



FritsJurgens®  
SYSTEM M

# FritsJurgens<sup>®</sup>

## SYSTEM M

### Absolute Control

System M offers you absolute control over the movement of your pivot door. With just the touch of a finger, the pivot door is set into a single fluid motion. Opening the door is effortless and controlled, the movement elegant and the closing as soft as a whisper.

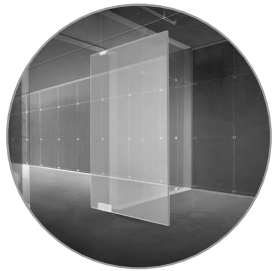
### Hidden in the door

Like all FritsJurgens pivot hinges, System M is fully integrated in the door. Only small floor and ceiling plates are visible. All the attention goes where it is supposed to go: the design of the pivot door and its surroundings.

### Timeless Quality

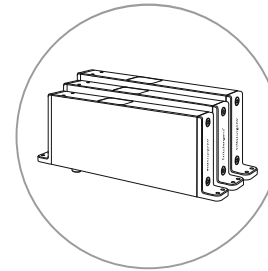
System M is virtually indestructible. Built from high-performance materials, the System is maintenance-free. Even the most extreme conditions do not affect the quality. Our rigorous testing shows that even after 1 million cycles, the equivalent of 136 years of daily use, System M continues to perform as it was designed. A perfect balance between technology, quality and aesthetics.

# FRITSJURGENS SYSTEM M



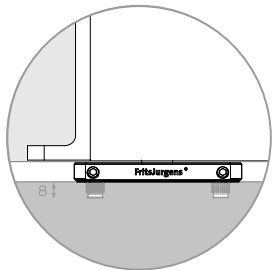
## HIDDEN IN THE DOOR

The pivot hinge system is fully mortised into the top and bottom of the door.



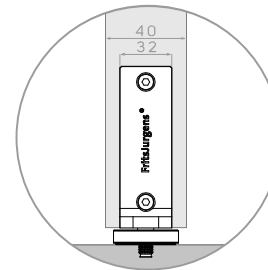
## MODEL SELECTOR

System M can support light and heavy pivot doors thanks to high performance and corrosion resistant materials. Find out which model suits your pivot door.



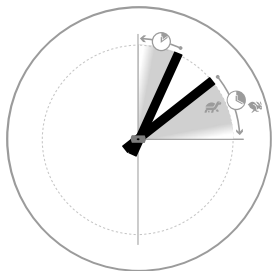
## 8 MM IN THE FLOOR

The floor plate fasteners only need to be mortised 8 mm in the floor, which means System M can be applied on virtually any surface in combination with floor heating.



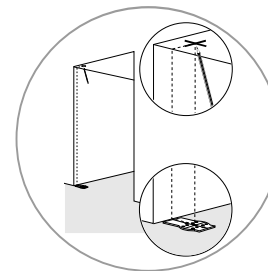
## MINIMUM DOOR THICKNESS OF 40 MM

System M is suitable for almost every door width and barely any space is needed around the door.



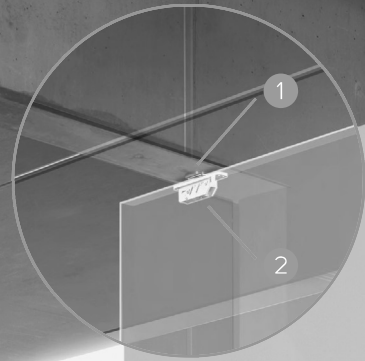
## ABSOLUTE CONTROL

System M has hold positions, is self-closing and is adjustable. Discover what this can do for your door.



## SMART INSTALLATION

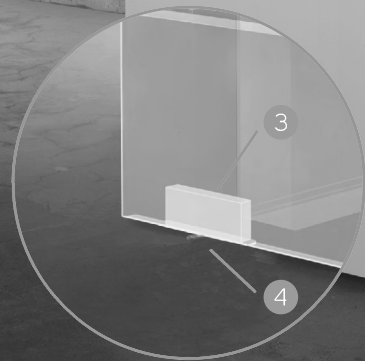
A pivot door with System M inside is easy to install. First, the floor and ceiling plates are mounted. Then the pivot door can easily be placed. Finally, you can fine-tune the door to create the movement you desire. Find out how.



## SYSTEM M HIDDEN IN THE DOOR

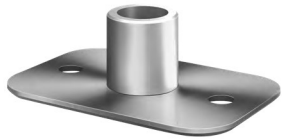
The pivot hinge systems by FritsJurgens are unique because there are no structural elements necessary in the floor and the ceiling. The pivot door hinges are fully-mortised in the top and bottom of the door. Only surface-mounted floor and ceiling plates need to be installed. It is a virtually invisible system.

[MORE INFORMATION](#)



# SYSTEM M COMPONENTS

1 CEILING PLATE



2 TOP PIVOT

TECHNICAL DRAWINGS

3 SYSTEM M

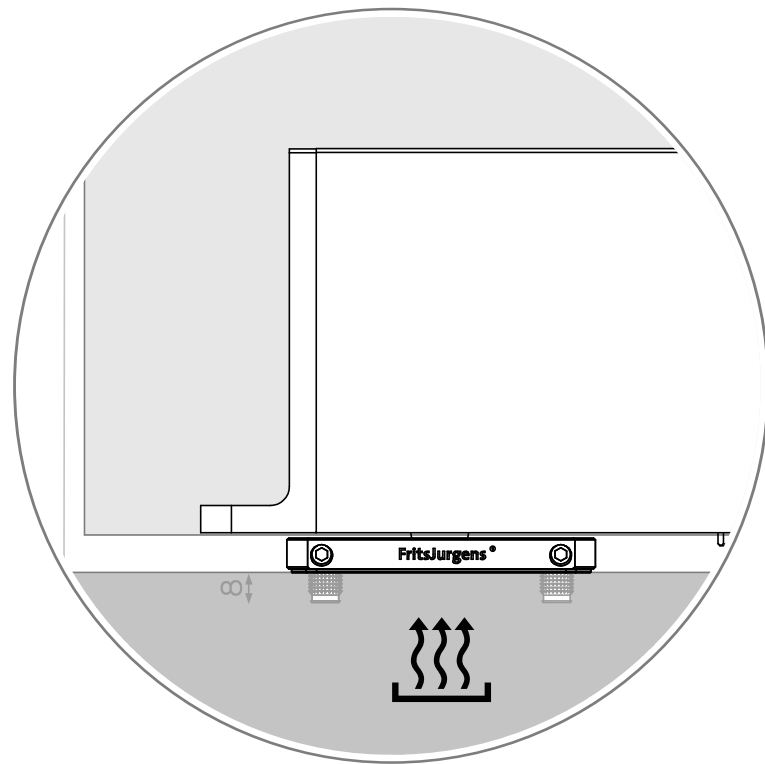


4 FLOOR PLATE

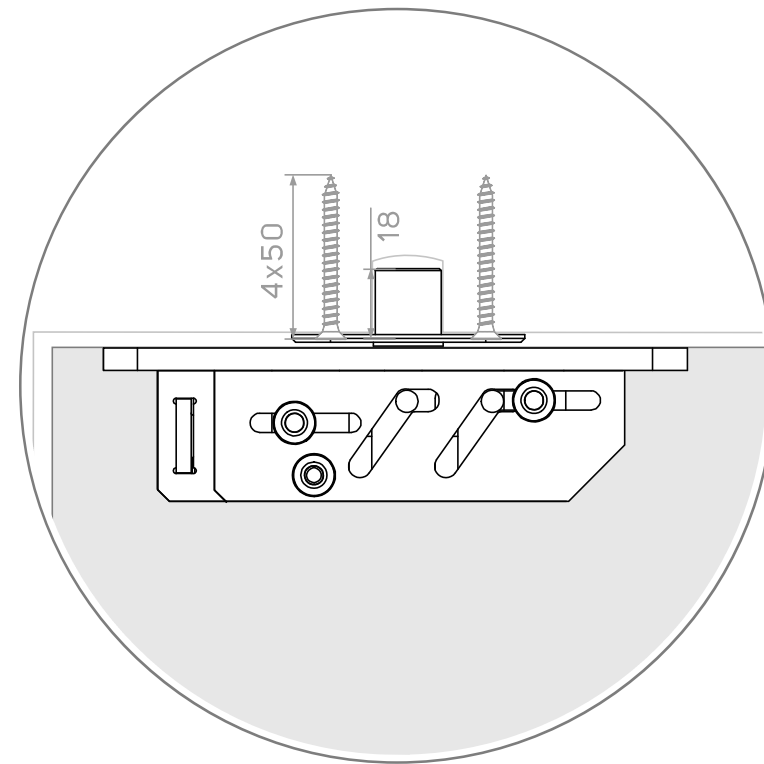
# SYSTEM M 8 MM IN THE FLOOR

The System M top and bottom pivots are fully-mortised into the top and bottom of the pivot door. Only small floor and ceiling plates are visible. The floor plate fasteners only need to be mortised 8 mm into the floor, which means System M can also be applied in combination with floor heating.

## SYSTEM M



## TOP PIVOT

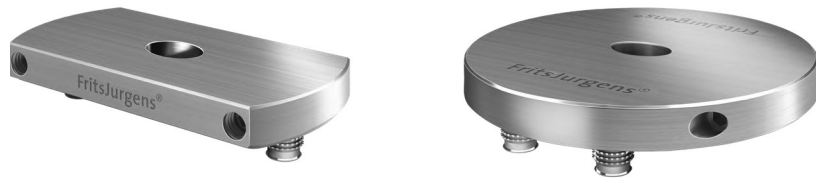


# SYSTEM M DESIGN OPTIONS

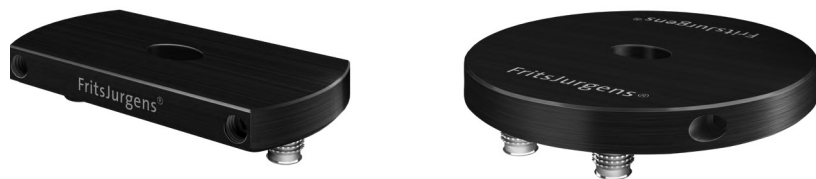
## FLOOR PLATE

The floor plate is available in two finishes and shapes: brushed stainless steel and black and can be obtained in a round and a rectangular version. The floorplates by FritsJurgens are made of solid tempered steel (Series 420) and therefore fully scratch resistant.

### STAINLESS STEEL



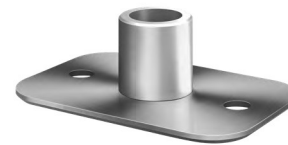
### BLACK



## CEILING PLATE

The ceiling plate is available in brushed stainless steel and black as well and can be obtained in the rectangular version only.

### STAINLESS STEEL



### BLACK



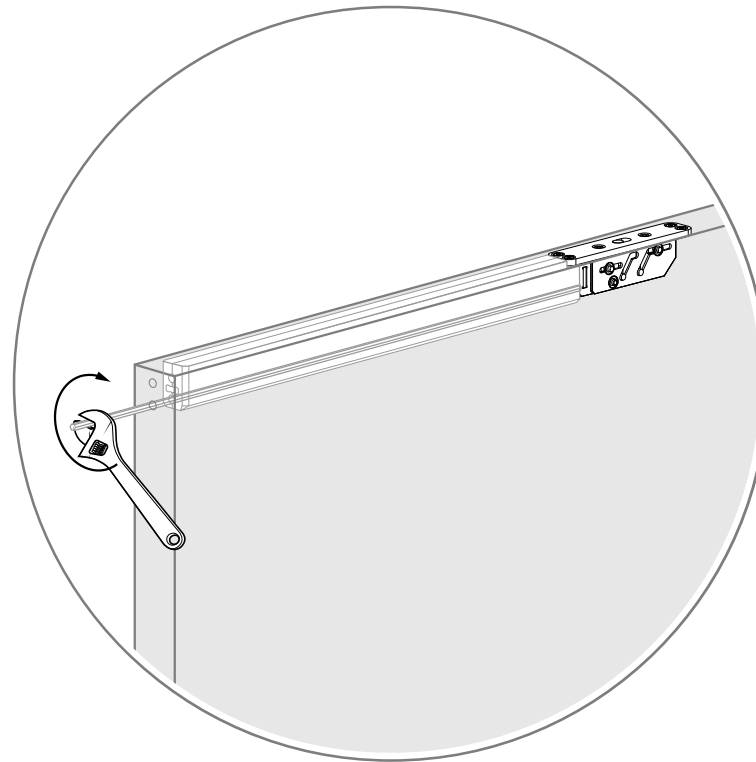
# SYSTEM M

## CHOOSE YOUR PIVOT POINT

The minimum distance from the pivot point to the edge of the door is 91 mm. The maximum distance would be in the middle of the door width. In case the pivot point is more than 280 mm from the edge of the door we offer the Hexagon Guide to ease the installation.



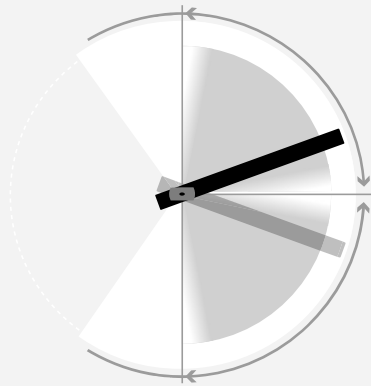
## HEXAGON GUIDE



HEXAGON GUIDE

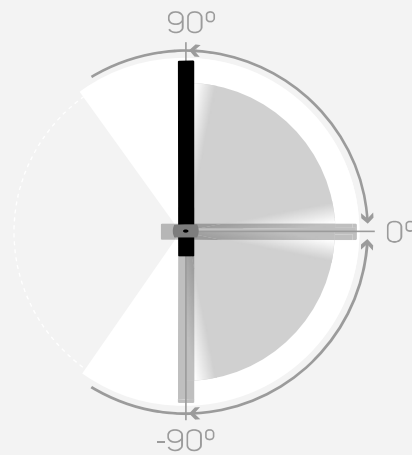


# SYSTEM M ABSOLUTE CONTROL



## DOUBLE-AND SINGLE ACTING

System M is suitable for double- and single-acting pivot doors.



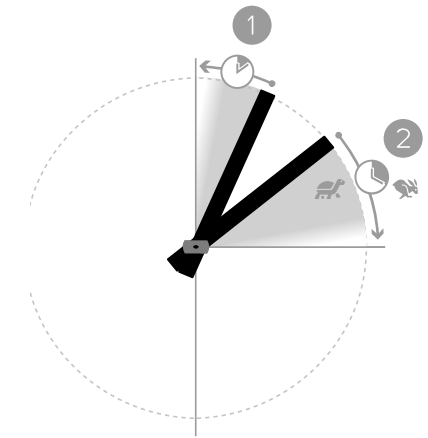
## HOLD POSITIONS

The door can be placed in hold positions at  $90^\circ$ ,  $-90^\circ$  and  $0^\circ$ .



## SELF-CLOSING

The door automatically moves towards the  $0^\circ$  position after being opened.



## ADJUSTABLE MOVEMENT

The hydraulic backcheck (1) and the closing speed (2) of the door can be adjusted. The hydraulic backcheck in System M ensures the pivot door encounters increasing resistance beginning at  $70^\circ$  to help prevent the door damaging the wall when opened.

MORE INFORMATION

# SYSTEM M MODEL SELECTOR

To ensure the pivot hinge provides the appropriate movement for your door, System M is available in six models suited to the weight and width of the door. There are no limits to the height of the door. System M is suitable for both light and heavy pivot doors covering a range between 20 and 350 kg.

Does your pivot door have other measurements than shown here? Please do not hesitate to contact us. FritsJurgens has an on-site testing facility which enables us to determine whether our systems are suitable for your specific situation.

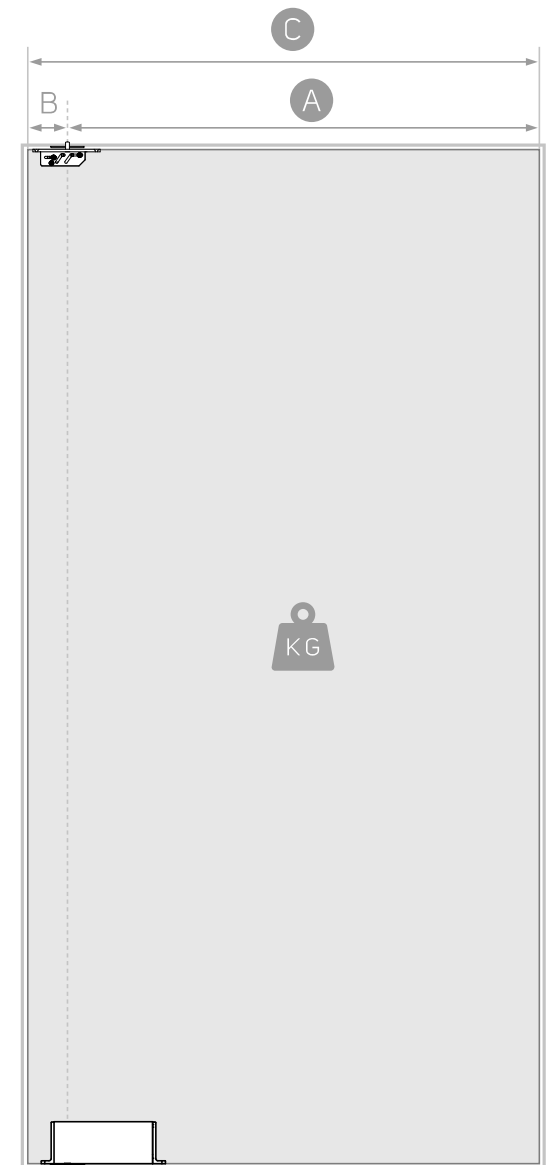
ONLINE SELECTOR

## EXAMPLE

Specifications door: width 1600 mm, height 3200 mm, weight 165 kg.

The distance between the pivot point of the hinge and the side of the door is 91 mm.

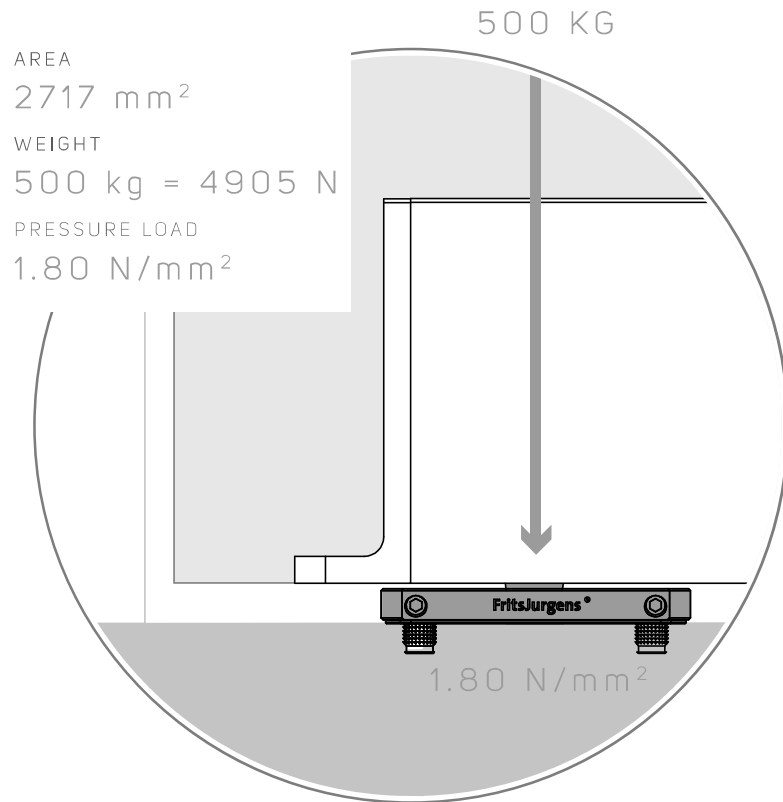
|   |   |         |
|---|---|---------|
| 1 | Determine the distance of pivot point to the latch side of the door (C minus B) | 1509 MM |
| 2 | Check the door width (C)  | 1600 MM |
| 3 | Fill in the weight (KG)   | 165 KG  |
| ! | The following system suits this door:   | SCD     |



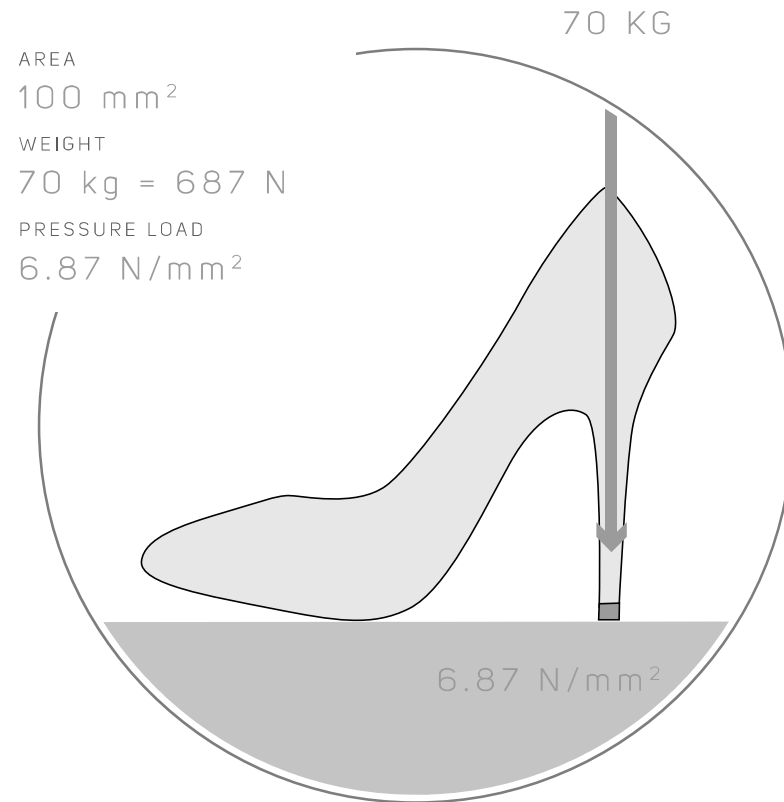


# SYSTEM M PRESSURE LOAD

The FritsJurgens pivot door stands on a floorplate of 40 x 80 mm and produces a pressure load (Fw) of 1.80 N/mm<sup>2</sup> with a door of 500 kg. For application on your floor we refer to the specifications of the floor manufacturer.



As a reference: a woman of circa 70 kg wearing high heels produces a pressure load (Fw) of 6.87 N/mm<sup>2</sup>.



# SYSTEM M LATERAL FORCE

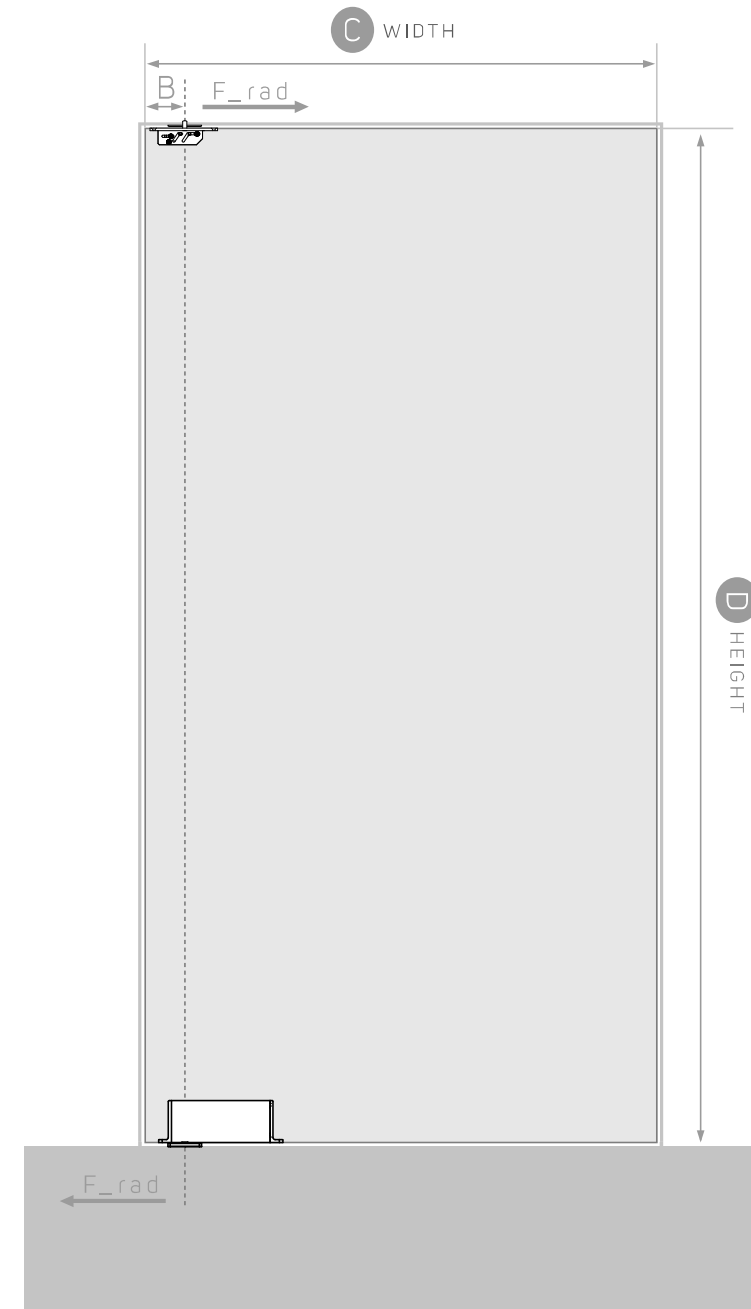
See the table below for examples. For more information, please contact FritsJurgens.

EXAMPLE: B=91 MM, WEIGHT DOOR 500 KG

|          |       | C WIDTH (MM) |       |        |        |        |        |        |
|----------|-------|--------------|-------|--------|--------|--------|--------|--------|
|          |       | 500          | 750   | 1000   | 1250   | 1500   | 1750   | 2000   |
| D HEIGHT | 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 |        |

EXAMPLE: B=1/5 WIDTH DOOR, WEIGHT DOOR 500 KG

|          |       | C WIDTH (MM) |       |       |       |        |        |        |
|----------|-------|--------------|-------|-------|-------|--------|--------|--------|
|          |       | 500          | 750   | 1000  | 1250  | 1500   | 1750   | 2000   |
| D HEIGHT | 2000  | 368 N        | 552 N | 736 N | 920 N | 1104 N | 1288 N | 1472 N |
|          | 2100  | 350 N        | 526 N | 701 N | 876 N | 1051 N | 1226 N | 1401 N |
|          | 2200  | 334 N        | 502 N | 669 N | 836 N | 1003 N | 1171 N | 1338 N |
|          | 2300  | 320 N        | 480 N | 640 N | 800 N | 960 N  | 1120 N | 1280 N |
|          | 2400  | 307 N        | 460 N | 613 N | 766 N | 920 N  | 1030 N | 1226 N |
|          | 2500  | 294 N        | 442 N | 589 N | 736 N | 883 N  | 1030 N | 1177 N |
|          | 2600  | 283 N        | 425 N | 566 N | 708 N | 849 N  | 990 N  | 1132 N |
|          | 2700  | 273 N        | 409 N | 545 N | 681 N | 818 N  | 954 N  | 1090 N |
|          | 2800  | 263 N        | 394 N | 526 N | 657 N | 788 N  | 920 N  | 1051 N |
|          | 2900  | 254 N        | 381 N | 507 N | 634 N | 761 N  | 888 N  | 1015 N |
| 3000     | 245 N | 368 N        | 491 N | 613 N | 736 N | 858 N  | 981 N  |        |

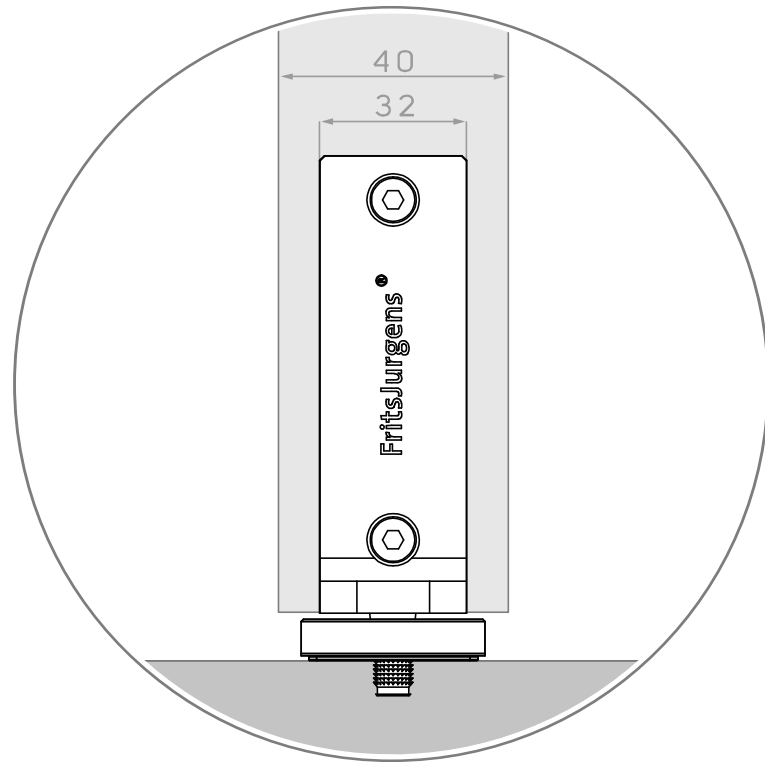


## SYSTEM M

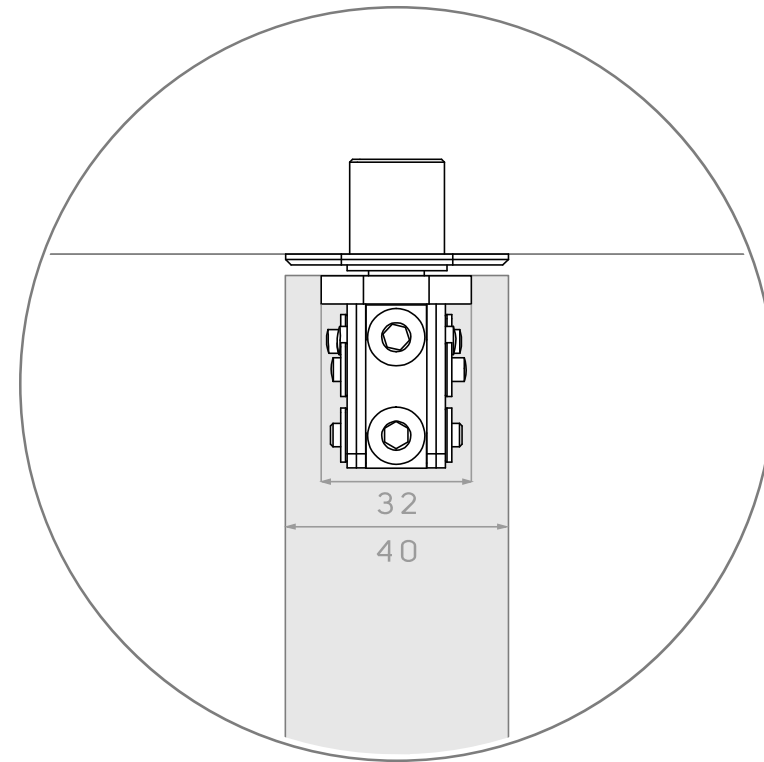
# MINIMUM DOOR THICKNESS OF 40 MM

Since System M is 32 mm thick, the minimum thickness of the door is only 40 mm. This makes System M suitable for doors in a wide range of size and weight giving designers a lot of freedom to design the ultimate pivot door.

## SYSTEM M



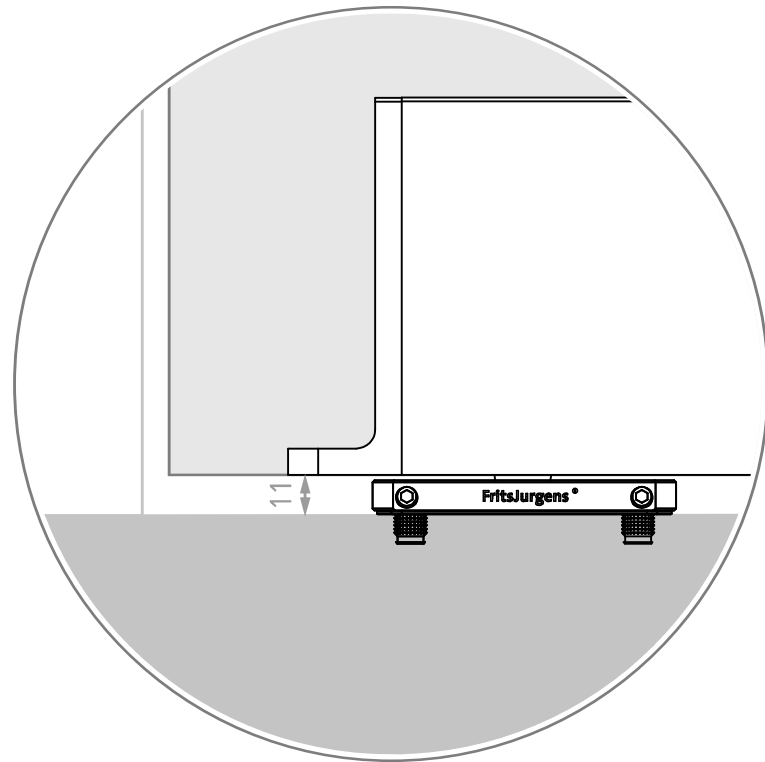
## TOP PIVOT



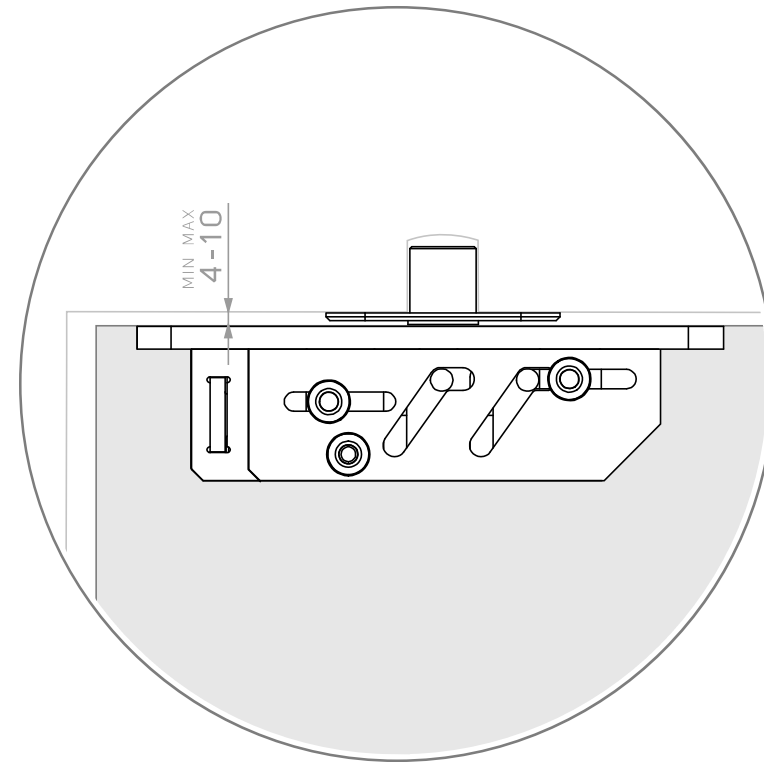
# SYSTEM M GAPS AROUND THE DOOR

System M makes it possible to design doors that are virtually invisible. The pivot hinge allows for minimum gaps between the door and the wall or jamb. The gaps once installed is 4 to 10 mm at the ceiling and a 11 mm undercut.

## SYSTEM M



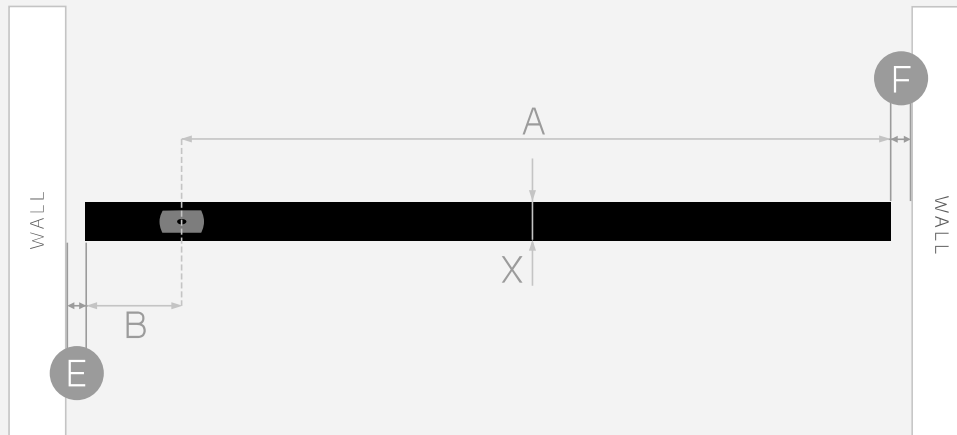
## TOP PIVOT



# GAP CALCULATION

ONLINE CALCULATION

The minimum vertical gap dimensions for the installed pivot door 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 91 mm.



## EXAMPLE

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

\* The dimensions are indicative. No rights can be derived from it.

| E*   | B | X   |     |     |     |      |      |      |
|------|---|-----|-----|-----|-----|------|------|------|
|      |   | 40  | 50  | 60  | 70  | 80   | 90   | 100  |
| 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  |

| F*   | A | X   |     |     |     |     |     |     |
|------|---|-----|-----|-----|-----|-----|-----|-----|
|      |   | 40  | 50  | 60  | 70  | 80  | 90  | 100 |
| 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 calculations for E and F includes a 2 mm tolerance.

All dimensions in mm.

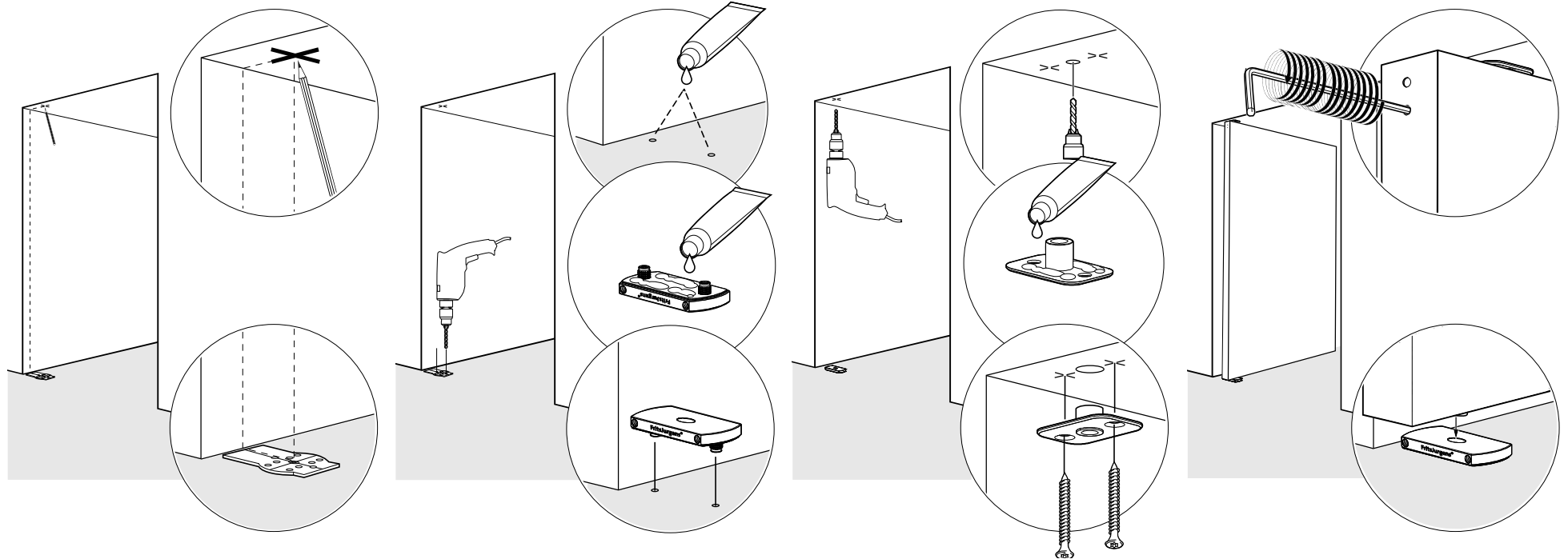


# SYSTEM M SMART INSTALLATION

MOUNTING MANUAL

DWG

A pivot door with System M inside is easy to install. First, the floor and ceiling plate are mounted. Then the pivot door can easily be set and lifted into place. Finally, you can fine-tune the door by adjusting the movement of the pivot door and the gaps surrounding it. Create your perfect pivot door.



1. Measuring the door

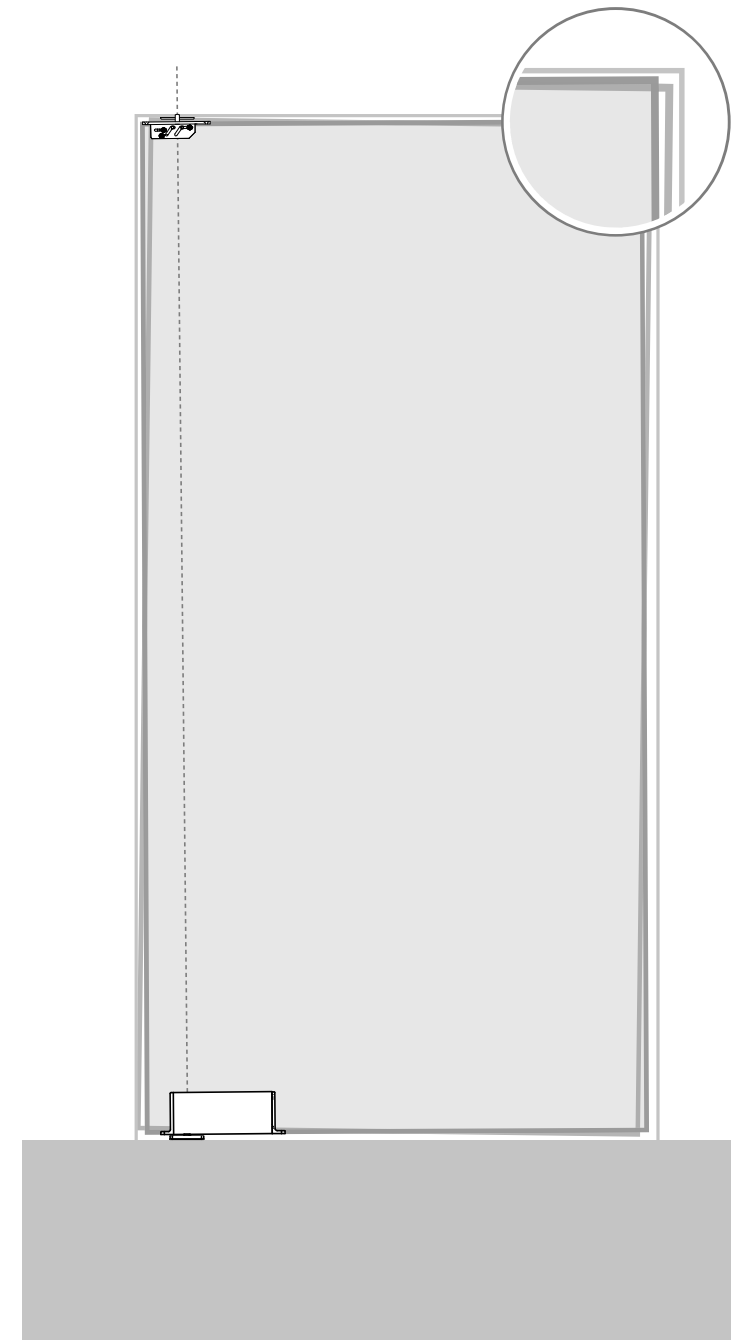
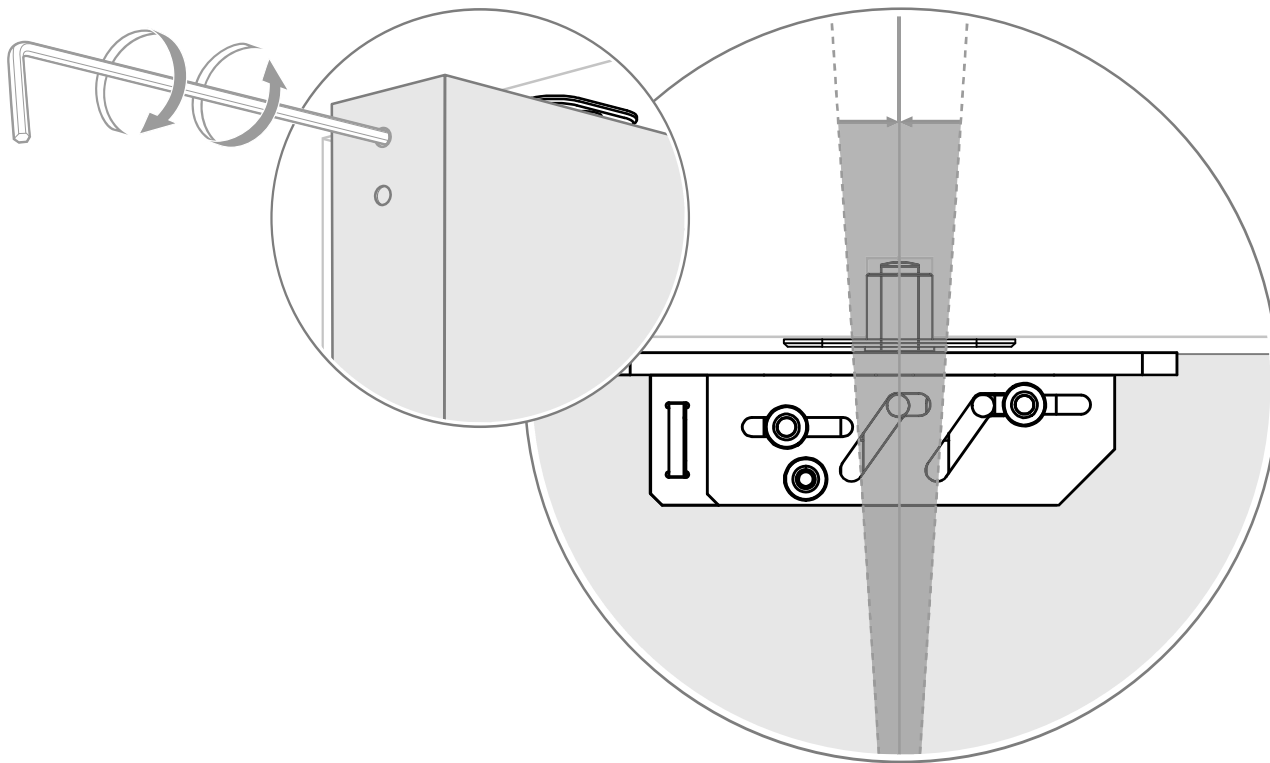
2. Mount the floorplate

3. Mount the ceiling plate

4. Mount the door

# TOP PIVOT FINE-TUNE YOUR DOOR

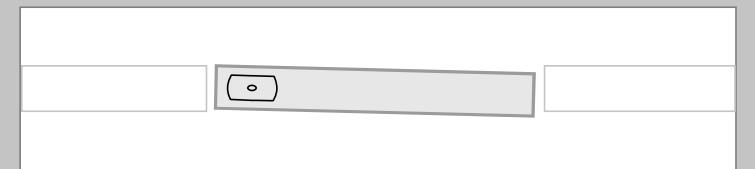
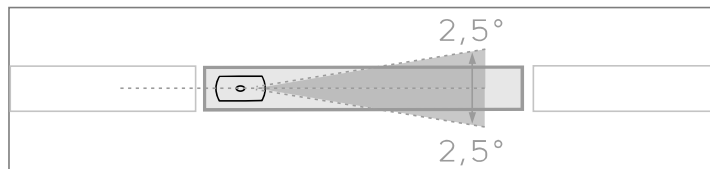
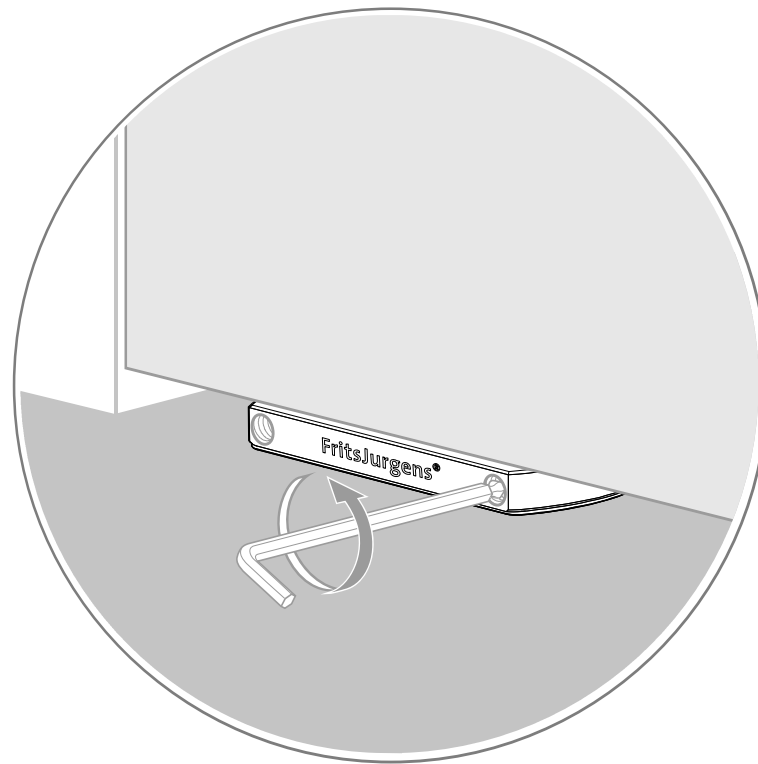
The gaps around the door can be adjusted using a M5 hex key (included) in the top screw of the top pivot.



## SYSTEM M



# ADJUSTING RADIAL POSITION

Adjust the angle of the door using a 3 mm hex key (included). Important: all 4 screws need to be loosened before setting the zero (radial) position of the door. Don't forget to tighten them again after adjusting.



# SYSTEM M CONTROLLED MOVEMENT

The hydraulic backcheck (1) and the closing speed (2) can be adjusted together using the key included with System M. The hydraulic backcheck in System M ensures that a pivot door encounters increasing resistance beginning at 70° to help prevent the door damaging the wall when opened.

-  By decreasing the damping, the speed of the door will be faster.
-  By increasing the damping, the speed of the door will be slower.

