

# Technical Specifications and Product Brochure



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# ISO-THERMAL INSULATED DOORS

# **HINGED DOORS**



# HINGED DOORS

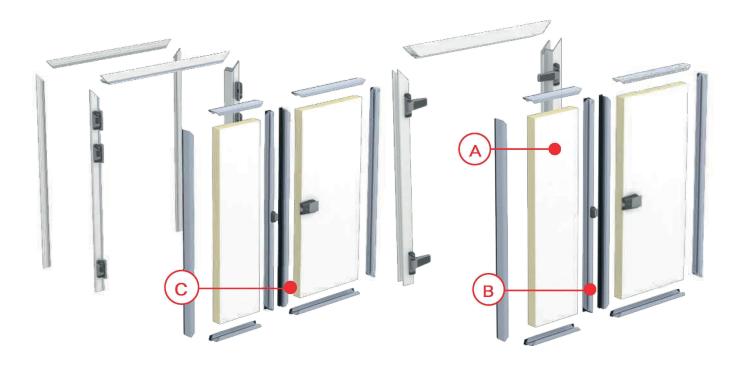
# Overlap & Flush

Single & Double Leaves



#### **Modular dimensions**

- •WIDTH up to 1500 mm for single-leaf door.
- WIDTH up to 3000 mm for double-leaf door.
- HEIGHT up to 3000 mm for both single and double leaf door.
- Thickness 70 mm up to 150 mm.



#### OVERLAP DOOR

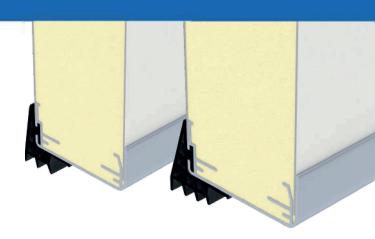
**FLUSH DOOR** 

#### 1-Door Leaf

- A-Cladding both sides of two pre-painted hot dip-galvanized steel sheets thickness 0.50mm RAL 9002 (Standard), thicker sheets available (on request) surrounded by an anodized aluminum profile 70,100,120 and 150mm, Injected with Polyurethane rigid foam (PUR) density of 40 Kg/ m3 (±2 kg).
- B- Along the edge of the anodized aluminum profile insert a special EPDM rubber gasket double density in order to avoid leakage.
- C-Special 3 or 4 lines EPDM rubber gaskets are fixed at the bottom of the door leaf.

#### 2-Threshold

Four types of thresholds are available depending on door application and temperature of the room.





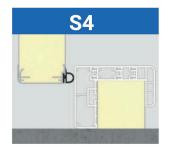
frame is only 3 parts without a threshold connected to it for positive and negative temperature.



frame is only 3 parts and a 50x50 mm pre-painted steel angle is connected to the frame at the bottom and recessed into the concrete floor.



frame is only 3 parts, A metal tube Angle of  $40 \times 40$  mm joined with another stainless-steel tube ( $20 \times 40$  mm) Both are connected to the frame at the bottom and recessed into the concrete floor.



frame is 4 parts of P.V.C consisting of (2 jambs + 2 transoms) for both positive and negative temperature.

#### **3-Door Frame**

#### **Overlap Doors**

- 1- Extruded P.V.C profile L shape for 100 mm panel thickness reinforced internally by steel, thermo-welded at (450).
- 2- For thicker panels another frame connecting type is provided and comes in 3 parts:
  - a- Outside part/ fixed size 2 types one for positive and the other
  - b- for negative temperature.
    - Side part/ in two sizes 30,20, and 100 mm to be connected to
  - c- the outside part in order to reach the right panel thickness.

    Counter frame/ inside of the cold rooms.
- 3- For negative temperature, a heating cable 30 w/m powered at 220V is inserted inside the frame covered by an aluminum profile.
- 4- A special opening for rail passage Inside meat processing plants:
  - The opening size will be 200 x 400 mm or customized.
  - The opening will be surrounded by the P.V.C.
  - Two rubber seals will be fixed on the opening to let pass the Guideway.





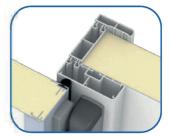














#### Flush Doors

1- Extruded P.V.C profile Z shape ending with a square box to install the heating cable covered with extruded aluminum, installed on 100 mm panel thickness, reinforced internally by steel. 2- A heating cable 20 w/m powered at 220 V is inserted inside the frame negative temperature. Flush Door

#### 4-Hinged System\_

#### Overlap Doors

According to the application and type of the door we use high-quality talian hinged hardware, all models are CE certified and tested up to 10,000 times.

#### The hinged system consists of the following parts:

1-External fastener with key lock and emergency safety release.

2-Hinges

#### Hinged system technical data:

- No door Clearance encumbrance.
- Interchangeable right or left.
- Inside emergency safety release push-button.
- Adjustments: horizontal/dual vertical adjustment.
- Recessed auto-lubricating ramp.





#### **Flush Doors**

According to the application and type of the door we use high-quality Italian hinged hardware, all models are CE certified and tested up to 10,000 times.

#### The hinged system consists of the following parts:

1-External fastener with key lock and emergency safety release.

#### 2-Hinges

#### Hinged system technical data:

- No door Clearance encumbrance.
- Interchangeable right or left.
- Inside emergency safety release push-button.
- Adjustments: horizontal/dual vertical adjustment.
- Recessed auto-lubricating ramp.



## Overlap Models



Model	Leaf Thickness	Temperature	Threshold	Rail passage
H70-TN	70 mm	+5	S1/S2/S4	
H100-TN	100 mm	+2	S1/S2/S4	:=:
H70-TNG	70 mm	+5	S1/S2/S4	Yes
H100-TNG	100 mm	+2	S1/S2/S4	Yes
H100-BT	100 mm	-18	S3/S4	320
H120-BT	120 mm	-30	S3/S4	>==:
H150-BT	150 mm	-40	S3/S4	27753
HD-70TN	70 mm	+5	S1/S2/S4	22)
HD-70TNG	70 mm	+5	S1/S2/S4	Yes
HD-100TN	100 mm	+2	S1/S2/S4	=
HD-100TNG	100 mm	+2	S1/S2/S4	Yes

## Flush Models



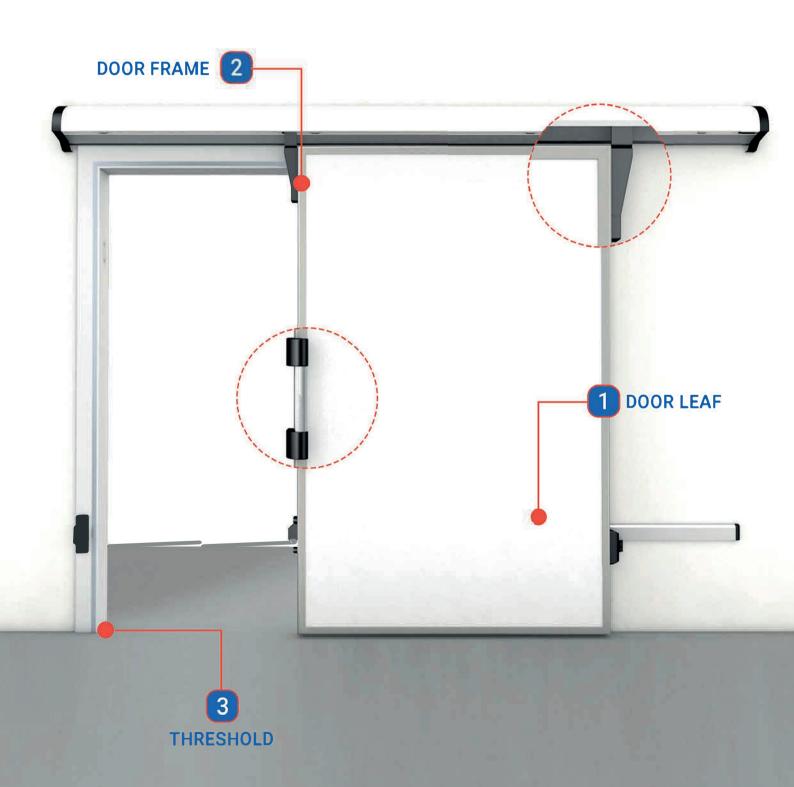
Model	Leaf Thickness	Temperature	Threshold
HF70-TN	70 mm	+5	S1/S2/S4
HF100-TN	100 mm	+2	S1/S2/S4
HF100-BT	100 mm	-18	S1/S2/S3/S4
HFD70-TN	70 mm	+5	S1/S2/S4
HFD100-TN	100 mm	+2	S1/S2/S4
HFD100-BT	100 mm	-18	S1/S2/S3/S4

# ISO-THERMAL INSULATED DOORS

# **SLIDING DOORS**



# LIGHT SLIDING DOORS



## **Light Sliding Door**

#### **Modular dimensions**

- WIDTH up to 1400 mm for single-leaf door.
- HEIGHT up to 2200 mm for both single and double leaf door.
- Thickness 70 mm and 100 mm.



#### 1- Doors Leaf

- Cladding both sides of two pre-painted hot dip-galvanized steel sheets thickness 0.50mm RAL 9002
   (Standard), thicker sheets available (on request) surrounded by an anodized aluminum profile 70 mm,
   Injected with Polyurethane rigid foam (PUR) density of 40 Kg/ m3 (±2 kg).
- Along the edge of the anodized aluminum profile insert a special EPDM rubber gasket double density.
- Special 3 lines EPDM rubber gaskets fixed at the bottom of the door leaf.

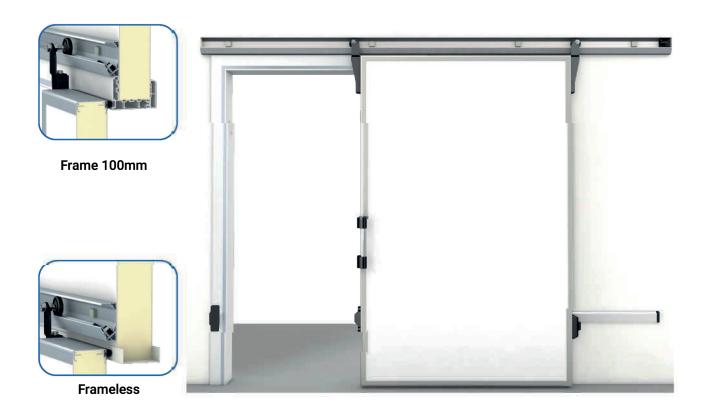
# **Light Sliding Door**

#### 2- Door Frame\_

- Upper rail in Anodized aluminum supplied in detached pieces to allow fixing the falling ramps with the possibility of setting up the right or left opening.
- Wall Guide in anodized aluminum.
- Brackets in reinforced composite material and zinc-coated metal.
- Two pulleys made of composite plastic materials.
- Fixed external handle in composite plastic material with stainless steel 304 tube.
- Fixed deep internal handle in luminescent plastic material.
- Adjustable lower register.
- Vertical and horizontal door leaf adjustment

#### **Optional**

1-Lock with key and safety release



# **Light Sliding Door**

#### 3-Threshold

Three types of thresholds are available depending on door application and temperature of the room.



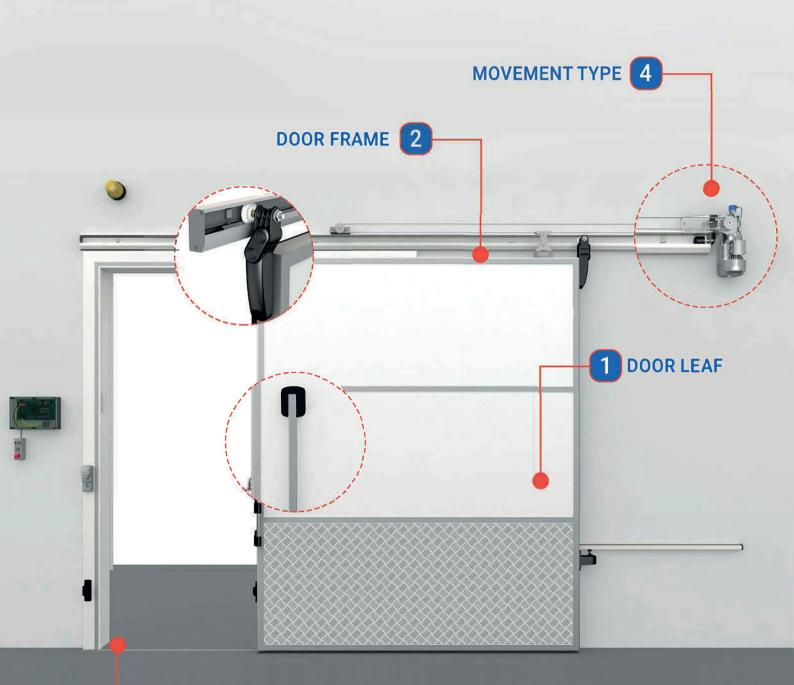
without threshold, the frame is only 3 parts (2 jambs + 1 transom) for positive temperature for rooms with or without floor.



frame is only 3 parts and a special 40x40 mm thickness 4mm pre-painted steel angle is connected to the frame at the bottom and recessed into the concrete floor at 80mm, used for both positive for rooms without a floor.

# INDUSTRIAL SLIDING DOORS

single & double leaves



#### Modular dimensions

- WIDTH up to 3400 mm for single-leaf door.
- WIDTH up to 6800 mm for double leaves door.
- HEIGHT up to 4300 mm for both single and double leaf door.
- Thickness 100 mm,120mm and 150 mm.



- A- Cladding both sides of two pre-painted hot dip-galvanized steel sheets thickness 0.50mm RAL 9002 (Standard), thicker sheets available (on request) surrounded by an anodized aluminum profile 100,120 and 150mm, Injected with Polyurethane rigid foam (PUR) density of 40 Kg/ m3 (±2 kg).
- B- Along the edge of the anodized aluminum profile insert a special EPDM rubber gasket double density, in deep freezers up to 40 degrees insert two double-density gaskets, Special 3 lines EPDM rubber gasket is fixed at the bottom.
  - Leaf is reinforced internally with a metal tube connecting four sides of anodized aluminum in perfect shape and condition.
  - Along the anodized aluminum internally special metal plates are inserted to allow fixing sliding system parts.

#### 2- Door Frame

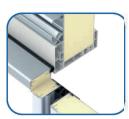
- A- Frame is made up of extruded P.V.C profiles reinforced internally by steel and it is thermo-welded at (450) and delivered in 3 main parts:
  - Outside part/ fixed size 2 types one for positive and the other for negative temperature.
  - Side part/ in two sizes 30,20, and 100 mm to be connected to the outside part in order to reach the right panel thickness.
  - Counter frame/ inside of the cold rooms.
- B- Optional/ framed can be covered by welded stainless steel 304 along with a door leaf made on both sides from stainless steel.
- C- For negative temperature, a heating cable 30 w/m powered at 220v is inserted inside the frame covered by an aluminum profile.
- D- For deep freezers, up to 40-co heating cable 30 w/m powered at 220v is inserted in both leaf and frame.
- E- For meat processing plants a special opening for rail is done as follows:
  - The opening size will be 200 x 400 mm or as the customer requests.
  - The opening will be surrounded by the P.V.C counter frame.
  - Two rubber seals will be fixed on the opening to let pass the Guideway.











#### <u>Optional</u>

- 1- Higher door up 6000 mm
- 2- lock with key and safety release
- 3- Automatic Sliding system SA100
  - Electronic control unit power supply 265/90V Single-phase.
  - Full control with magnetic encoder.
  - Obstacle detection in closing, with adjustable drive-torque.
  - Electric gear motor 380/220V50-Hz with magnetic encoder.
  - External push button switch box.
  - Emergency stop switch.
  - External flashing light.
  - Degree of protection: IP55

#### 3-Threshold

Three types of thresholds are available depending on door application and temperature of the room.





frame is only 3 parts without a threshold connected to it for positive and negative temperature.



frame is only 3 parts and a 50x50 mm pre-painted steel angle is connected to the frame at the bottom and recessed into the concrete floor.



frame is only 3 parts, A metal tube Angle of 40 x 40 mm joined with another stainless-steel tube (20 x 40 mm) Both are connected to the frame at the bottom and recessed into the concrete floor.

A heating cable 20 or 30 w/m powered at 220 V. is inserted inside the upper stainless-steel tube which remains visible at the same floor level only for negative temperature.

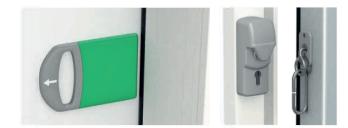
#### Sliding System

#### **A- Manual Movement**



#### <u>Optional</u>

- Lock
- SS kick Plate
- AL Kick Plate



#### **B- Automatic Movement**

 Control Panel power

• Three-Phase Gear Motor power

**Resolution 2048** 

• Magnetic Encoder • Degree of Protection IP55

90/265 Vac 50-60 Hz

220/380V-50Hz 550 Watt

pulses/revolution - IP64



#### Model for single leaf

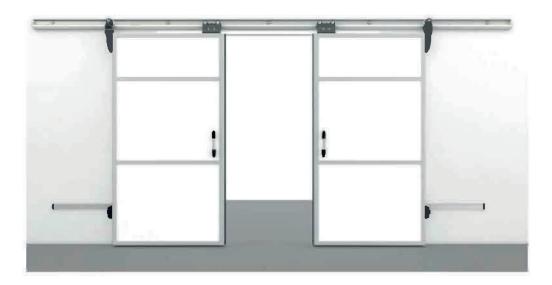
Model	Leaf Thickness	Temperature	Threshold	Rail passage
SI-100TN	100 mm	+2	S1/S2	<del></del>
SI-100BT	100 mm	-18	S3	
SI-120BT	120 mm	-30	S3	
SI-150BT	150 mm	-40	S3	( <del>22</del> )
SI-100TNG	100 mm	+2	S1/S2	Yes

#### 4- Movement Type for double leavs

#### A-Manual (Independent opening of each leaf)

- Upper rail in Anodized aluminum supplied in detached pieces to allow fixing the falling ramps with the possibility of setting up the right or left opening.
- Adjustable patented brackets "FSS" (Flex System Support) in reinforced composite material, suitable for
- doors with different counter-frame thicknesses and without counter-frame.
- Wall Guide in anodized aluminum.
- Brackets in reinforced composite material and zinc-coated metal.
- Two pulleys made of composite plastic materials.
- Fixed external handle in composite plastic material with stainless steel 304 tube.
- Fixed deep internal handle in luminescent plastic material.
- Vertical and horizontal door leaf adjustment.

#### Model for double leaves



Model	Leaf Thickness	Temperature	Threshold
SD-100TN	100 mm	+5	S1/S2
SD-100BT	100 mm	-18	S3
SD-120BT	120 mm	-30	S3
SD-150BT	150 mm	-40	S3

#### **B-Mechanical Movement (simultaneous opening of both leaves)**

- $_{\bullet}$  Belt pensioner tooth bracket.
- Rubber drive belt.
- Connection bracket door/belt

#### Model for double leaves



Model	Leaf Thickness	Temperature	Threshold
SD-100TNC	100 mm	+2	S1/S2
SD-100BTC	100 mm	-18	S3
SD-120BTC	120 mm	-30	S3
SD-150BTC	150 mm	-40	S3



#### **C-Automatic Movement (simultaneous opening of both leaves)**

- Electronic control unit power supply 265/90V Single-phase.
- Full control with magnetic encoder.
- Obstacle detection in closing, with adjustable drive-torque.
- Adjustable opening and closing speed.
- Re-close pause timer adjustable from 1 to 60 seconds.
- Optional temperature controller and heater (for low temperature).
- Electric gear motor 380/220V50-Hz with magnetic encoder, supplied with assembling Kit.
- Belt pensioner tooth bracket.
- Rubber drive belt.
- Connection bracket door/belt.
- External flashing light.
- Control panel: Power 265/90 Vac 60-50 Hz.
- Three-phase gear motor: Power 380/220V50-Hz 550 Watt.
- Magnetic encoder: Resolution 2048 pulses/revolution IP64.
- Degree of protection: IP55

# SEMI-INSULATED SERVICE DOORS

# **SWING DOORS**



# **SWING DOORS**

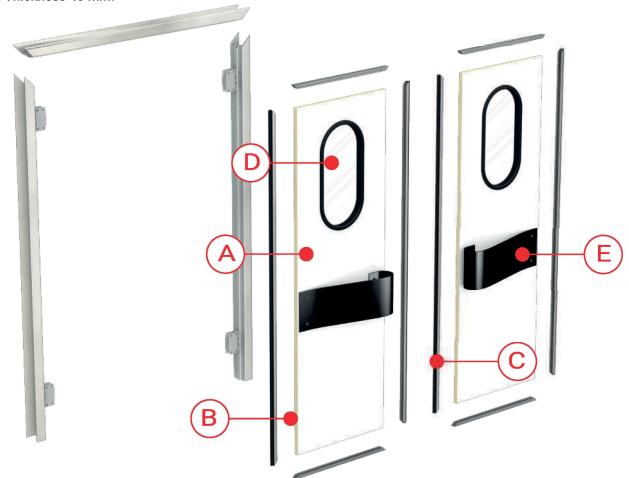
# single & double leaves



### **Swing Door**

#### **Modular dimensions**

- WIDTH up to 1200 mm for single-leaf door.
- WIDTH up to 2400 mm for double-leaf door.
- HEIGHT up to 2500 mm for both single and double leaf door.
- Thickness 40 mm.



#### 1-Door Leaf

- A- Cladding pre-painted hot dip-galvanized steel sheets thickness 0.50mm RAL 9002 (Standard), surrounded by anodized aluminum profile thickness 40mm.
- B- Injected with Polyurethane rigid foam (PUR) density 40 Kg/ m3 (±2 kg).
- C- Along the two jambs of the leaf insert a special EPDM rubber gasket.
- D- Oval Sight vision 300 x 700mm made of 5 mm polycarbonate sheet surrounded by a special rubber gasket.
- E- Polycarbonate thickness 4mm pumper fixed on both sides of the leaf.

## **Swing Door**

#### **2-Door Frame**

Two types of frames are used with swing doors

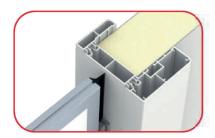
- 1-Extruded PVC profiles reinforced internally by steel, thermo-welded at (450) delivered in 3 main parts.
- 2-Extruded Anodized Aluminum profiles.

Inside meat processing plants with rail passages for meat a special opening for rail is done as follows:

- The opening size will be 200x 400 mm or as the customer requests.
- The opening will be surrounded by the P.V.C or aluminum frame.
- Two rubber seals will be fixed on the opening to let pass the Guideway.









# SEMI-INSULATED SERVICE DOORS

**OFFICE DOORS** 



# OFFICE DOORS

single & double leaves



### **Office Door**

#### **Modular dimensions**

- WIDTH up to 1200 mm for single-leaf door.
- WIDTH up to 2400 mm for double-leaf door.
- HEIGHT up to 2500 mm for both single and double leaf door.
- Thickness 40 mm.



#### 1-Door Leaf

- A- Cladding pre-painted hot dip-galvanized steel sheets thickness 0.50mm RAL 9002 (Standard), surrounded by anodized aluminum profile thickness 40mm.
- B- Injected with Polyurethane rigid foam (PUR) density 40 Kg/ m3 (±2 kg).

## **Office Door**

#### 2-Door Frame

The frame is made up of Extruded Anodized Aluminum profiles fixed on brick wall L shapes or sandwich panels thicknesses up to 150 mm.

1-Outside (Z) shape with invisible fastening along the two jambs.

2-Inside (L) mirrored with the outside with invisible fastening.



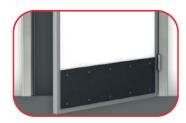
## **Office Door**

#### Office Doors Models



Model	Leaf Thickness	Temperature	Threshold	No.of leaves
CL	40 mm	+12	S1	Single
CD	40 mm	+12	S1	Double

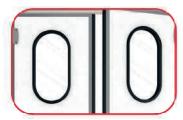
#### **Optional**



Protection at the bottom of the leaf (interior & exterior



Stainless steel cladding 304 or 316



Oval Sight vision 300 x 700mm made of 4 mm polycarbonate sheet surrounded by a special rubber gasket allows fixing into the leaf



Automatic door closer



Rounded sight vision 350 x 350 mm

# CLEAN ROOM DOORS



# **CLEAN ROOM DOORS**



### **Clean Room Door**

Designed to comply with the special requirements established by GPM guidelines for sterile environments.

#### **Advantages and Characteristics**

- Non-corrosive and non-flammable materials
   Chemical resistance.
- Easy to clean.
- Flush door with 50 mm clean room panels.
- Can be fixed on cleanroom partitions, Sandwich panels, and Brick walls.
- Long life expectancy

#### Modular dimensions

- WIDTH up to 1200 mm for single-leaf door
- WIDTH up to 2400 mm for double leaves door
- FIXED leaf size not less than 400 mm.
- HEIGHT up to 3000 mm
- THICKNESS 50 mm

#### **Optional accessories:**



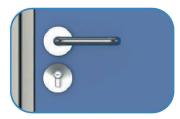
Stainless steel 304 or 2 316B for both internal and external leaf cladding



Panic handle



Automatic or manual door closer



Stainless steel handles with key lock

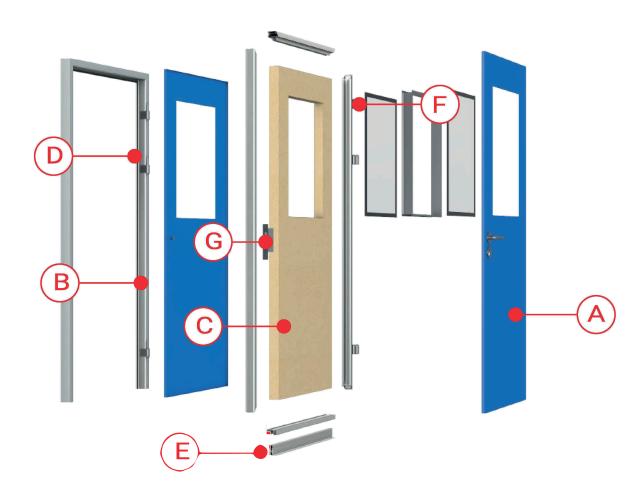


Interlocking system



Glass window 400 x 600 mm thickness 50 mm injected with hydrogen gas for thermal break.

### **Clean Room Door**



#### 1-Door Leaf

- A-Both sides are made up of pre-painted hot dip-galvanized steel sheets thickness 0.50 mm RAL 9002 (Standard).
- B-Surrounded by a high anodized aluminum profile thickness 50 mm.
- C-Injected with Polyurethane rigid foam (PUR) density 40 Kg/ m3 (±2 kg) or rock wall 100 kg/m3.
- D-Inserted in both columns and the ransom special EPDM rubber gasket for perfect sealing.
- E-Drop seal at the bottom of the leaf.
- F- Aluminum flush hinge.
- G-Aluminum knob or handle with key lock.

#### 2-Door Frame

• An anodized profile thickness 50 mm can be fixed on 50 mm panels or brick walls.

# RAL COLORS

RAL 9002 standard color

grey white

RAL 9006 white aluminum

RAL 9010 white

**RAL** 5010 gentian blue

RAL 5012 light blue

**RAL** 6032 signal green

RAL 1021 colza yellow

RAL 1014 ivory

RAL 3000 flame red

RAL 2004 pure orange

# **NOTES**

