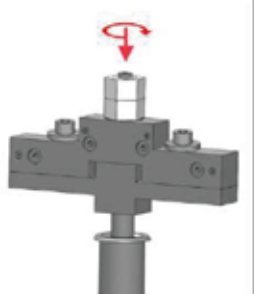
#### LEFTWARDS ADJUSTMENT:



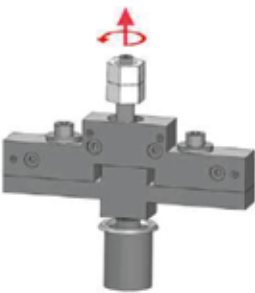
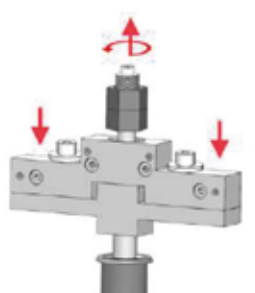
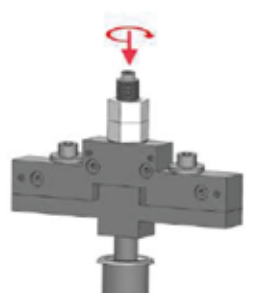
## 2 VERTICAL ADJUSTMENT

The adjustment for a door with brush must leave a clearance between the door and frame of at least 2 mm, and for a door with threshold, at least 11 mm.

### UPWARDS ADJUSTMENT:

(NEUTRAL POSITION = 0)	(MOVEMENT)	(POSITION +)
		
<b>STEP 1:</b> <ul style="list-style-type: none"> <li>• Slacken off the nuts</li> </ul>	<b>STEP 2:</b> <ul style="list-style-type: none"> <li>• Tighten down the rod using the upper M8 stud</li> </ul>	<b>STEP 3:</b> <ul style="list-style-type: none"> <li>• Tighten the nuts</li> </ul>

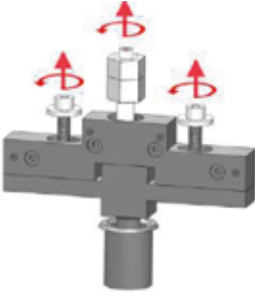
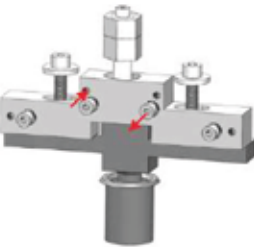
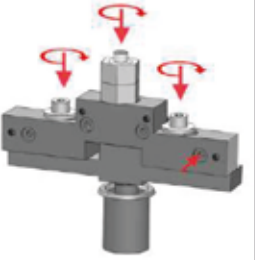
### DOWNWARDS ADJUSTMENT:

(NEUTRAL POSITION = 0)	(MOVEMENT)	(POSITION -)
		
<b>STEP 1:</b> <ul style="list-style-type: none"> <li>• Slacken off the nuts</li> </ul>	<b>STEP 2:</b> <ul style="list-style-type: none"> <li>• Tighten down the rod using the upper M8 stud</li> </ul>	<b>STEP 3:</b> <ul style="list-style-type: none"> <li>• Tighten the nuts</li> </ul>

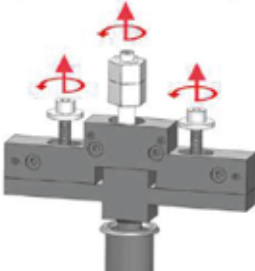
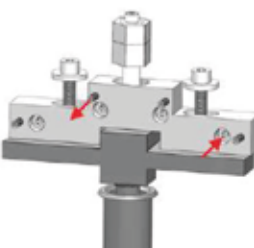
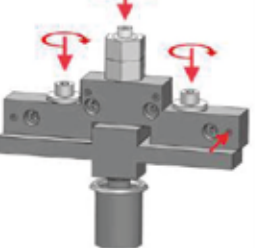
## 3 FORWARDS/BACKWARDS ADJUSTMENT

The hinge adjustment values shown in the figure are limits.  
Make sure not to exceed these limits.

### FORWARDS ADJUSTMENT

(NEUTRAL POSITION = 0)	(MOVEMENT)	(POSITION +3 mm)
 <p>STEP 1:</p> <ul style="list-style-type: none"> <li>• Slacken off the nuts;</li> <li>• Loosen the rod by slackening off the upper M8 stud;</li> <li>• Slacken off the M10 studs.</li> </ul>	 <p>STEP 2:</p> <ul style="list-style-type: none"> <li>• Slacken off the M8 studs;</li> <li>• Tighten down the M4 captive bolts.</li> </ul>	 <p>STEP 3:</p> <ul style="list-style-type: none"> <li>• Tighten down the rod using the upper M8 stud;</li> <li>• Tighten the nuts;</li> <li>• Tighten down the M10 studs;</li> <li>• Tighten down the M8 studs.</li> </ul>

### BACKWARDS ADJUSTMENT:

(NEUTRAL POSITION = 0)	(MOVEMENT)	(POSITION -3 mm)
 <p>STEP 1:</p> <ul style="list-style-type: none"> <li>• Slacken off the nuts;</li> <li>• Loosen the rod by slackening off the upper M8 stud;</li> <li>• Slacken off the M10 studs.</li> </ul>	 <p>STEP 2:</p> <ul style="list-style-type: none"> <li>• Slacken off the M4 captive bolts;</li> <li>• Tighten down the M8 studs.</li> </ul>	 <p>STEP 3:</p> <ul style="list-style-type: none"> <li>• Tighten down the rod using the upper M8 stud;</li> <li>• Tighten the nuts;</li> <li>• Tighten down the M10 studs;</li> <li>• Tighten down the M4 captive bolts.</li> </ul>

Best regards  
Scigno Spa





