ATHALIUM

Elevating Spaces with Italian Precision

DOORS

CB SYSTEMS
sistemi per porte e arredamento

PIVOT DOOR

TABLE OF CONTENT

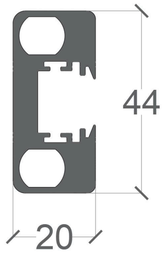
INTRODUCTION

The pivot door system is based on a hydraulic pivot hinge that ensures smooth, controlled movement and reliable performance. The system supports a range of door widths and heights, providing flexibility for different design and spatial requirements.

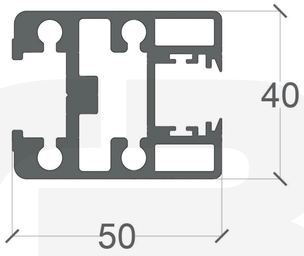
This catalogue presents the system configuration, including installation principles, hinge positioning options, and opening layouts shown through plan and elevation views. Options for single or multiple door installations are included, along with a selection of handle options for functional and aesthetic customization.

MATERIALS & TOOLS

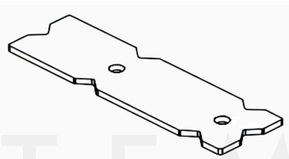
Main Components



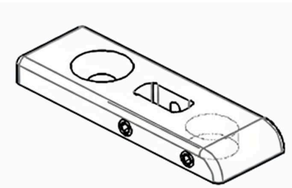
Vertical Profile



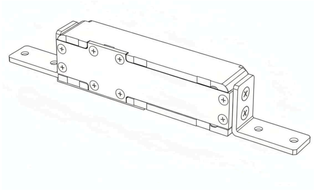
Horizontal Profile



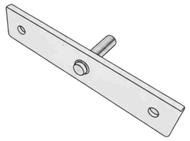
Base Template



Base Plate



Lower Pivot Mechanism



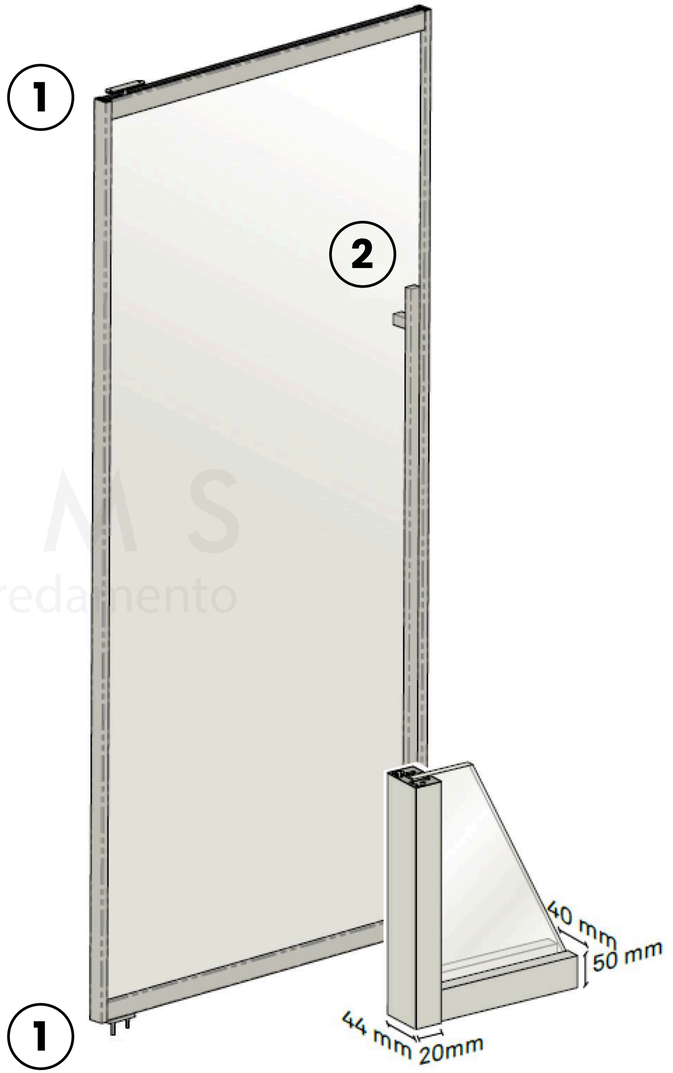
Upper Plate

SYSTEM STRUCTURE

Pivot Hinge System

Pivot door 44 mm thick, available with 8mm and 10 mm thick safety glass and aluminum profile

1. Hydraulic pivot hinge with automatic closing at pre-set speed. stop at 0° +90° -90°. Maximum load capacity of 80kg.
2. Compatible with optional handle accessories.



SYSTEM STRUCTURE

Dimensional & Load Capacities

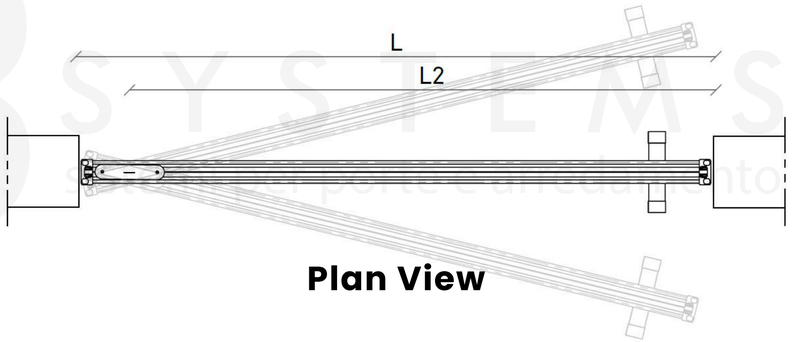
- Glass 8 mm thick

H 1600-2400 mm; **L MAX:** 1500 mm
H 2500-2700 mm; **L MAX:** 1400 mm
H 2800-3000 mm; **L MAX:** 1200 mm

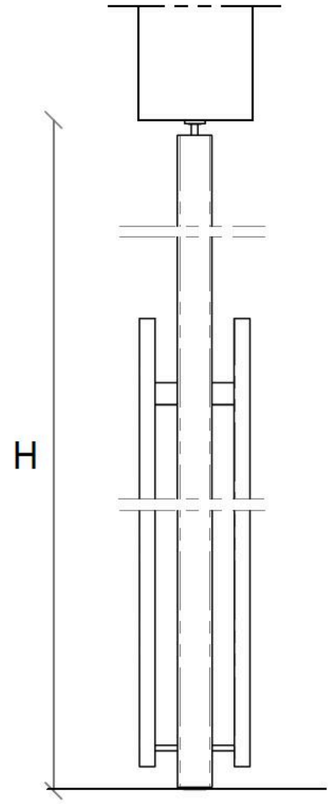
- Glass 10 mm thick

H 1600-2400 mm; **L MAX:** 1200 mm
H 2500-2700 mm; **L MAX:** 1100 mm
H 2800-3000 mm; **L MAX:** 1000 mm

- **L2 MAX:** 1000 mm



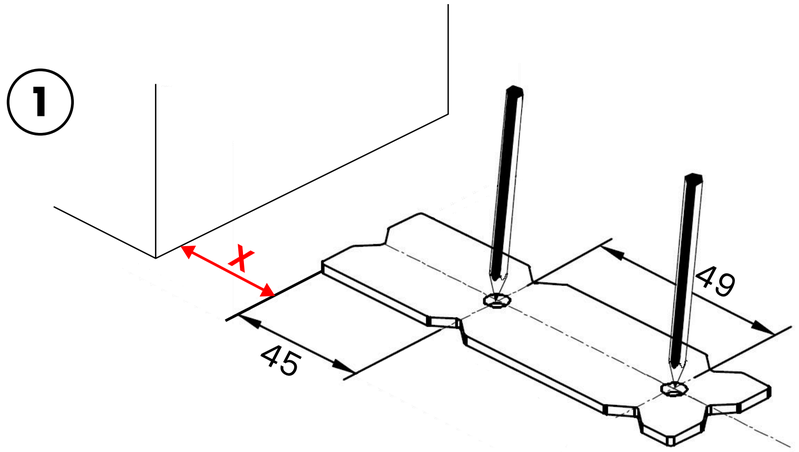
Plan View



Section

SYSTEM INSTALLATION

Base Plate Installation



1- Positioning & Marking:
Position The Base Template Plate, Ensuring The Distance Of 45 mm, 49 mm and x mm.

Required Spacing (X): The Distance Required Between The Door Frame And The Installation Template.

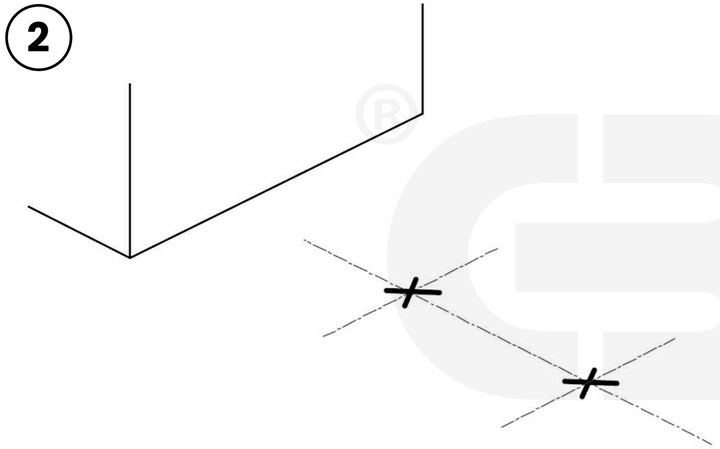
- For Door Widths **≤ 110 Cm**: X = 2 Cm
- For Door Widths **> 110 Cm**: X = 2 Cm + (Door Width - 110 Cm)

	Door Width (W)	Required Spacing (X)
Option 1	W ≤ 110 cm	X= 2 cm
Option 2	W > 110 cm	X= 2+(W-110) cm

SYSTEM INSTALLATION

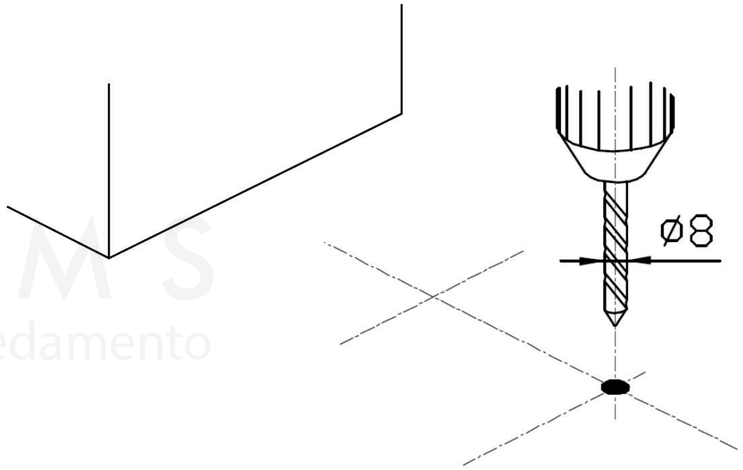
Base Plate Installation

2



2- Center Marking:
Confirm The Precise Intersection And Center Points Of The Markings For The Drilling Locations.

3

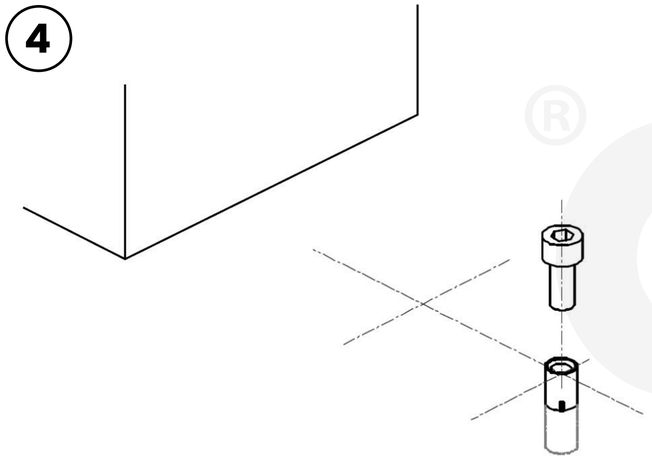


3- Hole Drilling:
Drill The Fixing Hole Using An Ø8 Mm Drill Bit.

SYSTEM INSTALLATION

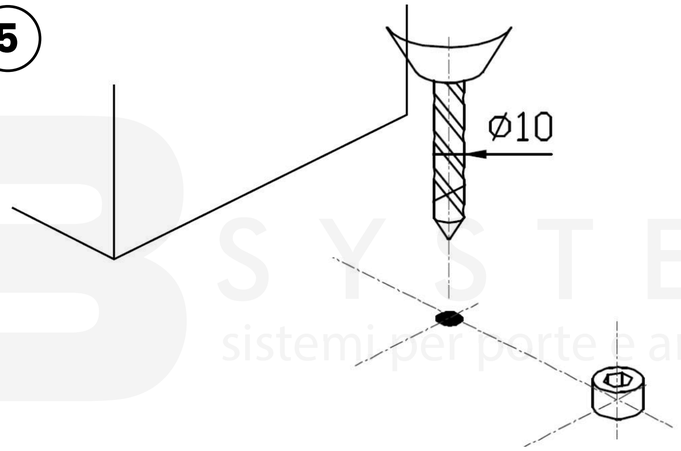
Base Plate Installation

4



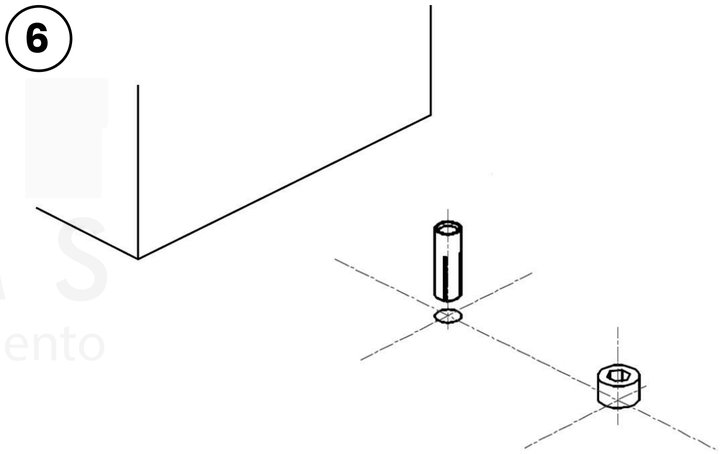
4- Receptor Installation:
Insert The Cylindrical Receptor Into The Ø8 Mm Drilled Hole.

5



5- Mechanism Hole Drilling:
Drill The Larger Recess Hole For The Pivot Mechanism Housing Using An Ø10 Mm Drill Bit.

6

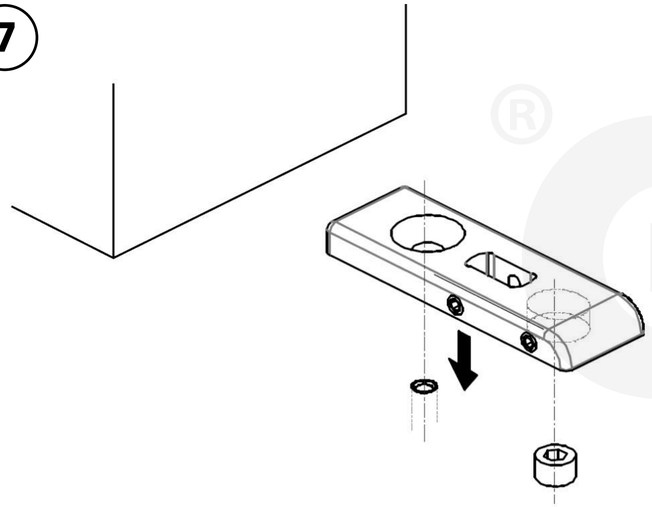


6- Mechanism Receptor Installation:
Insert The Threaded Receptor Or Anchor For The Pivot Mechanism Into The Ø10 Mm Hole.

SYSTEM INSTALLATION

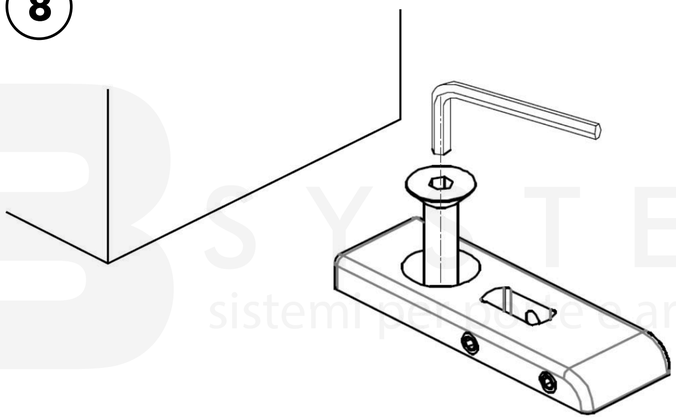
Base Plate Installation

7



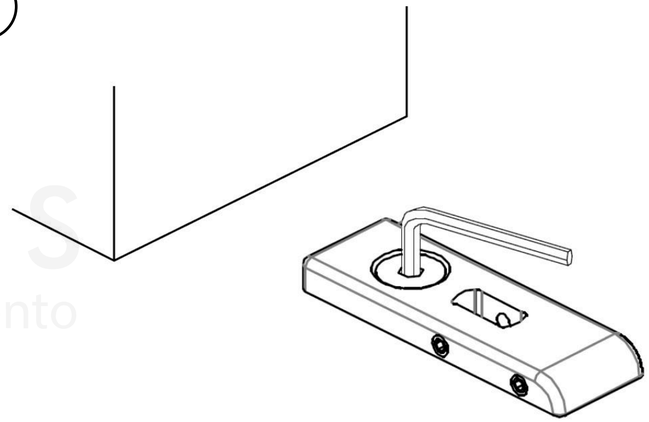
7- Base Plate Assembly:
Fix The Adjustable Base Plate Onto The Installed Receptors Using The Supplied Screws.

8



8- Initial Tightening:
Lightly Tighten The Fasteners Using A Suitable Hex Key To Hold The Plate In Position.

9

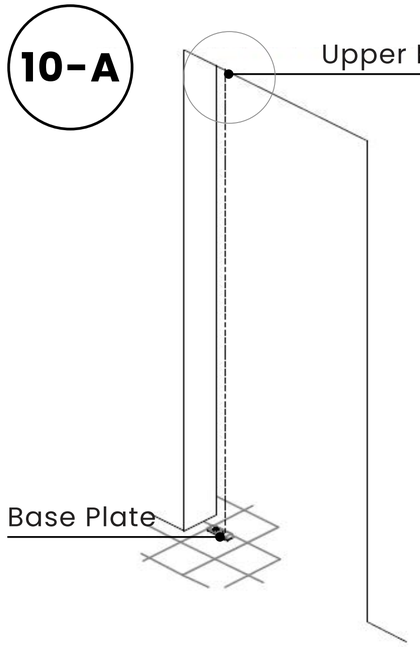


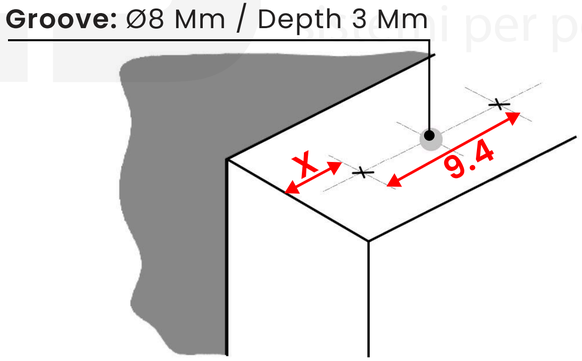
9- Final Tightening:
Fully Tighten The Fasteners Using A Hex Key, Ensuring The Base Plate Is Securely Fixed.

SYSTEM INSTALLATION

Overhead Preparation & Alignment

- **Option A: Manual Measurement Method**
  Overhead Drilling Points Are Set Using Manual Measurements From Reference Surfaces.





Fixing Points For Upper Plate

Required Spacing (X): The Distance Required Between The Door Frame And The First Hole Drilling.

- For Door Widths **≤ 110 Cm**: X = 4.3 Cm
- For Door Widths **> 110 Cm**: X = 4.3 Cm + (Door Width - 110 Cm)

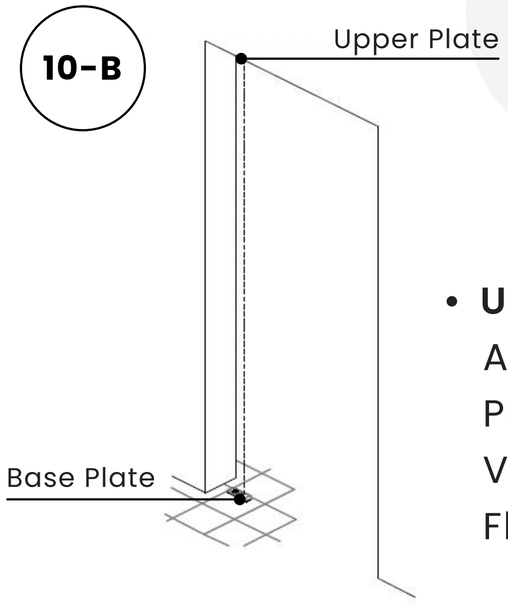
	Door Width (W)	Required Spacing (X)
Option 1	W ≤ 110 cm	X= 4.3 cm
Option 2	W > 110 cm	X= 4.3+(W-110) cm

SYSTEM INSTALLATION

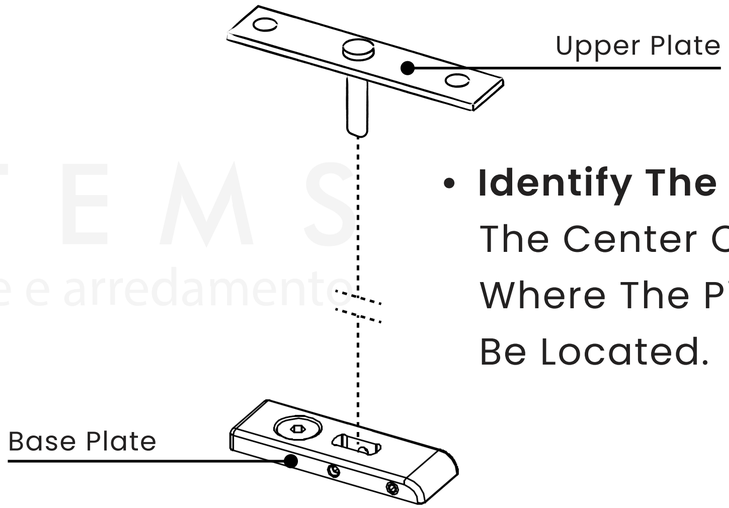
Overhead Preparation & Alignment

- **Option B: Laser Alignment Method**

  Overhead Drilling Points Are Determined By Laser Alignment From The Bottom Pivot Position.



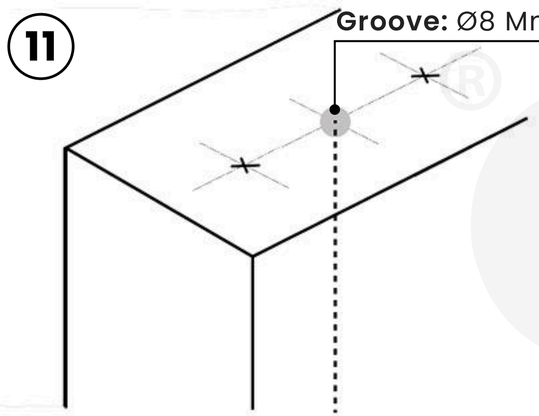
- **Upper Pivot Plate Alignment:**
  Align The Upper Pivot Mounting Plates, Making Sure They Are Vertically Aligned With The Installed Floor Base Plate.

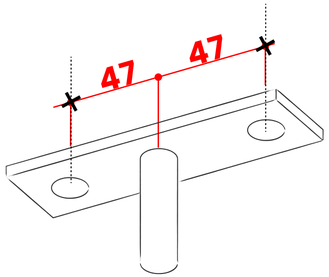


- **Identify The Pivot:**
  The Center Of This Plate Is Where The Pivot Point Will Be Located.

SYSTEM INSTALLATION

Overhead Preparation & Alignment





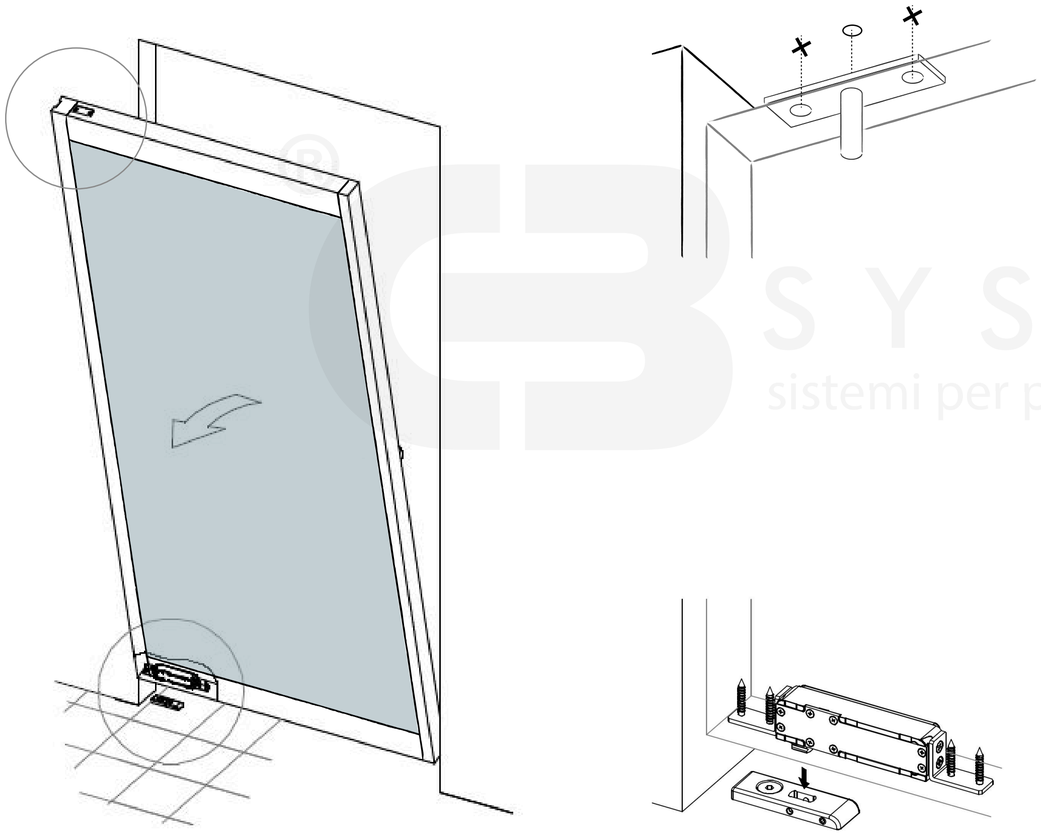
- **Mark The Fixing Points:**
  Mark The Points To Be Drilled. The Illustration Shows The Center Pivot Point And The Two Fastening Points.

- **Overhead Drilling:**
  Drill The Holes At The Marked Points Using The Correct Drill Bit.

SYSTEM INSTALLATION

Door Mounting

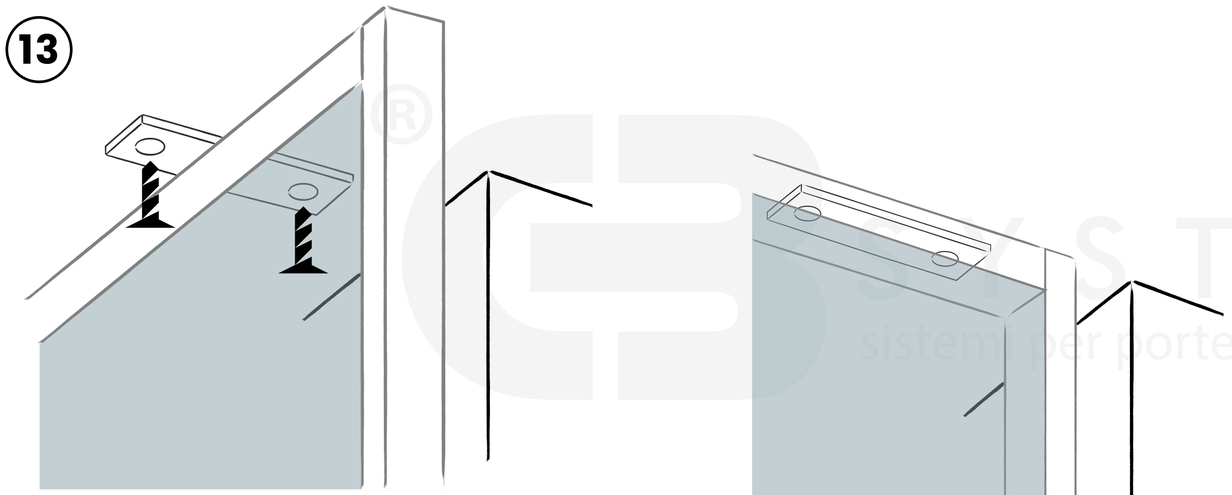
12



- **Door Installation:**
  Place The Door Leaf Onto The Floor Base Plate. The Bottom Pivot Engages With The Floor Base, And The Upper Mechanism Aligns With The Fixing Point In The Overhead Frame.

SYSTEM INSTALLATION

Door Mounting



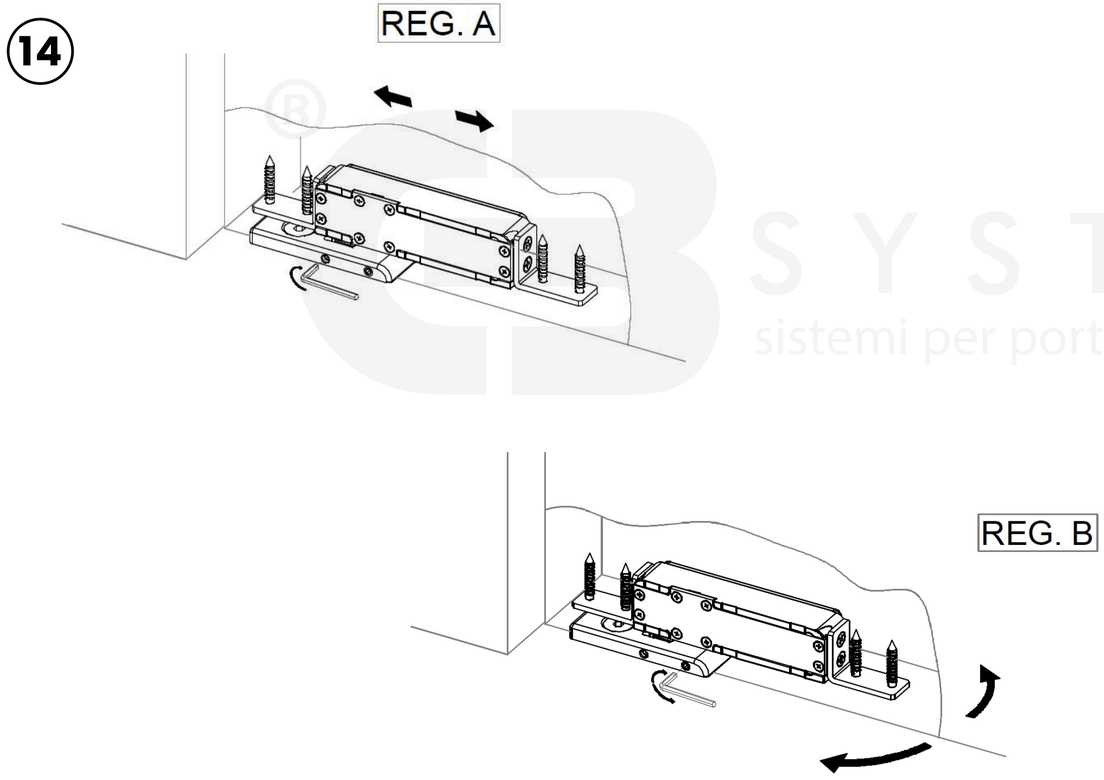
Door in Open Position

Door in Closed Position

- **Upper Plate Fixing:**
  With The Door In Position, Rotate It Slightly To Access The Upper Mechanism. Fix The Top Mounting Plate Using The Supplied Screws.

SYSTEM INSTALLATION

Final Adjustments

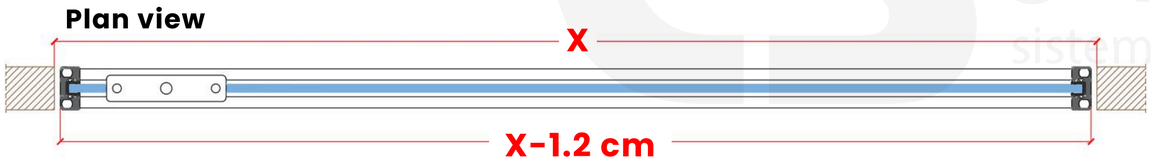


- **Final Adjustments:**
  After Installation, Adjust The Floor Mechanism Using The Adjustment Screws For Correct Alignment.
  After Adjustment, Lock The Mechanism To Keep The Settings Fixed.

SYSTEM CONFIGURATION

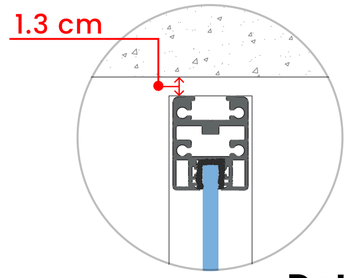
Door Dimensions

Top and section views illustrate the door's width and height dimensions, along with the detailed side clearance dimensions.

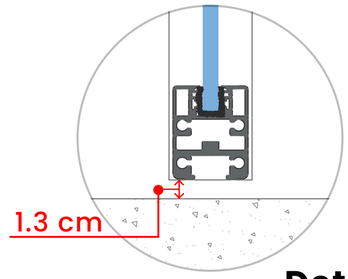


	Formula
Door Width	X-1.2 cm
Door Height	Y-2.6 cm

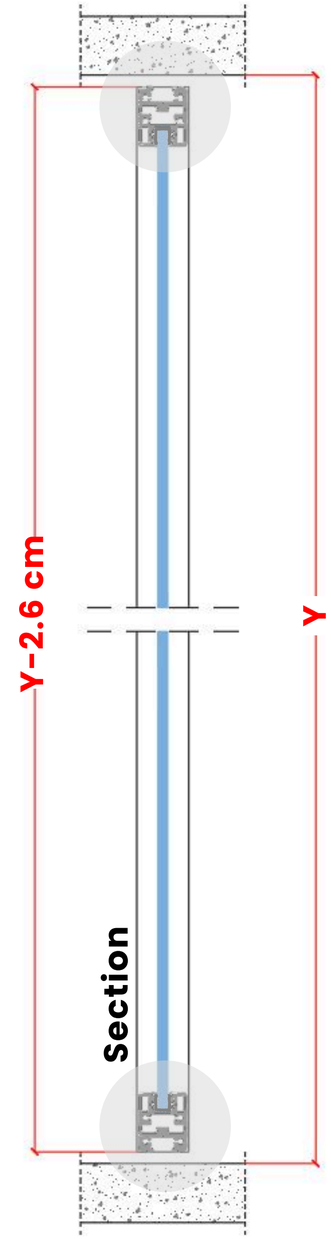
X= Door Opening Width
Y= Door Opening Height



Detail 1



Detail 2

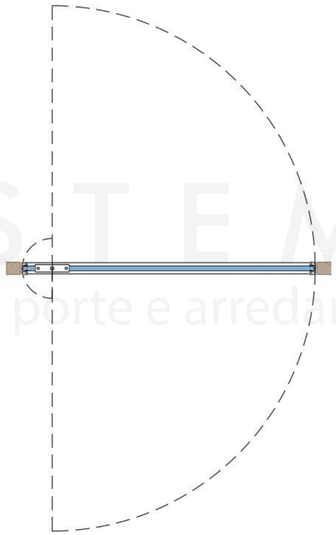


SYSTEM CONFIGURATION

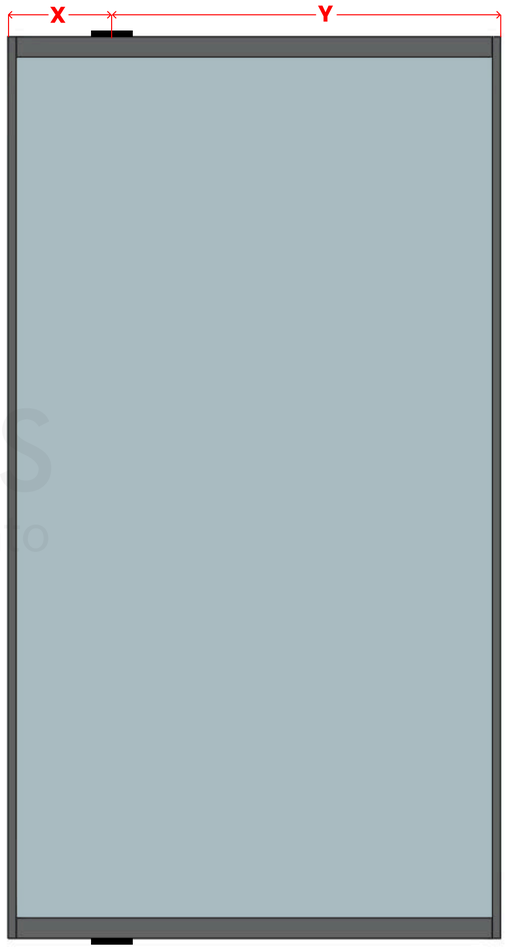
Hinge Positioning

- The plan and elevation views illustrate the required clearance dimensions for the installation.
- The system features defined stopping points for the door a 0° , +90°, -90° .

X= Minimun 8.4 cm
Y= Maximum 100 cm



Plan view



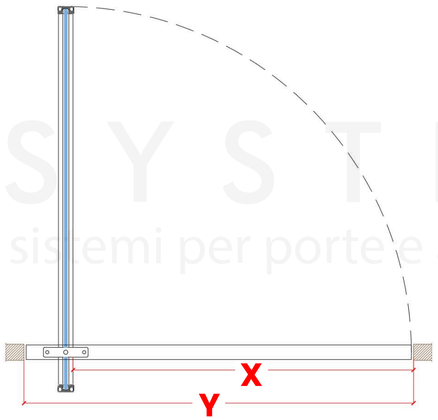
Elevation

SYSTEM CONFIGURATION

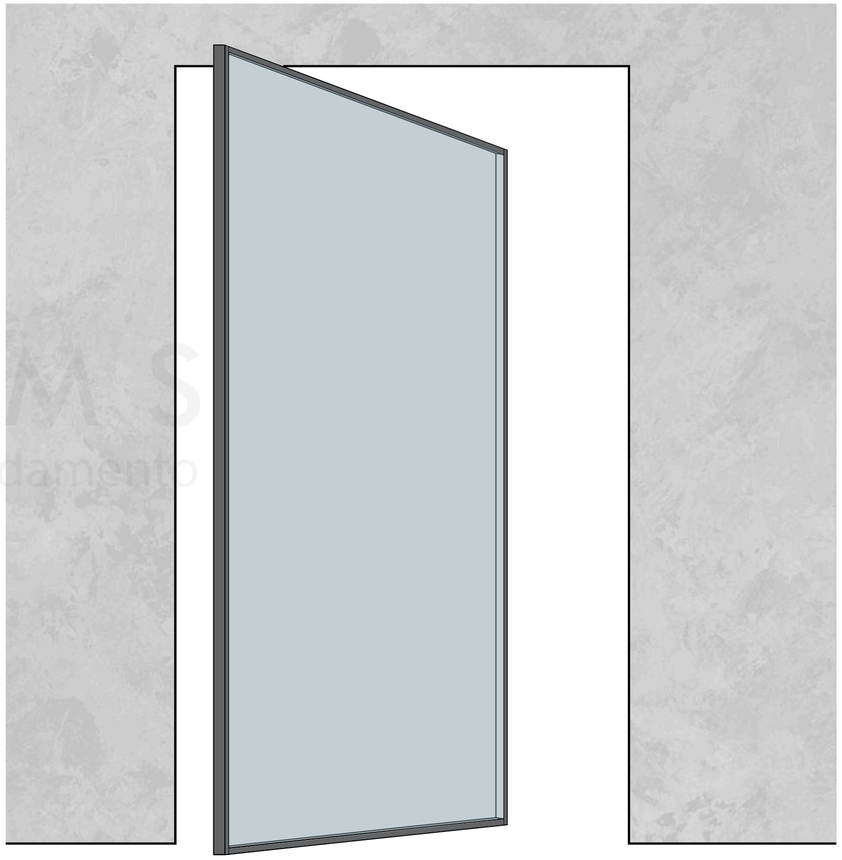
Door Opening Layout

Plan and elevation views define the clear opening and clear passage dimensions, highlighting the effective passage width achieved once the pivot door is in the open position.

	Clear Opening (Y)	Clear Passage (X)
Option 1	Y> 110 cm	X= 100 cm
Option 2	Y< 110 cm	X= Y-11 cm



Plan view



Elevation

CENTRAL PIVOT LAYOUT

Dimensional & Load Capacities

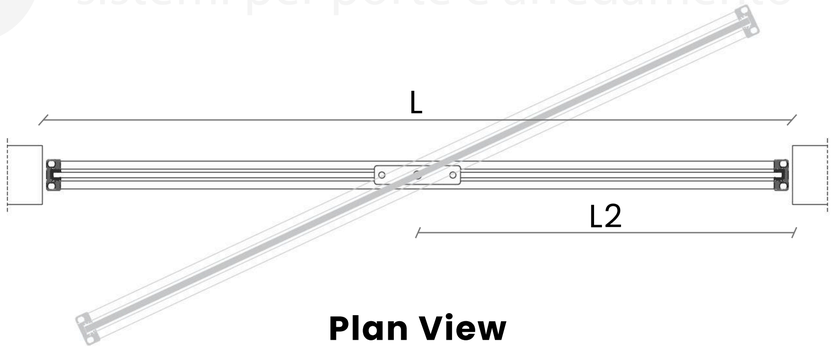
- Glass 8 mm thick

H 1600-2400 mm; **L MAX:** 1500 mm
H 2500-2700 mm; **L MAX:** 1400 mm
H 2800-3000 mm; **L MAX:** 1200 mm

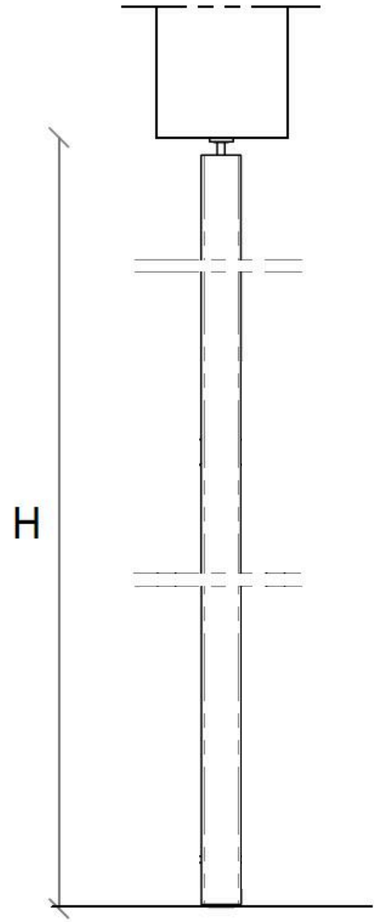
- Glass 10 mm thick

H 1600-2400 mm; **L MAX:** 1200 mm
H 2500-2700 mm; **L MAX:** 1100 mm
H 2800-3000 mm; **L MAX:** 1000 mm

- **L2 MAX:** 750 mm



Plan View

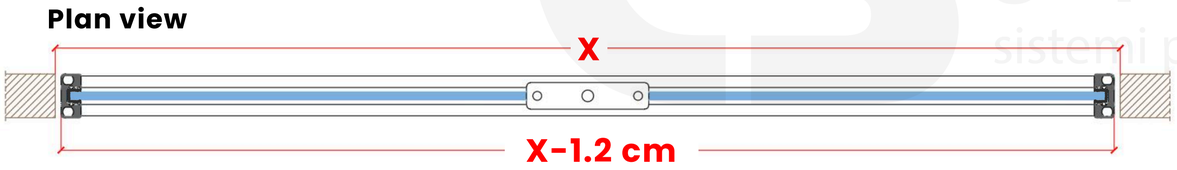


Section

CENTRAL PIVOT LAYOUT

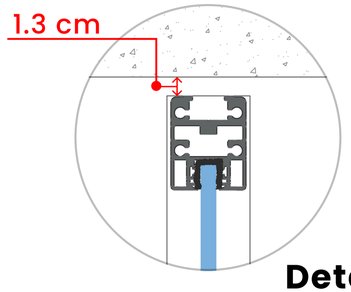
Door Dimensions

Top and section views illustrate the door's width and height dimensions, along with the detailed side clearance dimensions.

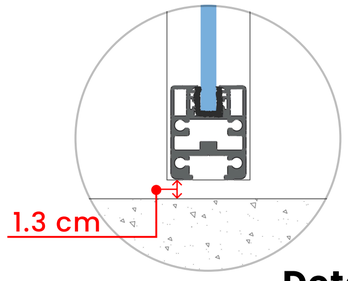


	Formula
Door Width	X-1.2 cm
Door Height	Y-2.6 cm

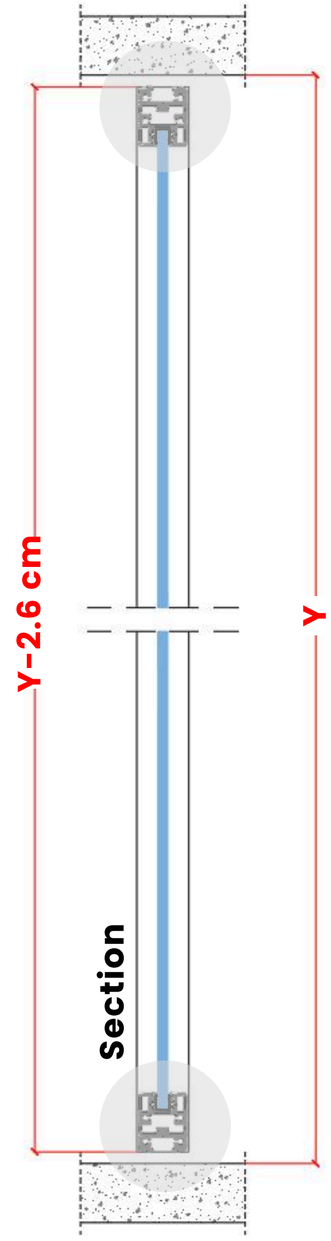
X= Door Opening Width
Y= Door Opening Height



Detail 1



Detail 2

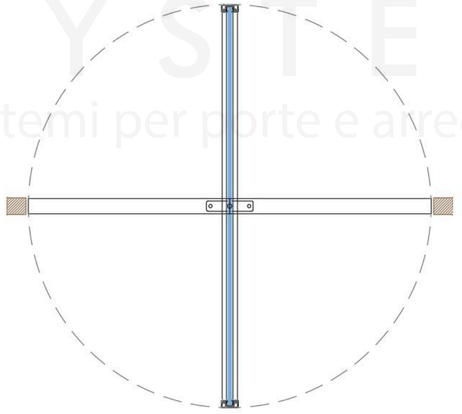


CENTRAL PIVOT LAYOUT

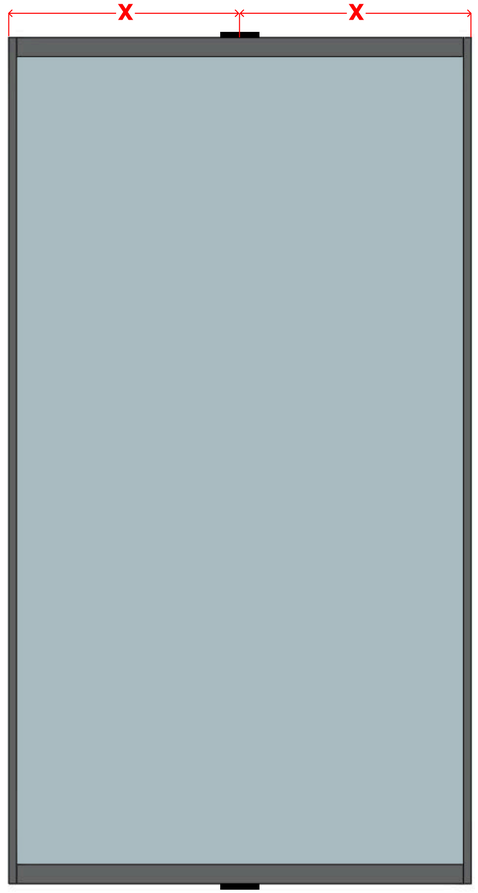
Hinge Positioning

- When the pivot hinge is positioned at the center of the door, the system allows a full 360° rotation.
- Plan and elevation views illustrate the symmetrical movement of the door.

X= Maximum 750 mm



Plan view



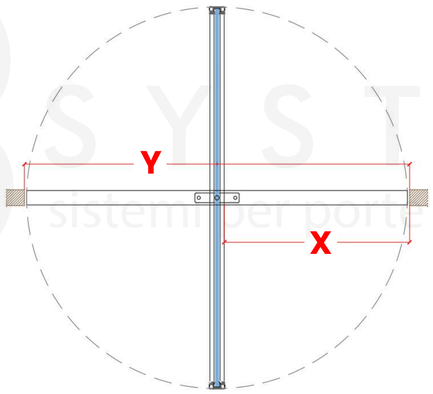
Elevation

SYSTEM CONFIGURATION

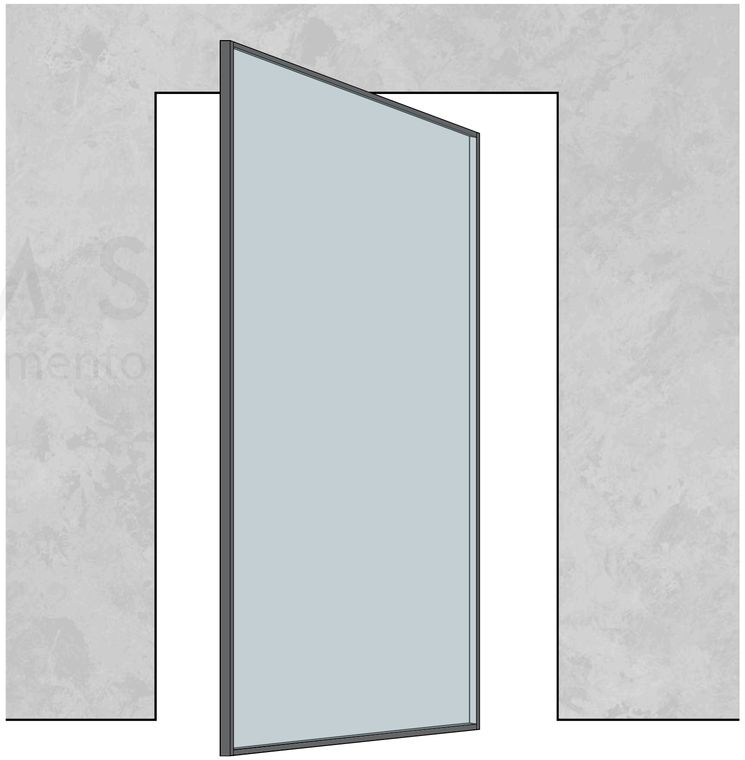
Door Opening Layout

Plan and elevation views define the clear opening and clear passage dimensions, highlighting the effective passage width achieved once the pivot door is in the open position.

X= (Y÷2)-3 cm



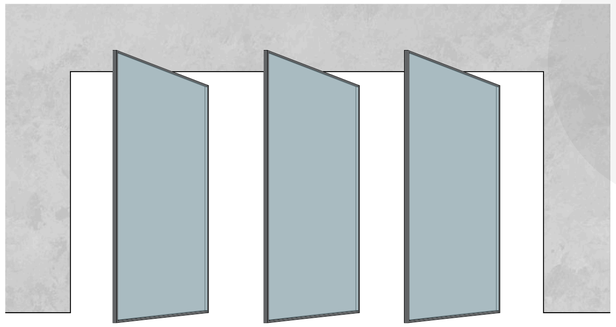
Plan view



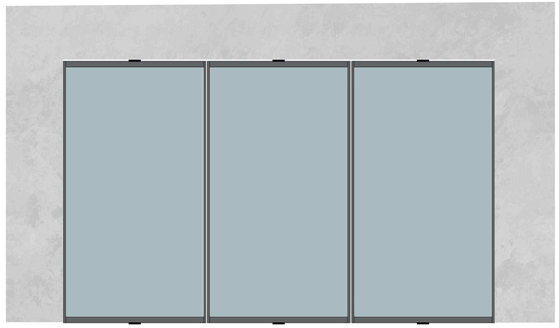
CENTRAL PIVOT LAYOUT

Multiple Door Installations

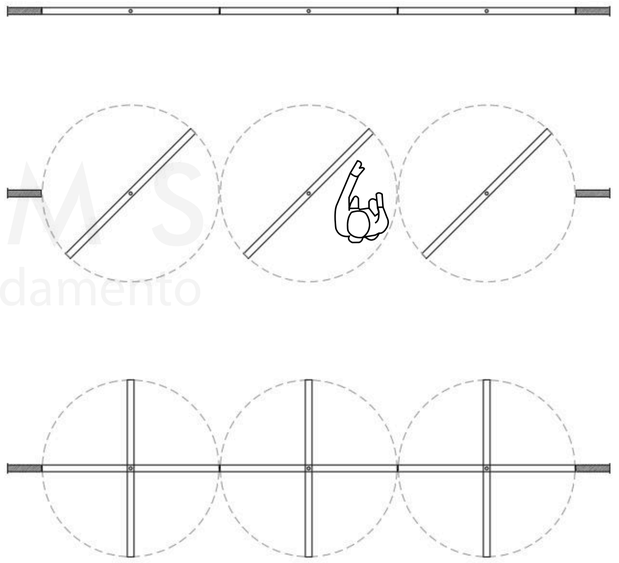
Plan and elevation views illustrate the symmetrical movement of three doors.



Doors in Open Position



Doors in Closed Position



Plan view

DOOR SHUTTERS

Colors and Glass Selections

Door Profile Finishes (Annodized Black)

Glass Finishes

Bronze Transparent

Smoked Transparent

Transparent

NATHALIUM
Elevating Spaces with Italian Precision

Doors

Nathalium .Co

Jamal Abdul Nasser Str. - Al Bahsas - Tripoli, Lebanon

Tel: 06/411790 , 06/411 791 - cell: 71/847529

www.nathalium.com - info@nathalium.com