

BELLEVUE  
ARCHITECTURAL

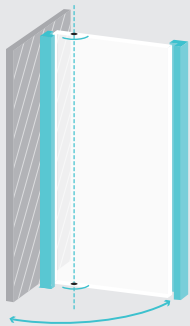
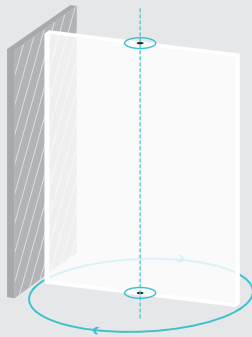
# SYSTEM ONE

hidden perfection  
concealed sprung pivot system

FritsJurgens®

SYSTEM ONE  
APPLICATIONS

System One is the perfect solution for 360° rotating doors and in combination with door frames:



Choose the pivot door system that meets all your needs. Please see our complete line of products on page 10 and 11.

FRITSJURGENS BY BELLEVUE  
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WHERE TO BUY

Visit [bellevuearch.com.au](http://bellevuearch.com.au) or call us on +61 3 9571 5666 to find your nearest distributor.







## HIDDEN PERFECTION SYSTEM ONE

A pivot door is a symbol of hidden perfection. No visible frame hinges, but an invisible vertical axis which allows free movement of the door panel.

FritsJurgens® pivot door systems are unique because the pivot technology is completely integrated into the door. System One is the most compact system in our range of pivot door hinges.



# SYSTEM ONE HEAVY-DUTY PERFORMANCE



FritsJurgens® System One excels in its simplicity. One pivot point. Rotation of 360° or 90° in combination with door frames.

The performance of System One is outstanding. The pivot hinge system is suitable for large, heavy and tall doors. The possibilities are endless. Due to the high load-bearing capacity of System One of up to 500 kg, there are virtually no restrictions on the design of the pivot door.







## SYSTEM ONE DESIGNED TO STAND THE TEST OF TIME

The System One hinge is virtually indestructible. Built from high performance materials, the pivot is maintenance-free. Our rigorous testing has shown that even after 1 million cycles (similar to 136 years of daily use) System One still behaves flawlessly.

System One packs the highest corrosion resistance (according to the standard EN 1154, class 4). Even the most diverse conditions do not affect the operation of this system. Thanks to a very compact housing and a cam made of duplex stainless steel, the System One has considerable power. This is a system truly designed for the ages: invisible, built-to-last and maintenance-free.

# FRITSJURGENS® OVERVIEW SYSTEMS

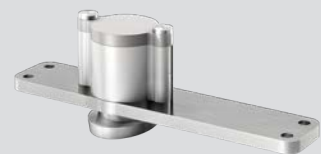
The FritsJurgens® pivot door range consists of three systems.

System One is the most compact system: the hinge is non sprung providing free movement.

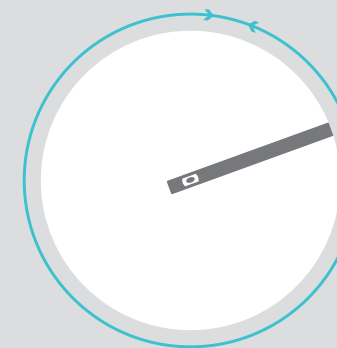
System 3 has three functions: rotation, closing and hold positions. System 3 can turn through 360° and is characterized by a hold position at every quarter of a circle including a self opening and self closing feature.

The System M adds a new dimension to the pivot door by creating the ultimate smoothness in: total control over the movement of the door making it ideal for 90° and 180° swing doors.

## SYSTEM ONE

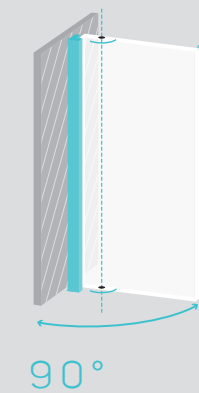
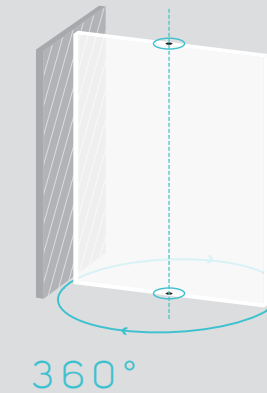


### MOVEMENT

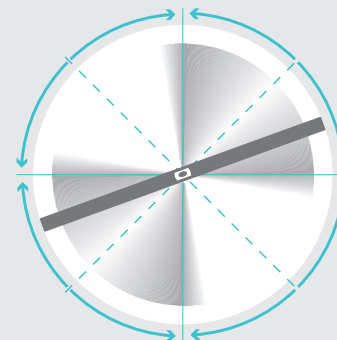


- Rotates 360°
- No hold open positions or self closure function

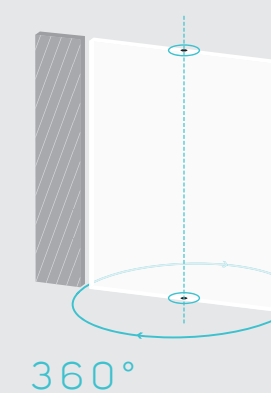
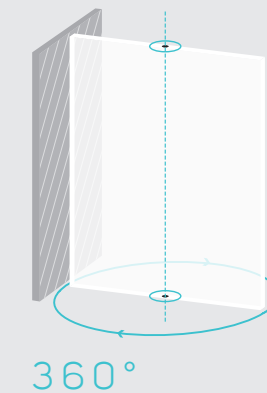
### POSITIONING



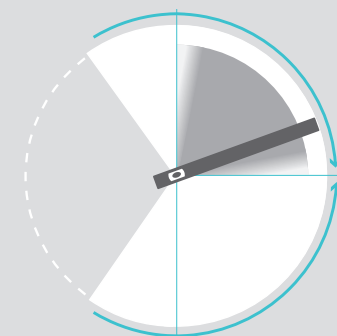
## SYSTEM 3



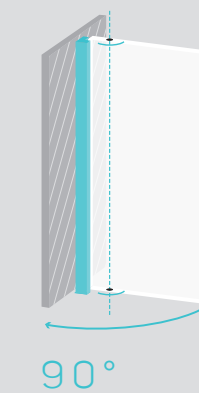
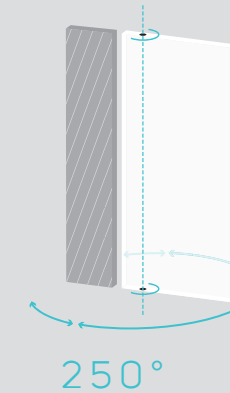
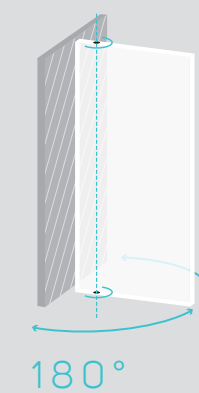
- Rotates 360°
- Hold open at 0°, 90°, 180° and 270°
- Self-opening - The door automatically moves from each 45° angle in both directions to the next hold position
- Self-closing - The door comes to rest in the desired hold position after a two overswing movements



## SYSTEM M



- Hold open at 0°, 90° and -90°
- Self-closing from -125° and 125° - After opening, the door returns smoothly to the 0° position unless pushed to the hold open position at 90° or -90°.
- Adjustable closing damping (soft close)
- Adjustable hydraulic backcheck







# FRITSJURGENS® SYSTEM ONE

## NO STRUCTURAL ELEMENTS

All of our pivot systems are fully integrated into the top and bottom of the door: no structural elements live in the floor or ceiling; leaving a beautiful clean look and feel. The aesthetics of the environment are not diminished by unsightly traditional floor or ceiling plates.

## LOAD-BEARING CAPACITY: UP TO 500 KG

Incredibly, our pivot systems can support the heaviest doors, upto 500kg. Thanks to our purpose built, robust precision bearing system and the use of the highest quality materials like hardened stainless steel and anodized aluminum.

## MINIMUM DOOR THICKNESS: 40MM

The thickness of System One is only 34 mm.

## FOR NEW AND RETROFIT SITUATIONS

The floorplate spigots only need to be rebated 8mm into the floor, this means System One is ideal for in-slab Hydronic Heating.

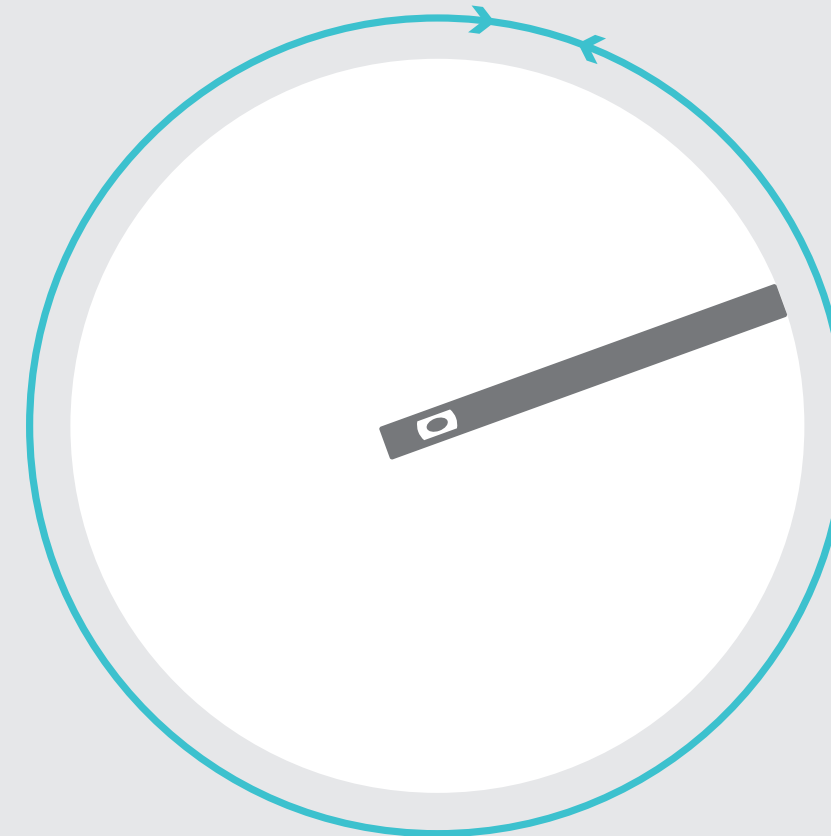
## EASILY-ADJUSTABLE

The innovative design of our pivot systems means the closing seam and the radial position can be easily adjusted whilst the door stays in place.

## SUITABLE FOR ALL TYPES OF DOORS

Ideal for timber, steel, framed glass and massive cladde doors. Perfect for internal and external doors, in both residential and commercial environments.

# SYSTEM ONE COMPACT SOLUTION



## ROTATES 360°

The door rotates 360° in both directions and does not contain hold positions.

## ONE FUNTION: ROTATION

System One is simply a very powerful pivot.

## CAME BE COMBINED WITH DOORFRAMES

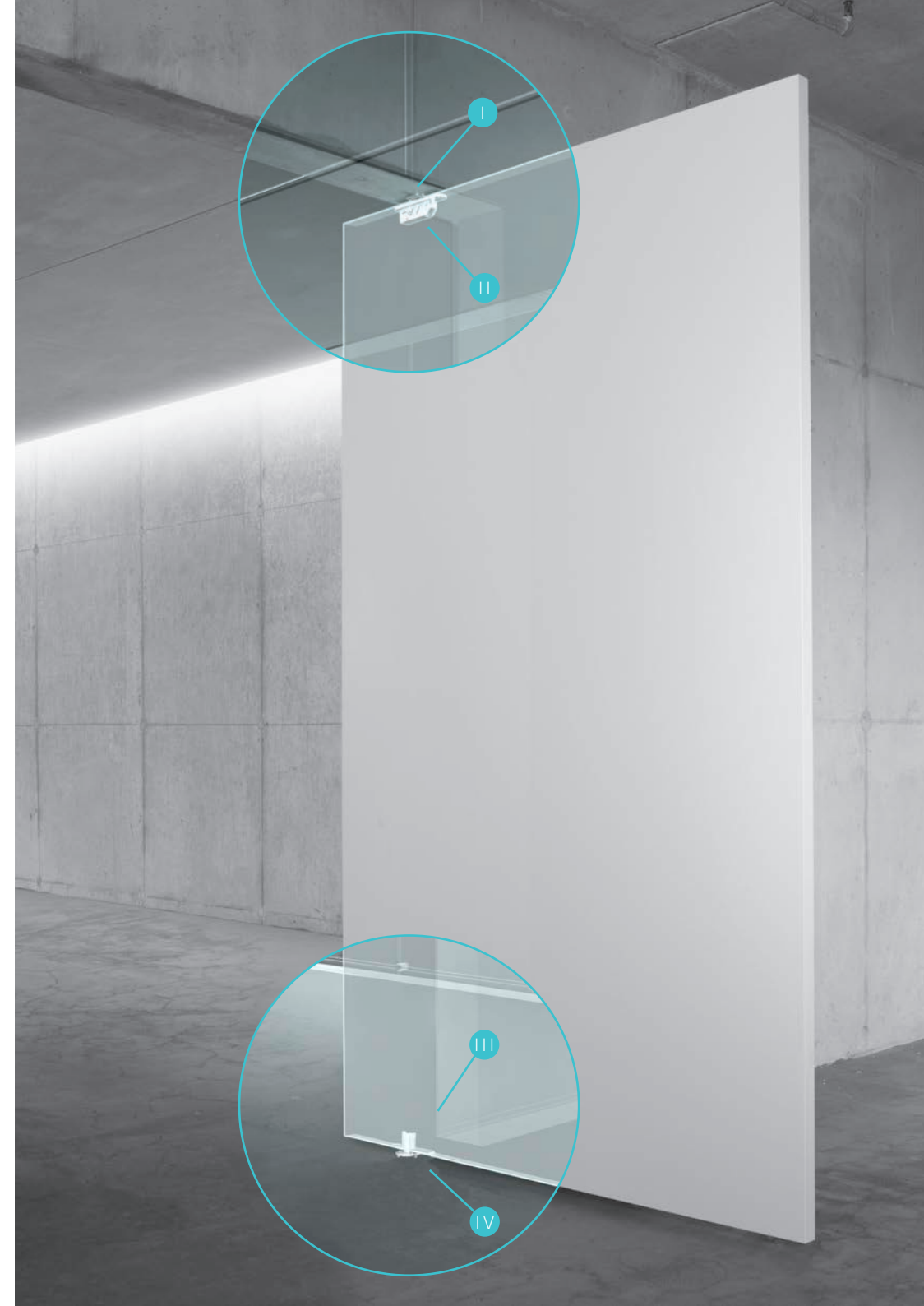
System One is also suitable for doors with door frames.

## NO STRUCTURAL ELEMENTS IN FLOOR AND CEILING

Due to the pivot being fully integrated into the top and bottom of the door; there is no imposing ceiling or traditional unsightly floor plate to distract from a beautifully crafted door and designer environment, the pivot becomes a virtually invisible system.

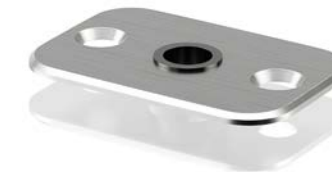
The FritsJurgens pivot door systems design is totally unique, in that there are no structural elements in the floor and the ceiling. As a result of its design, installation is quick and simple, without having to damage or cut blocks out of a concrete floor.

Due to the pivot being fully integrated into the top and bottom of the door; there is no imposing ceiling or traditional unsightly floor plate to distract from a beautifully crafted door and designer environment, the pivot becomes a virtually invisible system.



## SYSTEM ONE COMPONENTS

### I CEILING PLATE



### II TOP PIVOT



### III SYSTEM ONE



### IV FLOOR PLATE





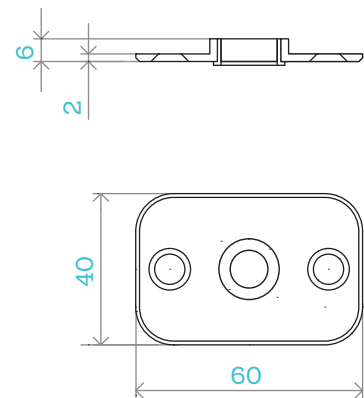


SYSTEM ONE  
TECHNICAL  
DOCUMENTATION

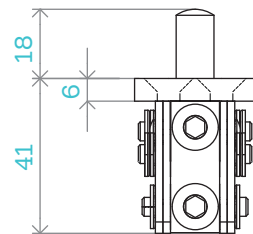
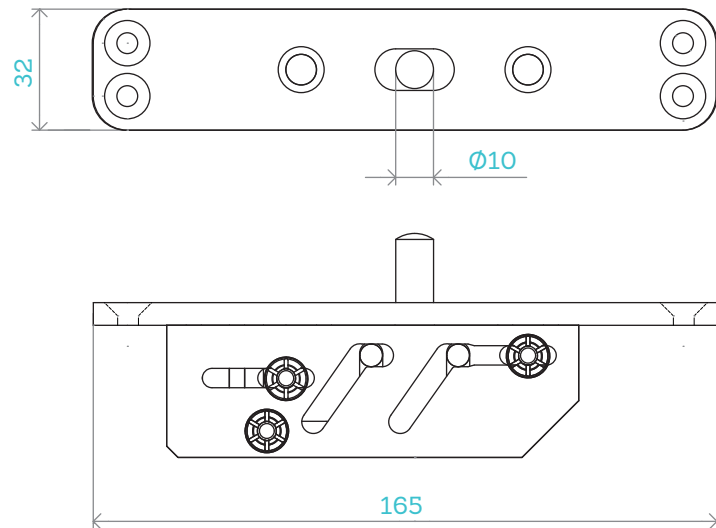
# SYSTEM ONE

## TECHNICAL DRAWINGS

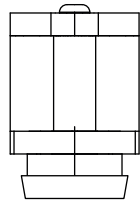
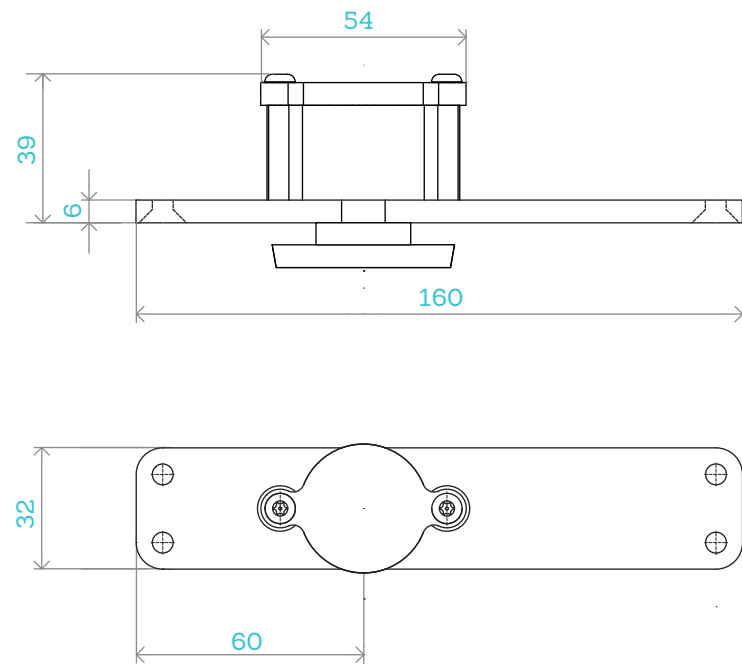
CEILING PLATE



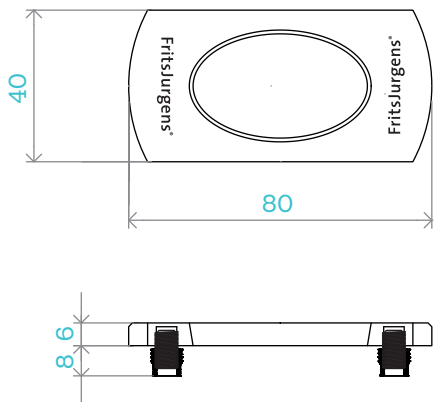
TOP PIVOT



SYSTEM ONE



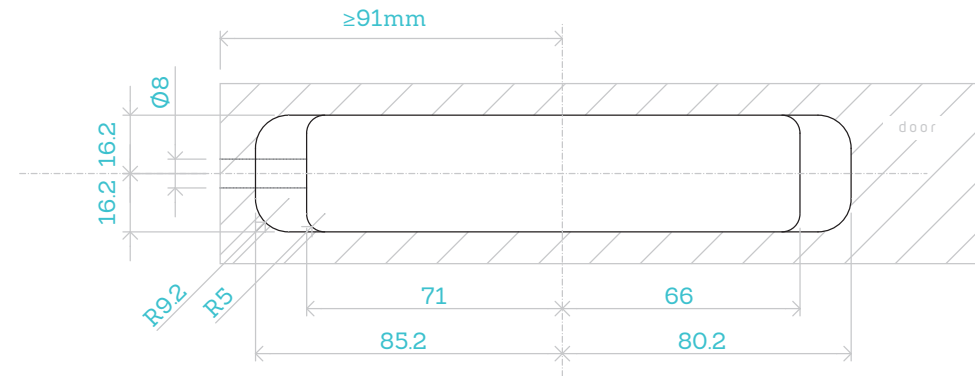
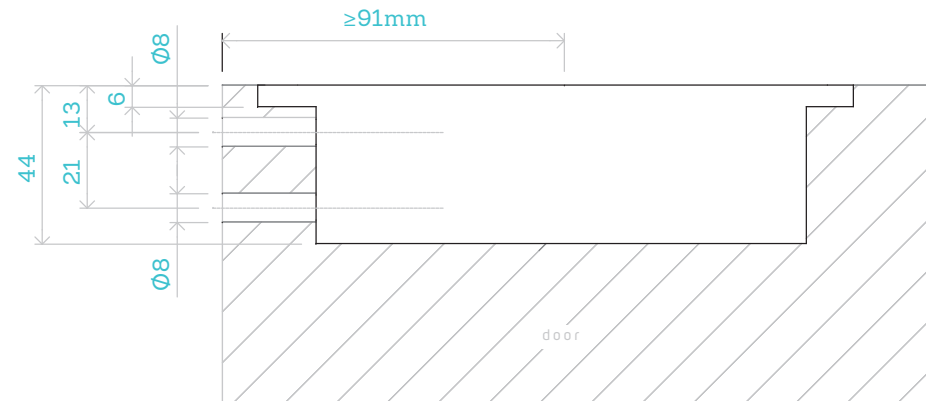
FLOOR PLATE



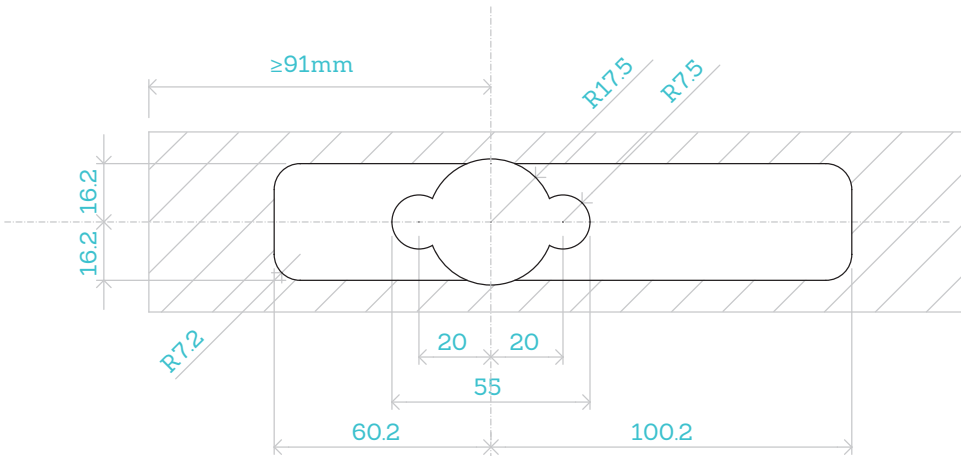
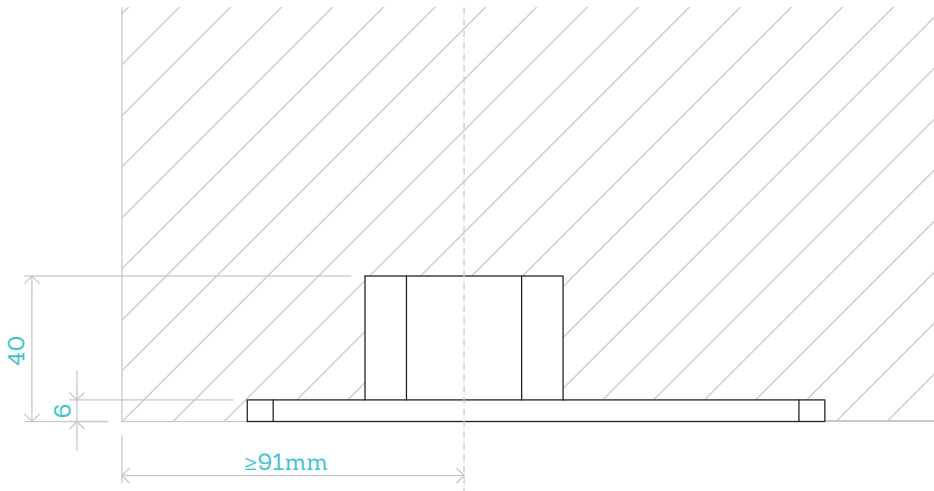


SYSTEM ONE  
MILLING DRAWINGS

TOP PIVOT

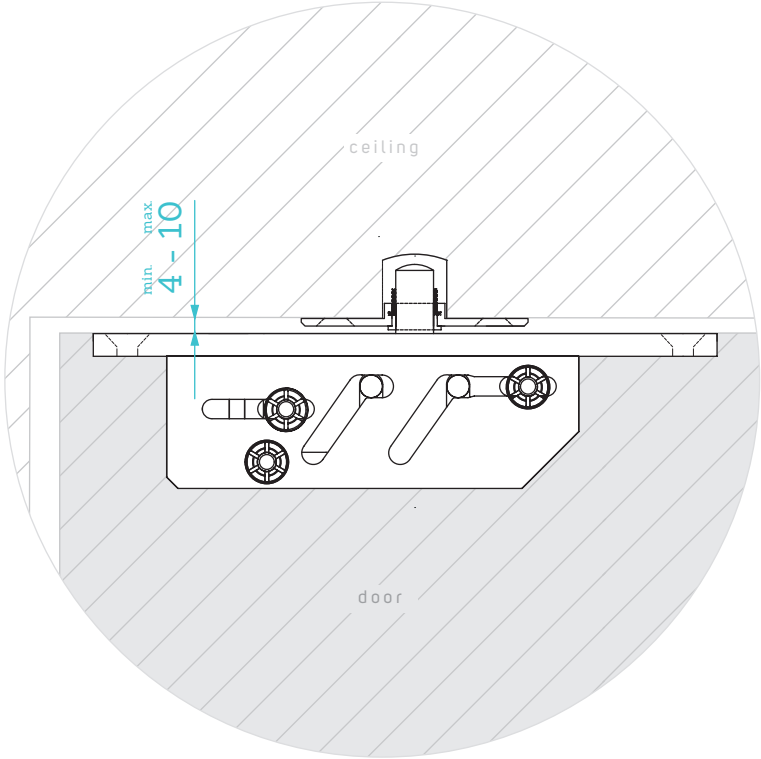


SYSTEM ONE



# SYSTEM ONE DIMENSIONS AROUND THE DOOR

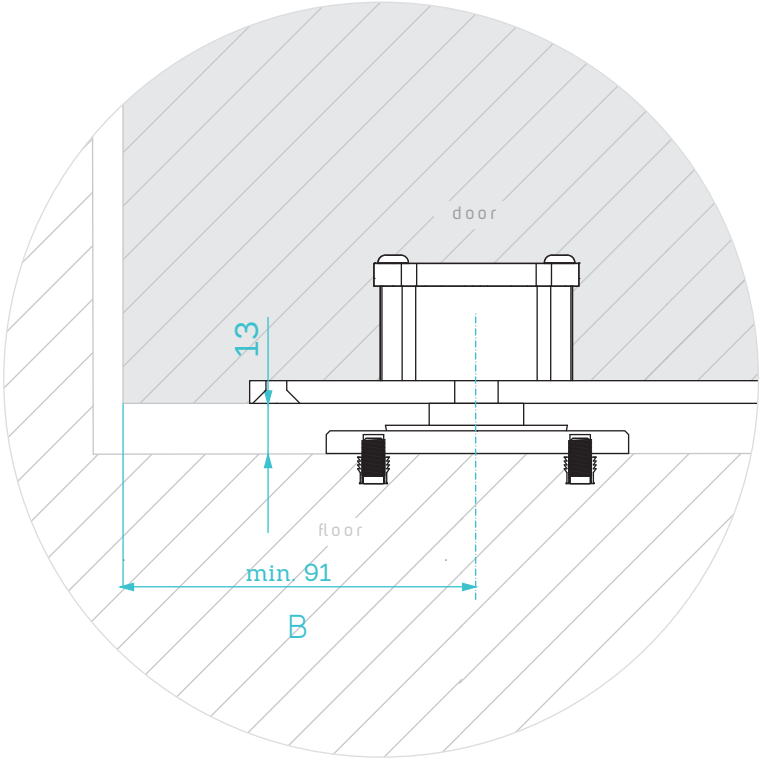
## TOP PIVOT



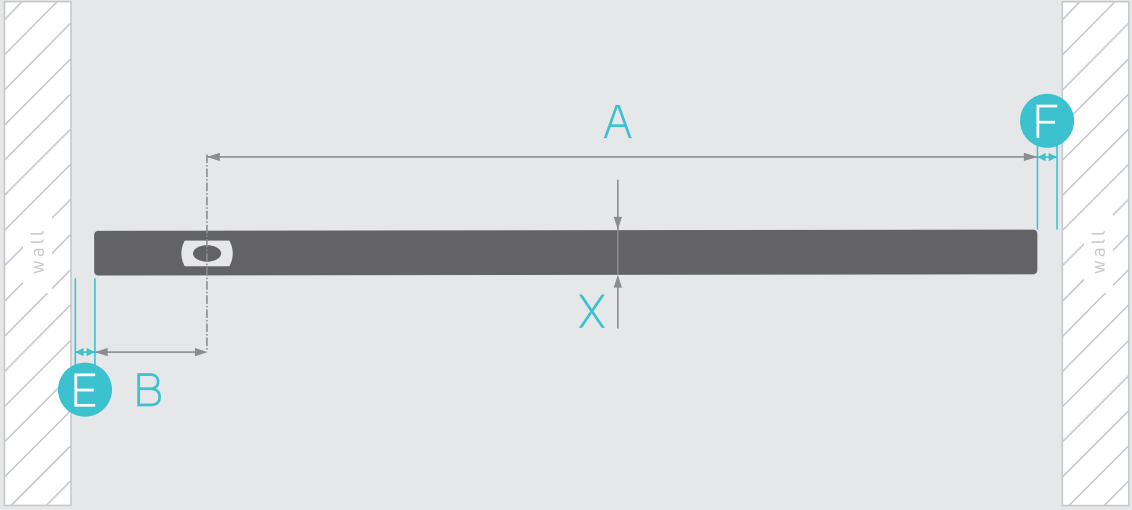
System One is designed to be virtually invisible with hardly any gaps between the door, wall and floor. The minimum installation dimensions are 4mm at the top (ceiling) and 13mm at the bottom (floor).

The minimum vertical dimensions for installation depend on the thickness (X) and width of the door in relation to the positioning of the hinge (A and B). Important: the minimum distance from the pivot point of the hinge to the edge of the door (B) is 91mm.

## SYSTEM ONE



# GAP CALCULATION



## EXAMPLE

X	Door thickness	40
A	Distance of rotation point to latch side of the door	1500
B	Distance pivot point to the start of the door	91
E*	Minimum gap between door and wall	4.2
F*	Minimum gap between door and wall	2.1

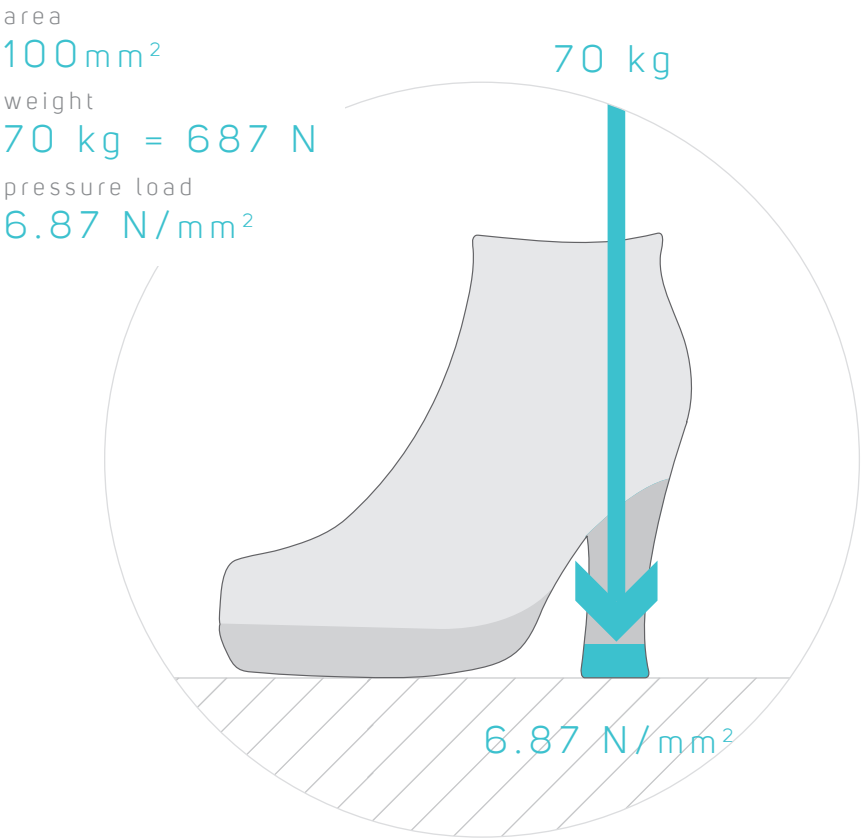
	B	X						
		40	50	60	70	80	90	100
E*	91	4.2	5.4	6.8	8.5	10.4	12.5	14.8
	250	2.8	3.3	3.8	4.4	5.2	6	7
	500	2.4	2.6	2.9	3.2	3.6	4	4.5
	1000	2.2	2.3	2.5	2.6	2.8	3	3.3
	1500	2.1	2.2	2.3	2.4	2.5	2.7	2.8
	2000	2.1	2.2	2.2	2.3	2.4	2.5	2.6

	A	X						
		40	50	60	70	80	90	100
F*	500	2.4	2.6	2.9	3.2	3.6	4	4.5
	1000	2.2	2.3	2.5	2.6	2.8	3	3.3
	1500	2.1	2.2	2.3	2.4	2.5	2.7	2.8
	2000	2.1	2.2	2.2	2.3	2.4	2.5	2.6

\* There is no need to add extra space for installing.  
The outcome for E and F includes a 2mm tolerance.

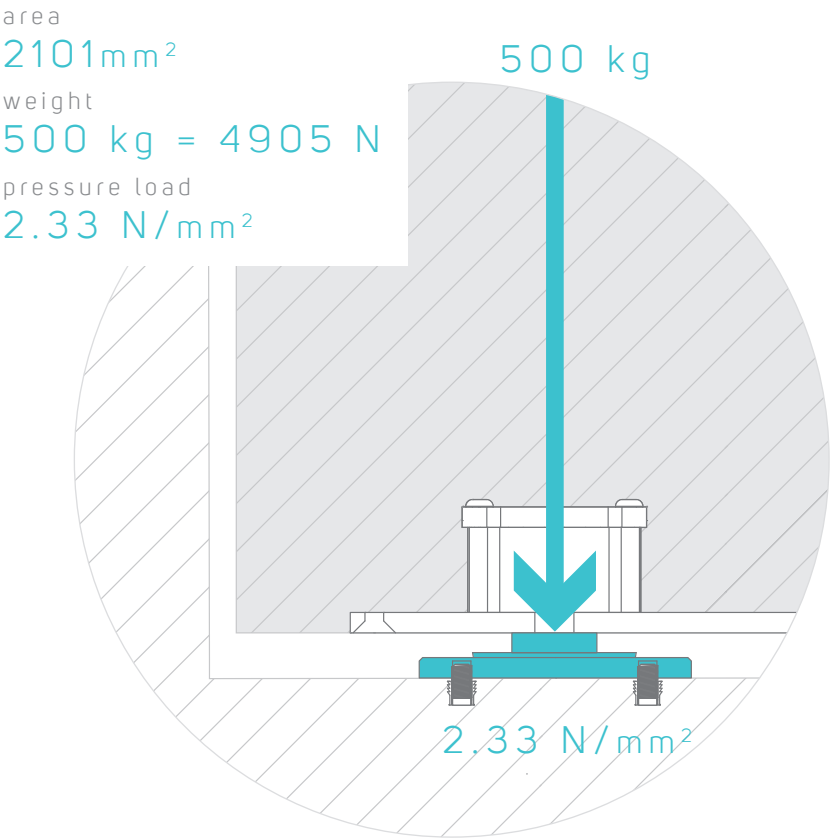


# SYSTEM ONE PRESSURE LOAD



The Fritsjurgens® pivot door is fastened on a floorplate of 40 x 80mm and produces a pressure load (Fw) of 2.33 N/mm² with a door of 500 kg.

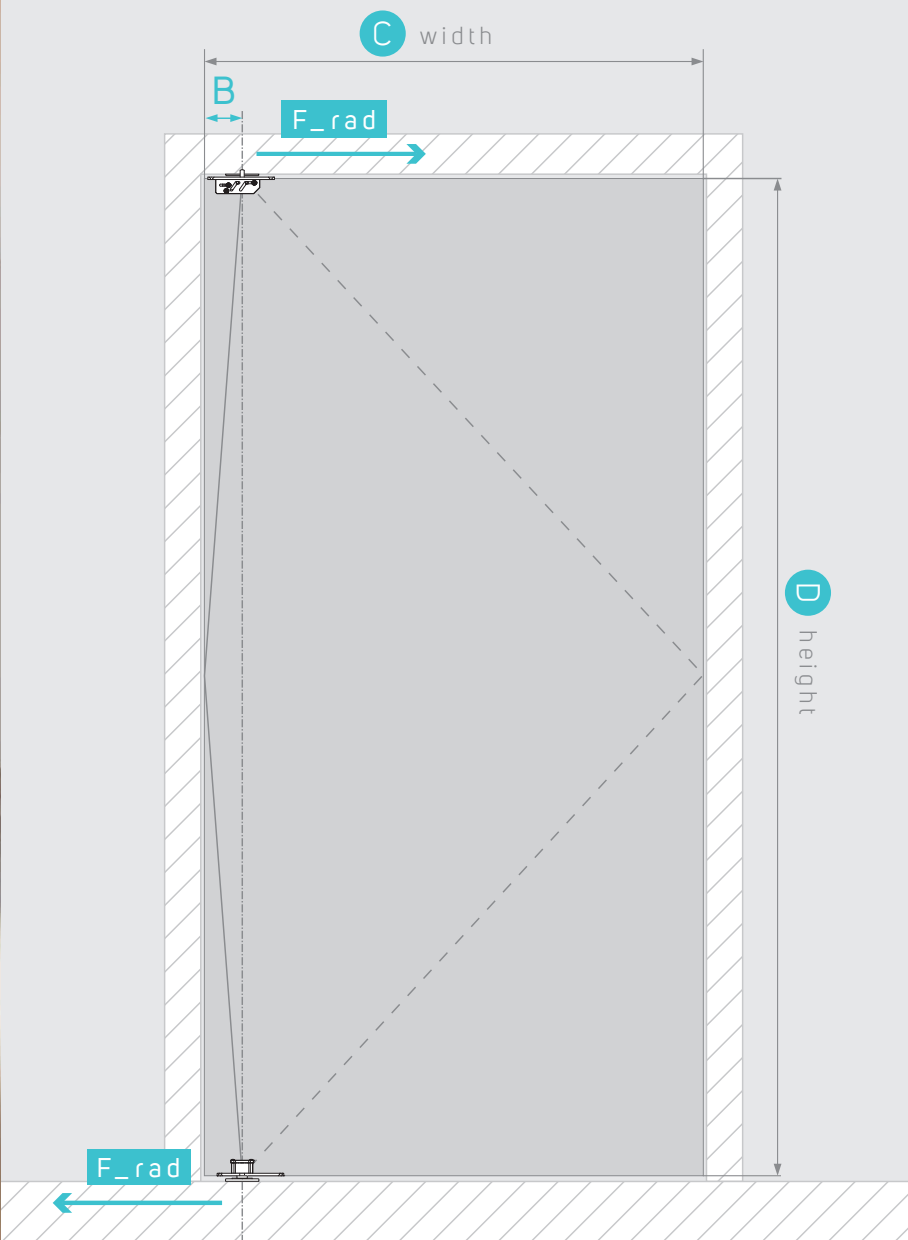
As a reference: a woman of circa 70 kg wearing high heels produces a pressure load (Fw) of 6.87 N/mm². For application on your floor we refer to the specifications of the floor manufacturer.







# LATERAL FORCE



$B = 91\text{ mm}$

**C** width (mm)

weight door: 500 kg

height (mm)							
	500	750	1000	1250	1500	1750	2000
2000	390 N	697 N	1003 N	1310 N	1616 N	1923 N	2229 N
2100	371 N	663 N	955 N	1247 N	1539 N	1831 N	2123 N
2200	355 N	633 N	912 N	1191 N	1469 N	1748 N	2027 N
2300	339 N	606 N	872 N	1139 N	1405 N	1672 N	1939 N
2400	325 N	580 N	836 N	1091 N	1347 N	1602 N	1858 N
2500	312 N	557 N	803 N	1048 N	1293 N	1538 N	1784 N
2600	300 N	536 N	772 N	1007 N	1243 N	1479 N	1715 N
2700	289 N	516 N	743 N	970 N	1197 N	1424 N	1651 N
2800	279 N	498 N	717 N	936 N	1154 N	1373 N	1592 N
2900	269 N	480 N	692 N	903 N	1115 N	1326 N	1538 N
3000	260 N	464 N	669 N	873 N	1078 N	1282 N	1486 N

$B = 1/2$  width door

At 1/2 door width  $F_{rad}$  has 0 N in all situations of height  $D$  - width  $C$ . The door is completely balanced because System One is placed in the middle. As a result, there is no extra lateral force on the floor and ceiling.

$9.8\text{ N} = 1\text{ kg}$

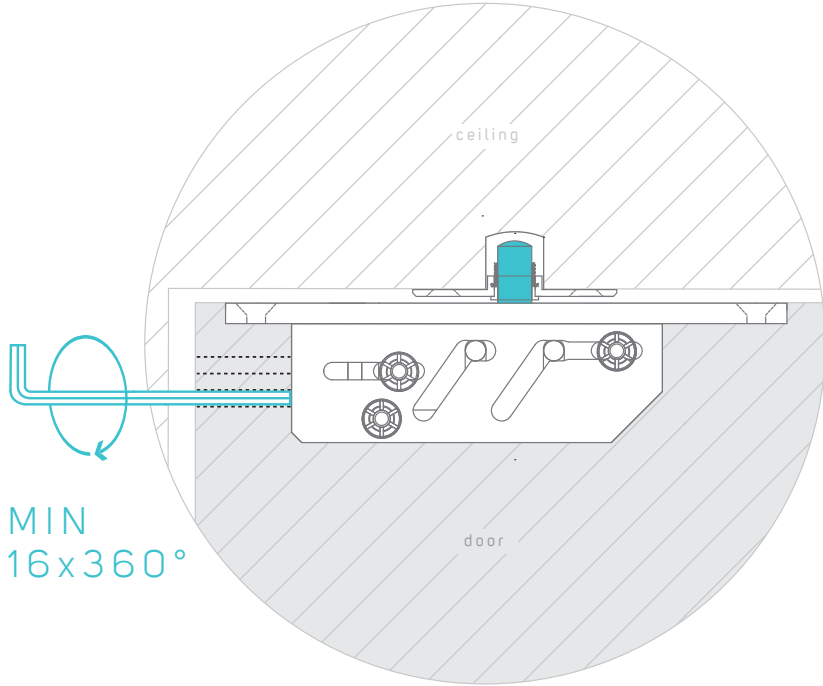


SYSTEM ONE  
SETTING  
TOP PIVOT

MOUNTING TOP PIVOT

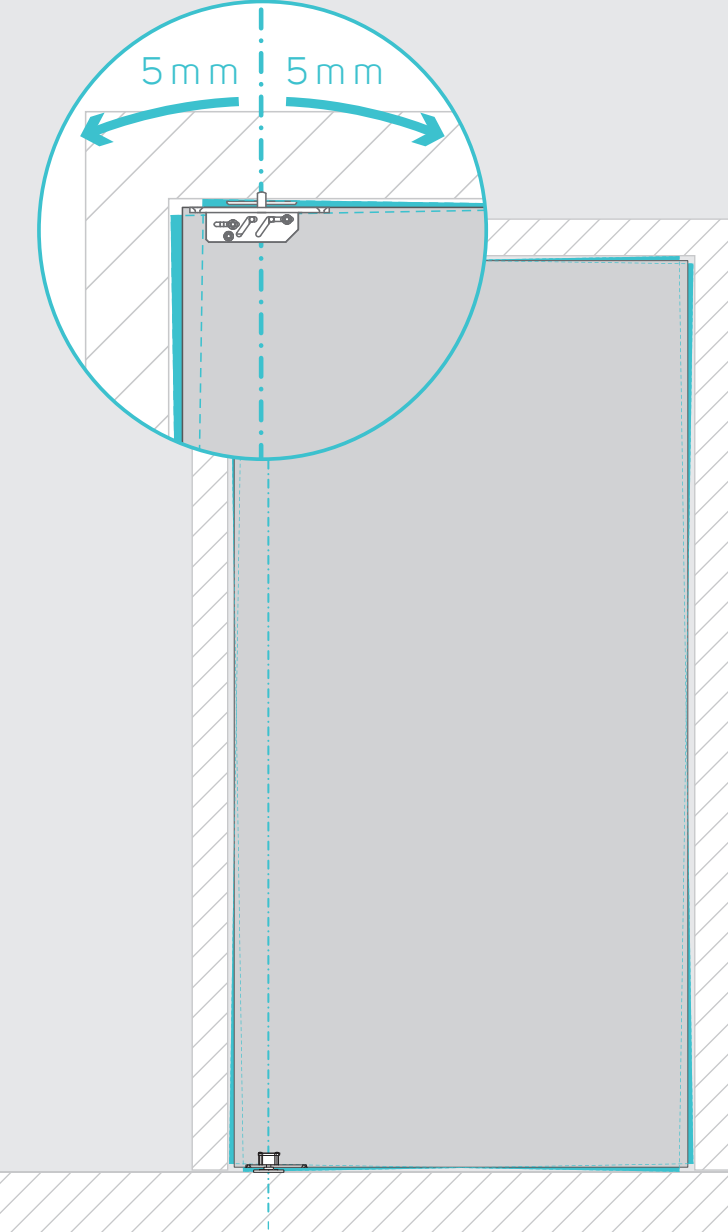
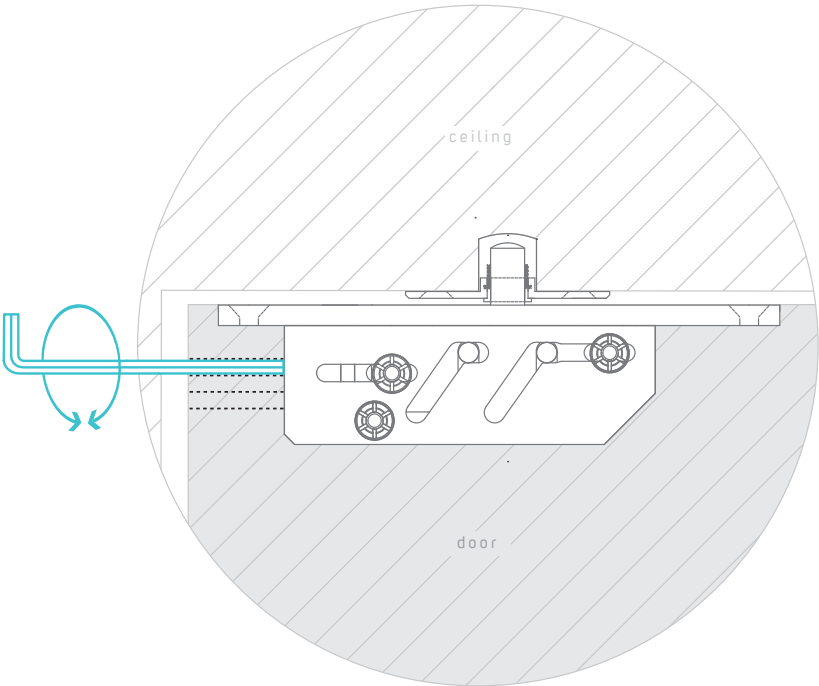
The top pivot can be engaged simply by inserting the 5mm hex key supplied into the bottom hole and twist.  
Turn to the right: raise the pivot.  
Turn to the left: lower the pivot.

Important: to ensure that the door is secured properly, a minimum of 16 rotations of 360° are required.



SETTING  
THE GAP

The closing seam can be adjusted simply by inserting the 5mm hex key supplied into the top hole and twist.



# FRITSJURGENS® SYSTEMS FEATURES

FritsJurgens provide pivot systems for multiple applications, all of which live in the door, not the floor. Depending on your door’s movement requirements, you can select a pivot system where the door stands parallel or perpendicular to the wall, a doors that revolve 180° or 360°, a soft-closing door, doors with or without hold open positions including many other options.

Please contact us on Ph: +61 3 9571 5666 or e-mail: [info@bellevuearch.com.au](mailto:info@bellevuearch.com.au) if you need assistance in choosing the correct FritsJurgens pivot system for your requirements.

## FRITSJURGENS® SYSTEMS

- No structural elements in the floor or ceiling
- Quick and simple to install
- Maintenance-free
- For new and existing environments
- Easily adjustable with the door in place

## FRITSJURGENS® APPLICATION AREAS

- Timber, steel, massive and aluminium doors
- Massive cladded custom doors
- Steel and timber framed glass doors
- Single and double action doors
- Internal and external doors
- Commercial and residential



SYSTEM ONE



SYSTEM 3



SYSTEM M

Rotation	360°	360°	-125° to 125°
System dimensions	160 x 34 x 39 mm	160 x 34 x 143 mm	294,8 x 32 x 99,6 mm
System weight	0,335 kg	0,75 kg	2,6 kg
Hold positions at every 90°	✗	✓	✗
Hold positions at 90° and -90°	✗	✗	✓
Self-opening	✗	✓	✗
Self-closing	✗	✓	✓
Adjustable closing damping (soft-close)	✗	✗	✓
Adjustable hydraulic backcheck	✗	✗	✓
Suitable for single action doors	✓	✗	✓
Suitable for double action doors	✓	✓	✓
Minimal number of movements tested	1.000.000	1.000.000	1.000.000
Minimum door thickness	40mm	40mm	40mm
Load-bearing capacity (up to)	500 kg	500 kg	500 kg
Maximum weight at latch force	NA	350 kg (See the datasheet of System 3)	300 kg (See the datasheet of System M)



# BELLEVUE

ARCHITECTURAL

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# FritsJurgens®

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